EN   **User manual**

PHILIPS

Contents

1 Important

Safety

(1) Read these instructions.

(2) Keep these instructions.

(3) Heed all warnings.

(4) Follow all instructions.

(5) Clean only with dry cloth.

(6) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

(7) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

(8) Only use attachments/accessories specified by the manufacturer.

(9) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, objects have fallen into the apparatus or does not operate normally.

(10) Do not place any sources of danger on the apparatus (e.g. lighted candles).

(11) Before use underwater, always securely close the protective cover at the bottom of the camcorder.

(12) Never open the protective cover underwater or when the camcorder is still wet after use underwater.

(13) After use in sea water, immediately rinse the camcorder with fresh water to prevent corrosion, then clean the camcorder with a soft dry cloth and let it dry in a well-ventilated place away from direct sunlight.

(14) Do not use this camcorder in water deeper than 3 meters (10 feet) or for longer than 30 minutes.

Any changes or modifications made to this device that are not expressly approved by Philips Consumer Lifestyle may void the user's authority to operate the equipment.

Notice

$\mathsf{C}\mathsf{E}$

This product complies with the radio interference requirements of the European Community.

This product is designed to be waterproof in compliance with IEC 60529 IP68.

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means that the product is covered by the European Directive 2002/96/EC.
Please inform yourself about the local separate collection system for electrical and electronic products.
Please act according to your local rules and do not dispose of your old products with your normal household waste. Correct disposal of your old product helps to prevent potential negative consequences for the environment and human health.

Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed with normal household waste.Please inform yourself about the local rules on separate collection of batteries because correct disposal helps to prevent negative consequences for the environmental and human health.

Always bring your product to a professional to remove the built-in battery.
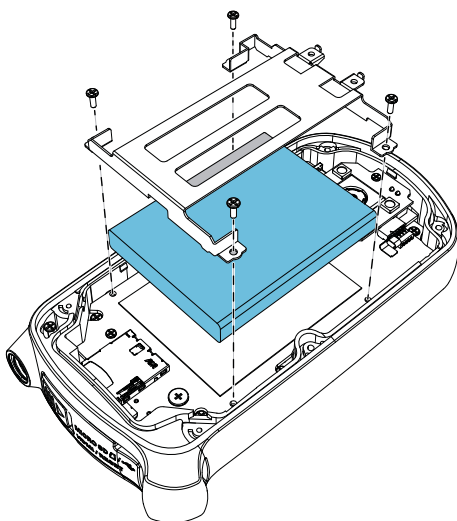
Note

- The safety logo and power rating information are located at the inner side of the protective cover at the bottom of the camcorder.

2 Your camcorder

## Introduction

With this portable camcorder, you can:
- take full HD (1080P), sports HD (720P with 60 FPS) or VGA movies
- take pictures
- take the camcorder underwater (up to 3 meters, 10 feet)
- take with you anywhere thanks to the rugged and drop-proof design (1.5-meter drop-proof)
- play recorded movies or pictures either directly or on the large screen of a connected TV
- upload the recorded movies or pictures to the Internet directly via your PC/Mac

What's in the box

Make sure that the following items are packed in the box:
- Camcorder
- USB cable (with a mini USB connector)
- Quick start guide
- Pouch

Functional overview
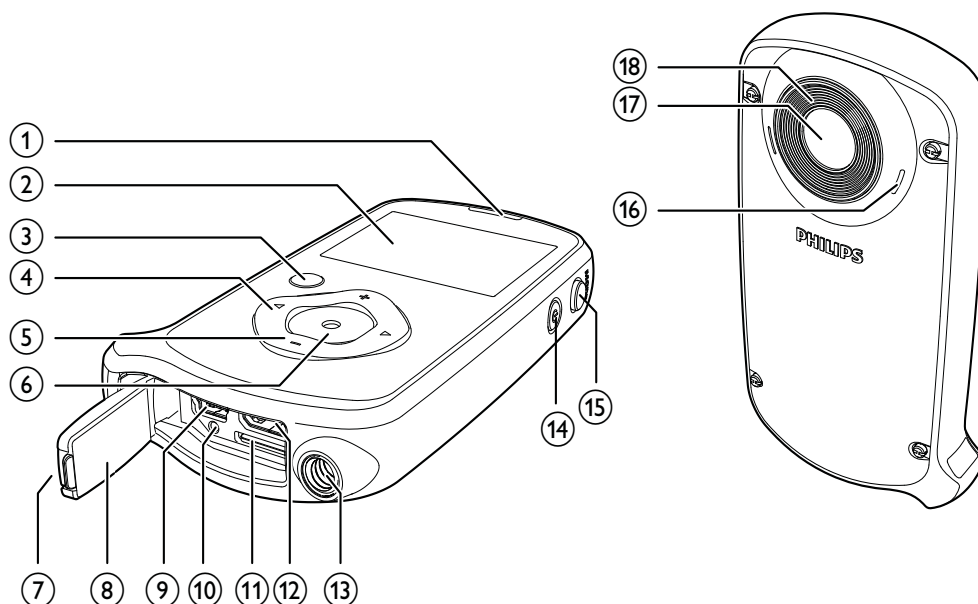
a **Built-in speaker**

b **Display panel**

c ►II
- In viewfinder mode, switch to play mode.
- In play mode, play a selected video clip.
- Confirm settings.

d ◄ / ►
- Navigate left/right in a menu.
- Select a menu option.
- In play mode, turn to the previous/ next picture/video clip.
- (◄) In viewfinder mode, switch to the scene selection window.
- (►) In viewfinder mode, switch to the settings menu.

e +/-
- In viewfinder mode, zoom in/out.
- Navigate up/down in a menu.
- Change a value in the settings menu.

- During video play, change the volume.
- Perform the specific function as shown on the display panel.

f **Shutter button**
- In viewfinder mode, take a picture or start/stop video recording.
- In play mode, switch to viewfinder mode.

g **Fastener**
- Secure the protective cover.

h **Protective cover**

i **Mini USB socket**
- Connect to a PC/Mac through the supplied USB cable.

j **Reset button**
- Restore default settings.

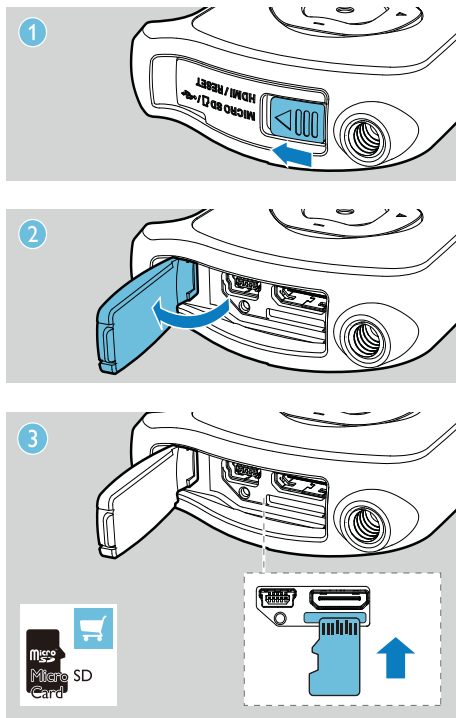k **Micro SD socket**
- Connect a Micro SD card.

l Mini HDMI socket
  • Connect to a TV through an HDMI cable with a mini HDMI connector (type C).

m Tripod socket

n ⏻
  • Turn on/off the camcorder.

o MODE
  • Switch between picture and video recording modes.

p Built-in microphones

q Lens

r Flashlight

3 Get started

Load the Micro SD card

1 Unlock the fastener on the protective cover.

2 Flip open the protective cover.

3 Insert a Micro SD card (not supplied) into the micro SD socket.
   - Make sure that the the Micro SD card is not write-protected.
   - Make sure that the metal contact of the card faces up.

4 Close the protective cover securely.

Turn on

- Press ⏻.
  - ↳ For first-time users, a menu for OSD language selection is displayed (See 'Get started - Set the OSD language').
  - ↳ The camcorder switches to viewfinder mode.

To turn off the camcorder:
- Press and hold ⏻.
  - ↳ The backlight on the display panel turns off.

> ✳ Tip
>
> - To save energy, the camcorder turns off automatically after being idle for 3 minutes.

First-time setup

When you turn on the camcorder for the first time, a menu for OSD language selection is displayed.

1 Press **+/-** to select a language.

2 Press ▶ⅠⅠ to confirm.
   - ↳ A welcome message is displayed briefly.
   - ↳ An inquiry box for date and time setting is displayed.

3 Press ◀ to highlight **[Yes]**.
   - ↳ A date setting menu is displayed.

4 Press ◀ / ▶ to select the day, month and year fields successively.

5 Press **+/-** to change the value of each field.

6 Press ▶ⅠⅠ to confirm the date setting.
   - ↳ A time setting menu is displayed.

7 Press ◀ / ▶ to select the hour and minute fields successively.

8 Press **+/-** to change the value of each field.

9 Press ►II to confirm the time setting.
   - » The first-time setup is complete.
   - » The camcorder enters viewfinder mode.

Select a scene

1 In viewfinder mode, press ◄ to enter the window for scene selection.

2 Press **+/-** to select a scene.

3 Press ►II to confirm and go back to viewfinder mode.
   - Or press ► to cancel and go back to viewfinder mode.

Charge the built-in battery
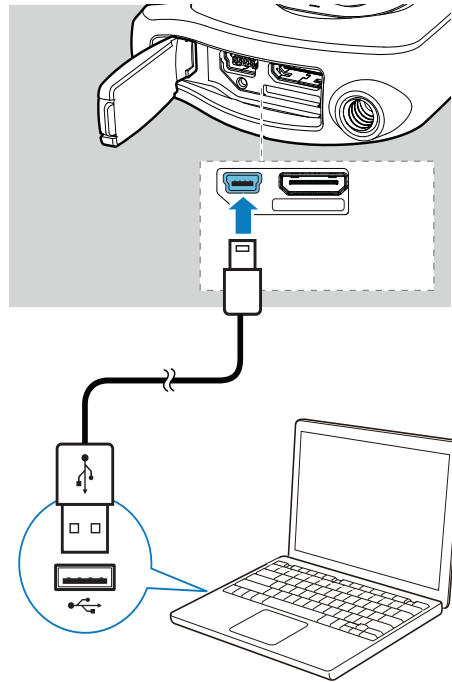
1 Unlock the fastener to flip open the protective cover at the bottom of the camcorder.

2 Connect the camcorder to a PC through the supplied USB cable.
   - » The status indicator on the shutter button starts flashing in orange.

3 Wait until the status indicator stops flashing and turns to green steadily.
   - » The built-in battery is fully charged.

You can also charge the camcorder via a USB adaptor (not supplied) connected to mains power. The charge time is about 2 hours.

UK

EUR
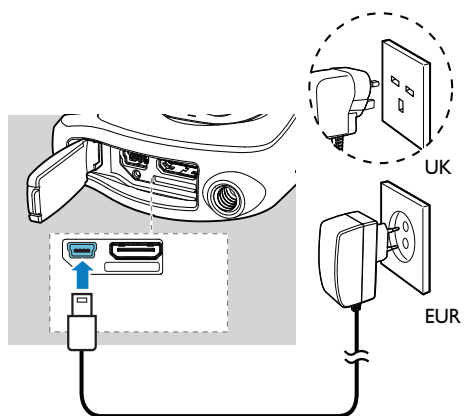
4 Use your water and drop proof camcorder

Note

- This camcorder is designed to be drop-proof (1.5 meters, 5 feet) and water-proof (3 meters, 10 feet).

You can take this camcorder 3 meters (10 feet) underwater to film or take photos of what's happening underwater.
You can also take it out with you on the beach, in the pool or anywhere you like.

Warning

- After use underwater, make sure to rinse the camcorder with tap water, then wipe with a soft dry cloth.
- Never open the protective cover when the camcorder is still wet after use underwater.

Record video

1 Press **MODE** once or twice until ▣ is displayed at the upper right corner of the display panel.
  ↳ The selected resolution and remaining recording time are displayed on the display panel.

2 Hold the camcorder steadily and aim the lens as needed.

3 Press the shutter button to start recording.
  ↳ A red time indicator is displayed on the display panel.
  ↳ The status indicator on the shutter button starts flashing in red.

4 Press the shutter button again to end recording.
  ↳ **[Recording saved!]** is displayed briefly.

Take pictures

1 Press **MODE** once or twice until ▣ is displayed at the upper right corner of the display panel.
  ↳ The file size and remaining number of pictures that can be taken are displayed on the display panel.

2 Hold the camcorder steadily and aim the lens as needed.

3 Press the shutter button down halfway to adjust the focus.

4 Press the shutter button down completely to take a picture.
  ↳ **[Picture saved!]** is displayed briefly.

Play

1 In viewfinder mode, press ▶❚❚ to enter play mode.
  ↳ The last recorded media is played automatically.

2 Press ◀ / ▶ to select a picture or video clip for play.

3 If the selected file is a video clip, press ▶❚❚ to start play.

Delete a file

1 In play mode, press ◀ / ▶ to select a file.
2 Press **+** to enter the edit window.
3 Press **+** again to enter the window for deletion confirmation.
4 Press ◀ to highlight **[Yes]** and confirm the deletion operation.
  ↳ **[Deleted!]** is dispalyed briefly.
  ↳ To exit the operation, press ▶ to highlight **[No]**.

Zoom in a picture

1   In play mode, press ◄ / ► to select a picture.
2   Press **+** to enter the edit window.
3   Press ◄ to zoom in the picture.
4   Press **+/-**/ ◄ / ► to pan through the enlarged picture.
    •   To return to normal view, press ►II.

Trim a video clip

> **Note**
>
> • Only video files not recorded with 'Dual recording' can be edited (trimmed) on the camcorder.

1   In play mode, press ◄ / ► to select a recorded video clip.
2   Press **+** to enter the edit window.
3   Press ◄ to enter the trim window.
    ↳ A bar for video trimming is displayed at the top of the window.
4   Press ► to set the starting point you want.
5   Press ►II to confirm.
6   Press ◄ to set the ending point you want.
7   Press ►II to confirm.
    ↳ A video trim menu is displayed.
8   Press **+/-** to select an option, then press ►II to confirm.

Menu option	Description
[Go back]	Go back to the trim window.
[Preview edit]	Preview the trimmed video clip.
[Save as new file]	Save the trimmed video clip as a new file.
[Cancel and exit]	Cancel the trim operation and exit.

Tag a file

1   In play mode, press ◄ / ► to select a file.
2   Press **+** to enter the edit window.
3   Press **-** to tag the file.
    •   To untag the file, press **-** again.
4   Repeat steps 1 to 3 to tag other files.

Preview

•   In play mode, press **-**.
    ↳ The thumbnails of 6 files are displayed on each page.
    ↳ To select a file, press **+/-**/ ◄ / ►.

Play tagged files

1   During preview, hold ►II.
    ↳ A tag operation menu is displayed.

2   Press **+/-** to select an option, then press ◄ / ► to highlight **[Yes]** for confirmation.

Menu option	Description
[Play all]	Play all files.
[Play tagged]	Play tagged files only.
[Quick impression]	Play excerpts of tagged files.
[Clear all tags]	Untag all files.

Options during video play

Fast forward/reverse

•   During video play, press and hold ◄ / ►.
    •   To return to the normal speed, release ◄ / ►.

Adjust volume level

•   During video play, press **+/-**.

Adjust settings

1 In viewfinder mode, press ▶.
   ↳ A settings menu is displayed.

2 Press **+/-** to highlight an option.

3 Press ◀ / ▶ to select a setting.

4 Press ▶ **II** to confirm the setting and return to viewfinder mode.

Settings menu option	Description
[Flash]	Select a flashlight mode: [On], [Off] or [Auto].
[Resolution]	Select a video resolution: [Full HD] (for best video quality), [Sports HD] (for filming of fast moving objects), or [Standard] (for reduced video file size).
[Photo Size]	Select the size of the photos to be saved (the higher the photo size, the higher the resolution).
[Scene]	Select an automatic exposure mode that matches your shot for easy shooting.
[Smile Detection]	Enable/disable smile detection.
[Dual recording]	Record full HD and compressed QVGA videos at the same time.
[Autoplay]	Start automatic play when the camcorder is connected to a PC.
[Pre-record]	Enable/disable 3-second pre-record mode.
[Capture sound]	Turn on/off the capture sound.

Settings menu option	Description
[Date]	Set the date.
[Time]	Set the time.
[Language]	Select your desired menu language.
[Format SD card]	Clear contents from the micro SD card.
[TV system]	Change this setting if the output video does not appear correctly on your TV.

5 Use more of your camcorder

View video or pictures on TV
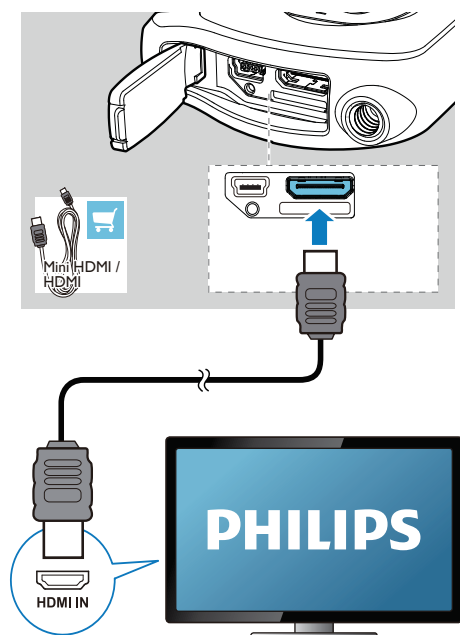
1 Unlock the fastener to flip open the protective cover at the bottom of the camcorder.

2 Connect an HDMI cable (not supplied) to:
   - the **HDMI** socket on the camcorder (requiring a mini HDMI connector)
   - the HDMI input socket on an HDTV
   - An inquiry box for output mode selection is displayed.

3 To output the exact camcorder display with menu options to the TV screen, select **[TV]**.
   - To output the camcorder display without menu options to the TV screen, select **[Live CAM]**.

4 On the camcorder, select a file and start play.

Install and use the camcorder software

⚠ **Warning**

- If you remove the supplied software, you will not be able to get one from ArcSoft for free.

With the software (ArcSoft MediaImpression HD Edition) available in the internal memory of the camcorder, you can import, edit, archive or upload your pictures/videos to the Internet easily.

📄 **Note**

- The software supplied only works on PCs that operate Microsoft® Windows® XP, Vista and Windows 7.
- When you connect the camcorder to a Mac, use the iMovie software to import and edit your pictures/videos directly.

Install the camcorder software

1 Connect the camcorder to a PC (see 'Get started' > 'Charge the built-in battery').

2 If the software does not install automatically, find and click the **Setup** icon at **My Computer\CAM150**.

3 Follow the on-screen instructions to finish installation of the software.

Install and use the camcorder software

1 On your PC, click **Start\(All) Programs\ ArcSoft MediaImpression HD Edition**.
  ↳ The main screen of the software is displayed.

2 Click an option to select the corresponding operation.

3 Follow the on-screen instructions to complete the operation.

Transfer video/pictures to a PC/Mac

1 Connect the camcorder to a PC/Mac (see 'Get started' > 'Charge the built-in battery').
  ↳ It may take some time for the PC/Mac to recognize the camcorder.

2 Find your video/pictures at **My Computer\CAM150\DCIM\100MEDIA** or **My Computer\CAM150 SD\ DCIM\100MEDIA**.

3 Copy any video/pictures you want to your designated folder in the PC/Mac.

✳ **Tip**

• You can also import the video/picture files with the camcorder software (for PC) or iMovie (for Mac).

6 Technical specifications

Product information is subject to change without prior notice.

Image sensor	1/3.2'' 8MP CMOS sensor
Operation modes	Movie record, picture record
Lens (focusing)	Auto focus f=4.76mm
Focus mode	Auto focus
Focus range	0.1m to Infinity
Aperture	F2.8
Digital zoom	5X
Exposure control	Auto
White balance	Auto
Auto power off	3 minutes
Memory	64MB (512Mbit) DDR2 + 128MB SLC (96MB for AP) + Micro-SD card Slot
Shutter type	Electronic
Shutter speed	1/2~1/4000 second
Picture file format	JPEG
Video container format (compression)	*.MP4 (H.264)
Video resolution	Full HD (1080p 30) 1920 X1080 (30fps) Sports HD (720p 60) 1280X720 (60fps) VGA (4:3) 640X480 (30fps)
Audio file format	AAC
Battery	1100mAh Li-ion (built-in); 120-minute battery life time based on 720P recording

PC interface	Mini USB 2.0 port
System support	Windows XP/Vista/ Windows 7, Mac (mass storage only)
TV out	NTSC/PAL selectable, Mini HDMI (type C)
Power rating	DC 5V, 500mA
Weight	145 g
Dimensions (W x H x D)	57.6 x 109.2 x 21.5 mm

7 Frequently asked questions (FAQ)

Why is there no response when I use the camcorder?
- The camcorder is in power-off mode. Turn on the camcorder (see 'Get started' > 'Turn on').
- The built-in battery may be drained. Charge the battery (see 'Get started' > 'Charge the built-in battery').

Why is [Memory full!] displayed when I try to record?
- Ensure that the Micro SD card has been inserted correctly (see 'Get started' > 'Load the Micro SD card').
- The memory is used up. Save your video/pictures to a computer (see 'Use more of your camcorder' > 'Transfer video/pictures to a PC/Mac'). Then delete files from your camcorder or clear the memory.

How much memory is needed for 1 hour of Full HD recording?
- The CAM150 uses 4GB on average for 1 hour of Full HD video. For a more complex video recording (e.g. with lots of motions in the video, or a lot of panning), the CAM150 will use more memory. This is done to maintain the video quality, but will increase the usage of memory.

Why do I have no access to folders on the camcorder from my computer?
- Ensure that the USB connection is correct.
- The camcorder turns off automatically 15 minutes after it is connected to a computer. You can press ▶❚❚ to turn it on again.

Why do my video/pictures look blurry?
- Hold the camcorder steady in your hands during shooting.

- During video capture, do not move the camcorder too fast.
- Use a tripod (not supplied) if necessary.

Why do my video/pictures look distorted on a TV screen?
- Select the correct TV system.

How do I charge the camcorder?
- You can charge the camcorder via the supported USB cable. When you connect it to your PC/laptop it will automatically charge. You can also connect the camcorder to a USB charger via the supplied USB cable.

How long do I have to charge the camcorder?
- The camcorder is fully charged for first usage. The camcorder charge time when connected to your PC/laptop is 3 hours. When you charge it via USB adaptor, the charge time is 2 hours.

Where can I find an adaptor for CAM150 to charge the battery?
- CAM150 can be charged via regular USB adaptors, which are readily available in electronic stores. CAM150 is also compatible with iPhone adaptors.

How do I fast-forward or rewind on the camcorder?
- You can fast-forward during play of a movie by pressing the right-button for 2 seconds. You can rewind during play of a movie by pressing the left-button for 2 seconds.

Camcorder stopped responding?
- In the unlikely event that your camcorder stops responding, you can manually reset it. The reset button is located under the protective cover. There you see a small opening beside the USB socket. Please use a small prying object (like a pen) to insert and press gently for resetting. After you have reset the camcorder, please turn on the camcorder again, and set-up will start again.

Why does the camcorder sometimes not record the right color?

- To record both indoors and outdoors, and not having to change any settings, the camcorder has an automatic white-balance correction. This enables you to record both indoors and outdoors where the amount of light in the environment changes. If you move fast from outdoors to indoors, the camcorder might need some time to correct that, and in extreme cases the colors might seem a bit unnatural. However, after a few seconds this will be corrected automatically by the camcorder.

Can I connect the camcorder directly to TV, DVD/Blu-ray player or Home Cinema set via their USB-port?

- The USB connection is designed to share your videos/pictures to your PC or Laptop. You can connect the CAM150 directly to your TV, DVD/Blu-ray player or Home cinema set (called the host from this point on), and it will play the pictures that are stored on the CAM150. To play the videos from the CAM150, it depends if your host supports the file format H.264 of the CAM150. Most Blu-ray enabled players are able to play this format.

How do I connect it to a Windows PC/laptop?

- Connect the camcorder to your PC/laptop via USB. For easy sharing and editing, install the software program (Media Impression HD) that comes with the camcorder.

How do I connect it to a Mac?

- The camcorder works with the Mac via USB. The camcorder works great with the iMovie software, which is part of the iLife package that comes with your Mac. To transfer videos using iMovie, simply connect the camcorder to your Mac via USB, launch iMovie and start importing by clicking the camcorder icon. Select 'Use original quality' to ensure the best quality, and to maintain file sizes at an optimum.

How do I play my videos on TV?

- To play back on TV, please use an HDMI connector (mini HDMI to standard HDMI) if your TV accepts HDMI input.

Why is there no lens cover?

- The camcorder comes without a lens cover, keeping it simple to use and fuss-free. It is made of robust material that doesn't scratch under normal usage. A travel pouch and a lens cloth are provided, allowing you to keep the camcorder clean.

What format does the camcorder record in?

- The camcorder uses the same video format as Blu-ray players and discs – H.264. This highly sophisticated format delivers superb HD picture quality.

What does pre-record mean that is in the setting?

- The pre-record button is designed to let you never miss a moment. When you enable the pre-record function, the camcorder will record video 3 seconds before you have pressed the record button. So when you play-back the recorded film, you will automatically see the first 3 seconds before you have pressed the record button. This can be useful when filming unexpected moments. The pre-record function will not drain battery life, it will operate as normal.

Some video files cannot be edited. Why is that?

- Video files recorded with dual recording cannot be edited. To edit video files on the camcorder, set **[Dual recording]** to **[Off]** before you record video (see 'Use your camcorder' > 'Adjust settings').

Tips on video making

- You can easily look back on fun moments and relive them with the camcorder. To enjoy these memories to the fullest, here are some simple video tips:
  - When capturing videos, hold your camcorder steady in your hand

19

- Don't move too fast when panning (i.e. moving the camera horizontally) as it will be hard to follow what is captured when you review the video
- Try shooting from different angles – for example, from the side, from the front, or even from below. You can easily join the different video segments together with the PC software included

部件名称 Name of the Parts	有毒有害物质或元素 Hazardous/toxic Substance					
	铅 (Pb, Lead)	汞 (Hg, Mercury)	镉 (Cd, cadmium)	六价铬 (Chromium 6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
Housing 外壳	O	O	O	O	O	O
LCD Panel 液晶面板	X	X	O	O	O	O
PWBs 电路板组件	X	O	O	O	O	O
Accessories (Remote control & cables) 附件（电源线，连 接线）	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363 - 2006 标准规定的限量要求
以下。

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for
this part is below the limit requirement in SJ/T11363 - 2006.

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363 – 2006 标准规定的限量
要求。

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous
materials used for this part is above the limit requirement in SJ/T11363 – 2006.

⑩ 环保使用期限 Environmental Protection Use Period

电子信息产品中含有的有毒有害物质或元素在正常使用的条件下不会发生外泄或突变，电子信息产品用户使用
该电子信息产品不会对环境造成严重污染或对其人身、财产造成严重损害的期限。

This logo refers to the period (10 years) during which the toxic or hazardous substances or elements
contained in electronic information products will not leak or mutate so that the use of these [substances
or elements] will not result in any severe environmental pollution, any bodily injury or damage to any
assets.

PHILIPS