SONY

Digital Still Camera

Instruction Manual

If the product number of your camera is within the range below, refer to the following URL. 3010001 - 9000000 9330001 - 9999000

http://helpguide.sony.net/dsc/rx100/d035100111.pdf

Cyber-shot

English

Learning more about the camera ("Help Guide")



"Help Guide" is an on-line manual. You can read the "Help Guide" on your computer or smartphone.

Refer to it for in-depth instructions on the many functions of the camera.

URL:

http://rd1.sony.net/help/dsc/1740/h_zz/



For Customers in the U.S.A.

For question regarding your product or for the Sony Service Center nearest you, call 1-800-222-SONY (7669).

Declaration of Conformity

Trade Name: SONY Model: DSC-RX100

Responsible Party: Sony Electronics Inc.

Address: 16535 Via Esprillo, San Diego, CA 92127 U.S.A.

Telephone Number: 858-942-2230

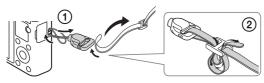
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Checking the supplied items

The number in parentheses indicates the number of pieces.

- Camera (1)
- Rechargeable Battery Pack NP-BX1 (1)
- Micro USB Cable (1)
- AC Adaptor (1)
- Power Cord (mains lead) (supplied in some countries/regions) (1)
- Wrist Strap (1)
- Strap adapter (2)

(Strap adapters are used to attach the shoulder strap (sold separately), as illustrated.)

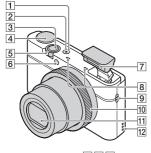


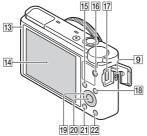
- Instruction Manual (this manual) (1)
- Reference Guide (1)

About language setting

Change the screen language before using the camera if necessary (page 11).

Identifying parts







- 1 ON/OFF (Power) button
- 2 Power/Charge lamp
- 3 Shutter button
- 4 Mode dial

intelligent Auto)/

(Superior Auto)/

A (Aperture Priority)/

S (Shutter Priority)/

M (Manual Exposure)/

MR (Memory recall)/

| (Movie)/| (Sweep Panorama)/SCN (Scene

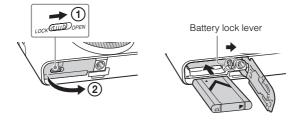
Selection)

- [5] For shooting: W/T (zoom) lever For viewing: ■ (Index) lever/ Playback zoom lever
- 6 Self-timer lamp/Smile Shutter lamp/AF illuminator
- 7 Flash
 - Do not cover the flash with your finger.
 - When using the flash, the flash pops up automatically. If not using the flash, press it down manually.
- 8 Microphone
- 9 Hook for strap
- 10 Control ring
- 11 Lens
- 12 Speaker
- 13 Light sensor
- 14 Monitor
- 15 Fn (Function) button
- 16 MOVIE (Movie) button
- 17 Micro USB connector
- 18 MENU button
- 19 Control wheel

- 20 Center button
- 21 (Playback) button
- ② **?**/節 (In-Camera Guide/Delete) button
- 23 Battery insertion slot
- 24 Battery lock lever
- 25 Tripod socket hole
 - Use a tripod with a screw less than 5.5 mm (7/32 inches) long. Otherwise, you cannot firmly secure the camera, and damage to the camera may occur.

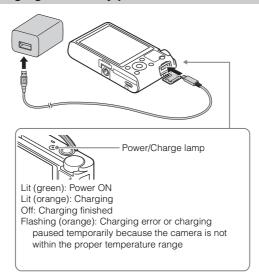
- 26 Access lamp
- 27 Memory card slot
- 28 HDMI micro jack
- 29 Battery/Memory card cover

Inserting the battery pack



- 1 Open the cover.
- 2 Insert the battery pack.
 - While pressing the battery lock lever, insert the battery pack as illustrated. Make sure that the battery lock lever locks after insertion.
 - Closing the cover with the battery inserted incorrectly may damage the camera.

Charging the battery pack



- 1 Connect the camera to the AC Adaptor (supplied), using the micro USB cable (supplied).
- 2 Connect the AC Adaptor to the wall outlet (wall socket). The power/charge lamp lights orange, and charging starts.
 - · Turn off the camera while charging the battery.
 - You can charge the battery pack even when it is partially charged.
 - When the power/charge lamp flashes and charging is not finished, remove and re-insert the battery pack.
 - For some countries/regions, connect the power cord (mains lead) to the AC Adaptor, and connect the AC Adaptor to the wall outlet (wall socket).

Notes

- If the power/charge lamp on the camera flashes when the AC Adaptor is connected
 to the wall outlet (wall socket), this indicates that charging is temporarily stopped
 because the temperature is outside the recommended range. When the temperature
 gets back within the appropriate range, the charging resumes. We recommend
 charging the battery pack in an ambient temperature of between 10°C to 30°C
 (50°F to 86°F).
- The battery pack may not be effectively charged if the terminal section of the battery is dirty. In this case, wipe any dust off lightly using a soft cloth or a cotton swab to clean the terminal section of the battery.
- When charging is finished, disconnect the AC Adaptor from the wall outlet (wall socket).
- Be sure to use only genuine Sony brand battery packs, micro USB cable (supplied) and AC Adaptor (supplied).

■ Charging time (Full charge)

The charging time is approximately 155 min. using the AC Adaptor (supplied). The power/charge lamp lights up and then turns off immediately when the battery pack is fully charged.

Notes

 The above charging time applies when charging a fully depleted battery pack at a temperature of 25°C (77°F). Charging may take longer depending on conditions of use and circumstances.

Charging by connecting to a computer

The battery pack can be charged by connecting the camera to a computer using a micro USB cable. Connect the camera to the computer with the camera turned off.



Notes

- If the camera is connected to a laptop computer that is not connected to a power source, the laptop battery level decreases. Do not charge for an extended period of time.
- Do not turn on/off or restart the computer, or wake the computer to resume from sleep mode when a USB connection has been established between the computer and the camera. That may cause the camera to malfunction. Before turning on/off, or restarting the computer or waking the computer from sleep mode, disconnect the camera and the computer.
- No guarantees are made for charging using a custom-built computer or a modified computer.

Battery life and number of images that can be recorded and played back

	Battery life Number of image	
Shooting (still images)	Approx. 165 min.	Approx. 330 images
Viewing (still images)	Approx. 250 min. Approx. 5000 i	
Shooting (movies)	Approx. 80 min.	_

Notes

- The above estimates for battery life and number of recordable images apply when the battery pack has been fully charged. The battery life and number of images may decrease depending on the conditions of use.
- The battery life and number of recordable images are estimates based on shooting with the default settings under the following conditions:
 - Using the battery pack at an ambient temperature of 25°C (77°F).
 - Using Sony Memory Stick PRO Duo (Mark2) media (sold separately)
- The numbers for "Shooting (still images)" are based on the CIPA standard and shooting under the following conditions:

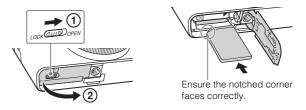
(CIPA: Camera & Imaging Products Association)

- One picture is taken every 30 seconds.
- The power is turned on and off once every ten times.
- The flash strobes once every two times.
- The zoom is switched alternately between the W and T ends.
- The number of minutes for movie shooting is based on the shooting under the following conditions:
 - The image quality is set to AVCHD 60i 17M(FH)/50i 17M(FH)
 - Battery life based on non-stop shooting until the limit (29 minutes) has been reached, and then continued by pressing the MOVIE (Movie) button again. Other functions, such as zooming, are not operated.

■ Supplying power

The camera can be supplied with power from the wall outlet (wall socket) by connecting to the AC Adaptor (supplied), using the micro USB cable (supplied). This way, you do not need to worry about draining the battery when shooting or playing back for extended periods of time. Shooting and playback are possible without a battery pack in the camera.

Inserting a memory card (sold separately)



- 1 Open the cover.
- 2 Insert the memory card.
 - With the notched corner facing as illustrated, insert the memory card until it clicks into place.
- 3 Close the cover.

■ Memory cards that can be used

Memory card	For still images For movies	
Memory Stick PRO Duo	>	✓ (Mark2 only)
Memory Stick PRO-HG Duo	>	<
Memory Stick Micro (M2)	~	✓ (Mark2 only)
SD memory card	>	✓ (Class 4 or faster)
SDHC memory card	>	✓ (Class 4 or faster)
SDXC memory card	>	✓ (Class 4 or faster)
microSD memory card	>	✓ (Class 4 or faster)
microSDHC memory card	~	✓ (Class 4 or faster)
microSDXC memory card	~	✓ (Class 4 or faster)

 For details on the number of recordable still images and recordable duration of movies, refer to page 22. Check the tables to select a memory card with the desired capacity.

Notes

- Not all memory cards are guaranteed to operate correctly. For memory cards produced by manufacturers other than Sony, consult the manufacturers of the products.
- When using Memory Stick Micro media or microSD memory cards with this camera, make sure to use with the appropriate adaptor.

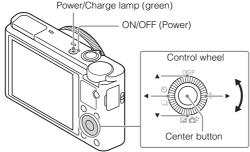
■ To remove the memory card/battery pack

Memory card: Push the memory card in once to eject the memory card. Battery pack: Slide the battery lock lever. Be sure not to drop the battery pack.

Notes

Never remove the memory card/battery pack when the access lamp (page 5) is lit.
 This may cause damage to data in the memory card.

Setting the language and the clock



Select items: **△**/**▼**/**⋖**/**▶**

Set the numeric value of date and

time: **▲/▼/**₹/J

Set: Center button

Press the ON/OFF (Power) button.

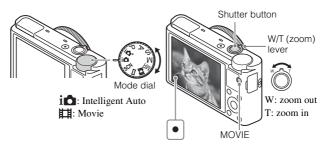
Language setting screen is displayed when you turn on the camera for the first time.

- It may take time for the power to turn on and allow operation.
- 2 Select a desired language, then press the center of the control wheel.

Date & Time setting screen is displayed.

- \mathfrak{P} When the message [Set Area/Date/Time.] is displayed, select [Enter] and press the center.
- 4 Select a desired geographic location by following the on-screen instructions, then press the center.
- 5 Set [Daylight Savings], [Date/Time] and [Date Format], then press the center.
 - When setting [Date/Time], midnight is 12:00 AM, and noon is 12:00 PM
- \mathfrak{h} Check that [Enter] is selected, then press the center.

Shooting still images/movies



Shooting still images

- Press the shutter button halfway down to focus.
 When the image is in focus, a beep sounds and the focus indicator (●) lights.
 - When the camera cannot focus automatically, the focus indicator flashes.
- 2 Press the shutter button fully down to shoot an image.

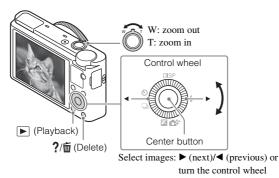
Shooting movies

- 1 Press the MOVIE (Movie) button to start recording.
 - \bullet Use the W/T (zoom) lever to change the zoom scale.
 - Press the shutter button to shoot still images while continuing to record the movie.
- 2 Press the MOVIE button again to stop recording.

Notes

- Do not pull up the flash manually. This may cause a malfunction.
- When using the zoom function while shooting a movie, the sound of the camera operating will be recorded. The sound of the MOVIE button operating may also be recorded when movie recording is finished.
- Continuous movie shooting is possible for a maximum of approximately 29 minutes at one time with the camera's default settings and when the ambient temperature is approximately 25°C (77°F). When movie recording is finished, you can restart recording by pressing the MOVIE button again. Recording may stop to protect the camera depending on the ambient temperature.

Viewing images



Set: Center button

1 Press the ▶ (Playback) button.

■ Selecting next/previous image

Select an image by pressing ► (next)/◄ (previous) on the control wheel or by turning the control wheel. Press the center of the control wheel to view movies

■ Deleting an image

- ① Press the ?/m (Delete) button.
- ② Select [Delete] with ▲ on the control wheel, then press the center.

■ Rotating an image

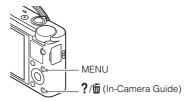
Press the Fn (Function) button.

■ Returning to shooting images

Press the shutter button halfway down.

Viewing the Guide

This camera is equipped with a built-in instruction guide.



In-Camera Guide

The camera displays explanations for MENU items and the setting values.

- 1 Press the MENU button.
- 2 Select the desired MENU item, then press ?/卣 (In-Camera Guide) button.

Shooting Tip

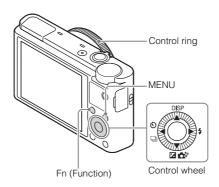
The camera displays shooting tips for the shooting mode selected.

- 1 Press ?/亩 (In-Camera Guide) button in shooting mode.
- 2 Select the desired shooting tip, then press the center of the control wheel.

The shooting tip is displayed.

You can scroll the screen using ▲/▼ and change shooting tips using ◀/►.

Introduction of other functions



■ Control wheel

DISP (Display contents): Allows you to change the screen display.

(b) / [] (Drive Mode): Allows you to switch between shooting methods, such as single shooting, continuous shooting, self-timer shooting or bracket shooting.

(Exposure Comp./Photo Creativity): Allows you to adjust image brightness./Allows you to operate the camera intuitively and shoot creative images easily.

(Flash Mode): Allows you to select a flash mode for still images.
 Center button (Standard): If you press this key when the [Focus Area] is set to [Flexible Spot], you can change the position of the focus area by pressing ▲/▼/◄/▶ on the control wheel. Depending on the options selected in [Focus Area] or [Center Lock-on AF], the available functions varies when pressing the key.

I Fn (Function) button

Allows you to register 12 functions and recall those functions when shooting.

- ① Press the Fn (Function) button.
- ② Select the desired function by pressing $\triangle/\nabla/4/\triangleright$ on the control wheel.
- 3 Select the setting value by turning the control wheel or the control ring.

■ Control ring

Your favorite functions can be assigned to the control ring. When shooting, established settings can be changed just by turning the control ring.

■ Menu Items

(Camera Settings)

Image Size	Selects the size of still images.	
Aspect Ratio	Selects the aspect ratio for still images.	
Quality	Sets the image quality for still images.	
Img. Size(Dual Rec)	Sets the size of still images shot when recording a movie.	
Panorama: Size	Selects the size of panoramic images.	
Panorama: Direction	Sets the shooting direction for panoramic images.	
File Format	Selects the movie file format.	
Record Setting	Selects a frame-rate and bit-rate for the movie.	
Drive Mode	Sets the drive mode, such as for continuous shooting.	
Flash Mode	Sets the flash settings.	
Flash Comp.	Adjusts the intensity of flash output.	
Red Eye Reduction	Reduces the red-eye phenomenon when using flash.	
Focus Mode	Selects the focus method.	
Focus Area	Selects the area of focus.	
AF Illuminator	Sets the AF illuminator, which provides light for a dark scene to aid focusing.	
Exposure Comp.	Compensates for the brightness of the entire image.	
ISO	Sets the ISO sensitivity.	
Metering Mode	Selects the method for measuring brightness.	
White Balance	Adjusts color tones of an image.	
DRO/Auto HDR	Compensates automatically for brightness and contrast.	
Creative Style	Selects the desired image processing. You can also adjust contrast, saturation and sharpness.	

	Selects the desired effect filter to achieve a more	
Picture Effect	impressive and artistic expression.	
Focus Magnifier	Enlarges the image before shooting so that you can check the focus.	
Long Exposure NR	Sets noise reduction processing for shots with a shutter speed of 1/3 second or longer.	
High ISO NR	Sets noise reduction processing for high-sensitivity shooting.	
Center Lock-on AF	Sets the function to track a subject and continue focusing when pressing the center button in the shooting screen.	
Smile/Face Detect.	Selects to detect faces and adjust various settings automatically. Sets to automatically release the shutter when a smile is detected.	
Soft Skin Effect	Sets the Soft Skin Effect and the effect level.	
Auto Obj. Framing	Analyzes the scene when capturing faces, close-ups, or subjects tracked by Lock-on AF function, and automatically trims and saves another copy of the image with a more impressive composition.	
Scene Selection	Selects pre-set settings to match various scene conditions.	
Movie	Selects the exposure mode to suit your subject or effect.	
SteadyShot	Sets SteadyShot for shooting still images. Reduces blur from camera shake when shooting while holding the camera.	
	Sets SteadyShot for shooting movies.	
Color Space	Changes the range of reproducible colors.	
Audio Recording	Sets whether to record audio when shooting a movie.	
Wind Noise Reduct.	Reduces wind noise during movie recording.	
Shooting Tip List	Accesses all shooting tips.	
Memory recall	Selects a setting registered in advance when the mode dial is set to MR (Memory recall). Optical zoom scale etc. can be registered.	
Memory	Registers the desired modes or camera settings.	

☆ (Custom Settings)

MF Assist	Displays an enlarged image when focusing manually.	
Focus Magnif. Time	Sets the length of time the image will be shown in an enlarged form.	
Grid Line	Sets a grid line display to enable alignment to a structural outline.	
Auto Review	Sets auto review to display the captured image after shooting.	
DISP Button	Sets the type of information to be displayed on the monitor by pressing DISP on the control wheel.	
Peaking Level	Enhances the outline of in-focus ranges with a specific color when focusing manually.	
Peaking Color	Sets the color used for the peaking function.	
Zoom Setting	Sets whether to use the Clear Image Zoom and Digital Zoom when zooming.	
Face Registration	Registers or changes the person to be given priority in the focus.	
₩rite Date	Sets whether to record a shooting date on the still image.	
Function Menu Set.	Customizes the functions displayed when the Fn (Function) button is pressed.	
Custom Key Settings	Assigning functions to the various keys allows you to perform operations more quickly by pressing the keys when shooting images.	
MOVIE Button	Sets whether to always activate the MOVIE button.	

▶ (Playback)

Delete	Deletes an image.	
View Mode	Sets the way in which images are grouped for playback.	
Image Index	Displays multiple images at the same time.	
Display Rotation	Sets the playback direction of the recording image.	
Slide Show	Shows a slide show.	

Protect	Protects the images.
Specify Printing	Adds a print order mark to a still image.

盎 (Setup)

Monitor Brightness	Sets the monitor brightness.	
Volume Settings	Sets the volume for movie playback.	
Audio signals	Sets the operating sound of the camera.	
Upload Settings	Sets the upload function of the camera when using an Eye-Fi card.	
Mode Dial Guide	Turns the mode dial guide (the explanation of each shooting mode) on or off.	
Pwr Save Start Time	Sets the length of time until the camera turns off automatically.	
Demo Mode	Sets demonstration playback of a movie to on or off.	
HDMI Settings	Sets the HDMI settings.	
USB Connection	Sets the USB connection method.	
USB LUN Setting	Enhances compatibility by limiting the functions of the USB connection. Set to [Multi] in normal conditions and to [Single] only when the connection between the camera and a computer or AV component cannot be established.	
USB Power Supply	Sets whether to supply power via USB connection when the camera is connected to a computer or USB device using a micro USB cable.	
Language	Selects the language.	
Date/Time Setup	Sets date and time, and daylight savings.	
Area Setting	Sets the location of use.	
Format	Formats the memory card.	
File Number	Sets the method used to assign file numbers to still images and movies.	
Select REC Folder	Changes the selected folder for storing still images and movies (MP4).	

New Folder	Creates a new folder for storing still images and movies (MP4).
Recover Image DB	Recovers the image database file and enables recording and playback.
Display Media Info.	Displays the remaining recording time of movies and the recordable number of still images on the memory card.
Version	Displays the camera software version.
Setting Reset	Restores settings to their defaults.

Using software

Installing the following software to your computer will make your camera experience more convenient.

- PlayMemories Home: Imports images to your computer and lets you use them in different ways (page 21).
- Image Data Converter: Displays RAW images and processes them.

You can download and install this software to your computer from the following URLs.

1 Using the Internet browser on your computer, go to one of the following URLs, and then follow the instructions on the screen to download the desired software.

Windows:

http://www.sony.co.jp/imsoft/Win/

Mac:

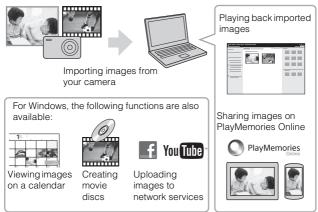
http://www.sony.co.jp/imsoft/Mac/

- · An Internet connection is required.
- For details on operation, refer to the support page or Help page of the software.

Importing images to your computer and using them (PlayMemories Home)

The software PlayMemories Home allows you to import still images and movies to your computer and use them. PlayMemories Home is required for importing AVCHD movies to your computer.

http://www.sony.net/pm/



Notes

- An Internet connection is required to use PlayMemories Online or other network services. PlayMemories Online or other network services may not be available in some countries or regions.
- If the software PMB (Picture Motion Browser), supplied with models released before 2011, has already been installed on your computer, PlayMemories Home will overwrite it during the installation. Use PlayMemories Home, the successor software of PMB.
- New functions may be installed in PlayMemories Home. Connect the camera to your computer even if PlayMemories Home is already installed on your computer.
- Do not disconnect the micro USB cable (supplied) from the camera while the operating screen or the accessing screen is displayed. Doing so may damage the data.
- To disconnect the camera from the computer, click on the tasktray, then click [Eject DSC-RX100].

Number of still images and recordable time of movies

The number of still images and recordable time may vary depending on the shooting conditions and the memory card.

■ Still images

The table below shows the approximate number of images that can be recorded on a memory card formatted with this camera. The values are defined using Sony standard memory cards for testing.

[Image Size]: L: 20M

When [Aspect Ratio] is set to [3:2]*

Quality	Number of still images		
	8 GB	64 GB	
Standard	1200 images	9600 images	
Fine	690 images	5500 images	
RAW & JPEG	235 images	1900 images	
RAW	355 images	2850 images	

^{*} When the [Aspect Ratio] is set to other than [3:2], you can record more pictures than shown above. (Except when [Quality] is set to [RAW].)

Movies

The table below shows the approximate total recording times using a memory card formatted with this camera.

File Format	Record Setting	Recordable time (h (hour), m (minute))		
		8 GB	32 GB	64 GB
AVCHD	60i 24M(FX)/50i 24M(FX)	40 m	3 h	6 h
	60i 17M(FH)/50i 17M(FH)	1 h	4 h 5 m	8 h 15 m
	60p 28M(PS)/50p 28M(PS)	35 m	2 h 30 m	5 h 5 m
MP4	1440×1080 12M	1 h 20 m	5 h 30 m	11 h 5 m
	VGA 3M	4 h 55 m	20 h	40 h 10 m

Continuous movie shooting is possible for a maximum of approximately 29 minutes at one time with the camera's default settings and when the ambient temperature is approximately 25°C (77°F).

 The recordable time of movies varies because the camera is equipped with VBR (Variable Bit-Rate), which automatically adjusts image quality depending on the shooting scene. When you record a fast-moving subject, the image is clearer but the recordable time is shorter because more memory is required for recording.
 The recordable time also varies depending on the shooting conditions, the subject or the image quality/size settings.

Notes on using the camera

Functions built into this camera

 This manual describes 1080 60i-compatible devices and 1080 50i-compatible devices.

To check whether your camera is a 1080 60i-compatible device or 1080 50i-compatible device, check for the following marks on the bottom of the camera. 1080 60i-compatible device: 60i 1080 50i-compatible device: 50i

 This camera is compatible with 1080 60p or 50p-format movies. Unlike standard recording modes up to now, which record in an interlacing method, this camera records using a progressive method. This increases the resolution, and provides a smoother, more realistic image. Movies recorded in 1080 60p/1080 50p format can be played back only on 1080 60p/1080 50p-supported devices.

On use and care

Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping, or stepping on the product. Be particularly careful of the lens.

Notes on recording/playback

- Before you start recording, make a trial recording to make sure that the camera is working correctly.
- The camera is neither dust-proof, nor splash-proof, nor water-proof.
- Do not directly expose the lens to beams such as laser beams. That may damage the image sensor and cause the camera to malfunction.
- Do not expose the camera to sunlight or shoot sunward for a long time. The internal mechanism may be damaged.
- Do not aim the camera at the sun or other bright light. It may cause the malfunction of the camera.
- If moisture condensation occurs, remove it before using the camera.
- Do not shake or strike the camera. It may cause a malfunction and you may not be able to record images. Furthermore, the recording media may become unusable or image data may be damaged.

Do not use/store the camera in the following places

- In an extremely hot, cold or humid place
 In places such as in a car parked in the sun, the camera body may become deformed and this may cause a malfunction.
- Storing under direct sunlight or near a heater
 The camera body may become discolored or deformed, and this may cause a malfunction
- · In a location subject to rocking vibration
- Near a location that generates strong radio waves, emits radiation or is strongly
 magnetic place. Otherwise, the camera may not properly record or play back
 images.
- In sandy or dusty places
 Be careful not to let sand or dust get into the camera. This may cause the camera to malfunction, and in some cases this malfunction cannot be repaired.

On carrying

Do not sit down in a chair or other place with the camera in the back pocket of your trousers or skirt, as this may cause malfunction or damage the camera.

Notes on continuous shooting

During continuous shooting, the monitor may flash between the shooting screen and a black screen. If you keep watching the screen in this situation, you may experience uncomfortable symptoms such as feeling of unwellness. If you experience uncomfortable symptoms, stop using the camera, and consult your doctor as necessary.

ZEISS lens

The camera is equipped with a ZEISS lens which is capable of reproducing sharp images with excellent contrast. The lens for the camera has been produced under a quality assurance system certified by ZEISS in accordance with the quality standards of ZEISS in Germany.

Notes on the monitor and lens

- The monitor is manufactured using extremely high-precision technology, and over 99.99% of the pixels are operational for effective use. However, some tiny black and/or bright dots (white, red, blue or green) may appear on the monitor. These dots are a normal result of the manufacturing process, and do not affect the recording.
- If the monitor gets wet from water droplets, etc., wipe it off immediately with a soft cloth. Leaving the monitor wet will cause the surface of the monitor to deteriorate or degrade, and malfunctions may occur.
- Take care that your fingers or other objects are not caught in the lens when it is operating.

Notes on the flash

- . Do not carry the camera by the flash unit, or use excessive strength on it.
- If water, dust or sand get into the open flash unit, it may cause a malfunction.
- Take care that your finger is not in the way when pushing the flash down.

Sony accessories

Use only genuine Sony brand accessories, otherwise it may cause a malfunction. Sony brand accessories may not come to market for some countries or regions.

On camera's temperature

Camera body and battery may get warm with use - this is normal.

On the overheat protection

Depending on the camera and battery temperature, you may be unable to record movies or the power may turn off automatically to protect the camera.

A message will be displayed on the screen before the power turns off or you can no longer record movies. In this case, leave the power off and wait until the camera and battery temperature goes down. If you turn on the power without letting the camera and battery cool down enough, the power may turn off again or you may be unable to record movies.

On charging the battery

- If you charge a battery that has not been used for a long time, you may be unable to charge it to the proper capacity.
 - This is due to the battery characteristics. Charge the battery again.
- Batteries which have not been used for more than a year may have become deteriorated.

Warning on copyright

Television programs, films, videotapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the provisions of the copyright laws.

No guarantee in the case of damaged content or recording failures

Sony can provide no guarantees in the event of failure to record or loss or damage of recorded images or audio data due to a malfunction of the camera or recording media, etc. We recommend backing up important data.

Cleaning the camera surface

Clean the camera surface with a soft cloth slightly moistened with water, then wipe the surface with a dry cloth. To prevent damage to the finish or casing:

 Do not expose the camera to chemical products such as thinner, benzine, alcohol, disposable cloths, insect repellent, sunscreen or insecticide.

Maintaining the monitor

- Hand cream or moisturizer left on the monitor may dissolve its coating. If you get any on the monitor, wipe it off immediately.
- · Wiping forcefully with tissue paper or other materials can damage the coating.
- If fingerprints or debris are stuck to the monitor, we recommend that you gently remove any debris and then wipe the monitor clean with a soft cloth.

Specifications

Camera

[System]

Image device: 13.2 mm × 8.8 mm (1.0 type) CMOS sensor Effective pixel number of camera: Approx. 20.2 Megapixels

Total pixel number of camera: Approx. 20.9 Megapixels

Lens: ZEISS Vario-Sonnar T* 3.6× zoom lens

> f = 10.4 mm - 37.1 mm (28 mm -100 mm (35 mm film equivalent)) F1.8 (W) - F4.9 (T)

While shooting movies (16:9):

29 mm - 105 mm*1 While shooting movies (4:3):

36 mm - 128 mm

*1 When [SteadyShot] is set to [Standard]

SteadyShot: Optical

File format (Still images): JPEG (DCF, Exif, MPF Baseline) compliant, RAW (Sony ARW 2.3 Format), DPOF compatible

File format (Movies):

AVCHD format (AVCHD format Ver. 2.0 compatible): Video: MPEG-4 AVC/H.264 Audio: Dolby Digital 2ch, equipped with Dolby Digital Stereo Creator

· Manufactured under license from Dolby Laboratories.

Movies (MP4 format):

Video: MPEG-4 AVC/H.264 Audio: MPEG-4 AAC-LC 2ch Recording media: Memory Stick PRO Duo media, Memory Stick Micro media, SD cards, microSD memory cards

Flash: Flash range (ISO sensitivity (Recommended Exposure Index) set to Auto): Approx. 0.3 m to 17.1 m (11 3/4 inches to 56 ft. 1 3/4 inches) (W)/ Approx. 0.55 m to 6.3 m (1 ft. 9 1/2 inches to 20 ft. 8 inches) (T)

[Input/Output connectors]

HDMI connector: HDMI micro jack Micro USB connector:

USB communication USB communication: Hi-Speed USB (USB 2.0)

[Monitor]

LCD monitor:

7.5 cm (3.0 type) TFT drive Total number of dots:

1 228 800 dots

[General]

Rated input: 3.6 V _____, 1.5 W Operating temperature:

0 to 40 °C (32 to 104 °F)

Storage temperature:

-20 to 60 °C (-4 to 140 °F)

Dimensions (W/H/D) (Approx.):

 $101.6 \times 58.1 \times 35.9 \text{ mm}$ $4 \times 2.3/8 \times 1.7/16 \text{ in}$

Mass (Approx.): 240 g (8.5 oz)

(including battery pack, Memory

Stick PRO Duo media)

Microphone: Stereo Speaker: Monaural

Exif Print: Compatible

PRINT Image Matching III:

Compatible

AC Adaptor AC-UUD11/ AC-UUD12/AC-UUE12

Rated input:

Rechargeable Battery Pack NP-BX1

Rated voltage: 3.6 V

Design and specifications are subject to change without notice.

Trademarks

- Memory Stick and are trademarks or registered trademarks of Sony Corporation.
- "AVCHD Progressive" and "AVCHD Progressive" logotype are trademarks of Panasonic Corporation and Sony Corporation.
- Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.
- Mac is a registered trademark of Apple Inc. in the United States and other countries.
- SDXC logo is a trademark of SD-3C, LLC.
- Facebook and the "f" logo are trademarks or registered trademarks of Facebook, Inc.
- YouTube and the YouTube logo are trademarks or registered trademarks of Google Inc.
- Eye-Fi is a trademark of Eye-Fi, Inc.
- In addition, system and product names used in this manual are, in general, trademarks or registered trademarks of their respective developers or manufacturers.
 However, the TM or ® marks may not be used in all cases in this manual.













On GNU GPL/LGPL applied software

The software that is eligible for the following GNU General Public License (hereinafter referred to as "GPL") or GNU Lesser General Public License (hereinafter referred to as "LGPL") are included in the product.

This informs you that you have a right to have access to, modify, and redistribute source code for these software programs under the conditions of the supplied GPL/LGPL.

Source code is provided on the web. Use the following URL to download it.

http://oss.sony.net/Products/Linux/ We would prefer you do not contact us about the contents of source code. Licenses (in English) are recorded in the internal memory of your product. Establish a Mass Storage connection between the product and a computer to read licenses in the "PMHOME" -"LICENSE" folder.

Additional information on this product and answers to frequently asked questions can be found at our Customer Support Website.

http://www.sony.net/



http://www.sony.net/SonyInfo/Support/