

Digital Still Camera

Instruction Manual



“Help Guide” (Web manual)

Refer to “Help Guide” for in-depth instructions on the many functions of the camera.

http://rd1.sony.net/help/dsc/1640/h_zz/

Cyber-shot

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.



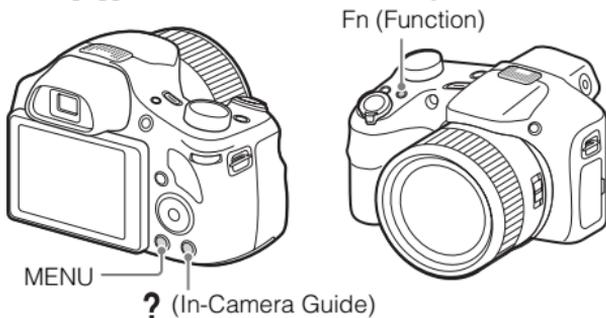
URL:

http://rd1.sony.net/help/dsc/1640/h_??/



Viewing the Guide

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



In-Camera Guide

The camera displays explanations for MENU/Fn (Function) items and the setting values.

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

Shooting Tip

The camera displays shooting tips for the shooting mode selected.

- ① Press the ? (In-Camera Guide) button in shooting mode.
- ② Select the desired shooting tip, then press ● on the control button.

The shooting tip is displayed.

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

Owner's Record

Record the model and serial number (which are located on the product) in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. DSC-

Serial No. _____

WARNING

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

IMPORTANT SAFETY INSTRUCTIONS -SAVE THESE INSTRUCTIONS DANGER TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.

CAUTION

Battery pack

If the battery pack is mishandled, the battery pack can burst, cause a fire or even chemical burns. Observe the following cautions.

- Do not disassemble.
- Do not crush and do not expose the battery pack to any shock or force such as hammering, dropping or stepping on it.
- Do not short circuit and do not allow metal objects to come into contact with the battery terminals.
- Do not expose to high temperature above 60°C (140°F) such as in direct sunlight or in a car parked in the sun.
- Do not incinerate or dispose of in fire.
- Do not handle damaged or leaking lithium ion batteries.
- Be sure to charge the battery pack using a genuine Sony battery charger or a device that can charge the battery pack.
- Keep the battery pack out of the reach of small children.
- Keep the battery pack dry.
- Replace only with the same or equivalent type recommended by Sony.
- Dispose of used battery packs promptly as described in the instructions.

Use a nearby wall outlet (wall socket) when using the supplied or recommended AC Adaptor/battery charger. If any malfunction occurs while using this product, disconnect the plug from the wall outlet (wall socket) immediately to disconnect from the power source. If you use the product with a charge lamp, note that the product is not disconnected from the power source even when the lamp turns off.

Notice

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.

This product has been tested and found compliant with the limits set out in the EMC regulation for using connection cables shorter than 3 meters (9.8 feet).

The electromagnetic fields at the specific frequencies may influence the picture and sound of this unit.

For Customers in the U.S.A. and Canada

RECYCLING LITHIUM-ION BATTERIES

Lithium-Ion batteries are recyclable.

You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, call toll free 1-800-822-8837, or visit <http://www.call2recycle.org/>

Caution: Do not handle damaged or leaking Lithium-Ion batteries.



For supplied accessories

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.

CAN ICES-3 B/NMB-3 B

For Customers in the U.S.A.

If you have any questions about this product, you may call:

Sony Customer Information Center
1-800-222-SONY (7669).

The number below is for the FCC related matters only.

Regulatory Information

Declaration of Conformity

Trade Name: SONY

Model No.: DSC-HX350

Responsible Party: Sony Electronics Inc.

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

Telephone No.: 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.

| CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

| Note:

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.

The supplied interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

For Customers in Europe

| Notice for the customers in the countries applying EU Directives

Manufacturer: Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan
For EU product compliance: Sony Belgium, bijkantoor van Sony Europe Limited, Da Vincilaan 7-D1, 1935 Zaventem, Belgium

Disposal of waste batteries and electrical and electronic equipment (applicable in the European Union and other European countries with separate collection systems)



This symbol on the product, the battery or on the packaging indicates that the product and the battery shall not be treated as household waste. On

certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these products and batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery and the electrical and electronic equipment will be treated properly, hand over these products at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product or battery.

For Customers in India

Battery Pack

IS 16046/IEC 62133



R-41022659

Checking the supplied items

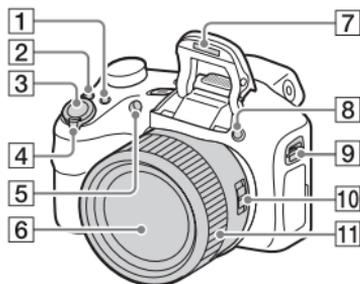
The number in parentheses indicates the number of pieces.

- 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)
- Shoulder Strap (1)
- Lens Cap (1)
- Instruction Manual (this manual) (1)

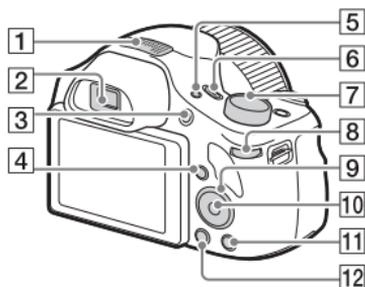
About language setting

Change the screen language before using the camera if necessary (page 24).

Identifying parts

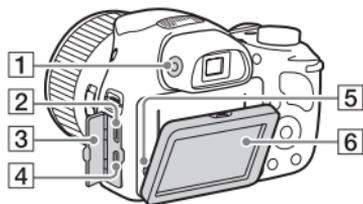
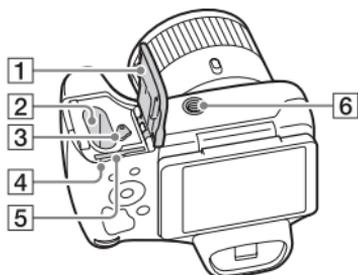


- 1** Fn (Function) button
- 2** CUSTOM (Custom) button
 - You can assign a desired function to the CUSTOM button.
- 3** Shutter button
- 4** For shooting: W/T (zoom) lever
For viewing:  (Index) lever/
 (Playback zoom) lever
- 5** Self-timer lamp/AF illuminator
- 6** Lens
- 7** Flash
 - Press the  (Flash pop-up) button to use the flash. The flash does not pop up automatically.
 - When not using the flash, press it back into the camera body.
- 8**  (Flash pop-up) button
- 9** Hook for Shoulder Strap
- 10** Zoom/Focus switch
- 11** Manual ring
 - When the Zoom/Focus switch is set to AF/ZOOM, turn the manual ring to perform the zoom function.
 - When the Zoom/Focus switch is set to MF or DMF, turn the manual ring to adjust the focus.



- 1** Stereo microphone
- 2** Viewfinder
- 3** MOVIE (Movie) button
- 4**  (Playback) button
- 5** FINDER/MONITOR button
 - The camera does not switch between the monitor display and the viewfinder display automatically. Switch the display by pressing this button.
- 6** ON/OFF (Power) button and Power/Charge lamp
- 7** Mode dial
 -  (Intelligent Auto)/
 -  (Superior Auto)/
 - P** (Program Auto)/
 - A** (Aperture Priority)/
 - S** (Shutter Priority)/
 - M** (Manual Exposure)/
 - 1/2** (Memory recall)/
 -  (Movie)/ (iSweep Panorama)/**SCN** (Scene Selection)

- 8** Control dial
- 9** Control button
- 10** Center button
- 11** ? (In-Camera Guide)/
 (Delete) button
- 12** MENU button



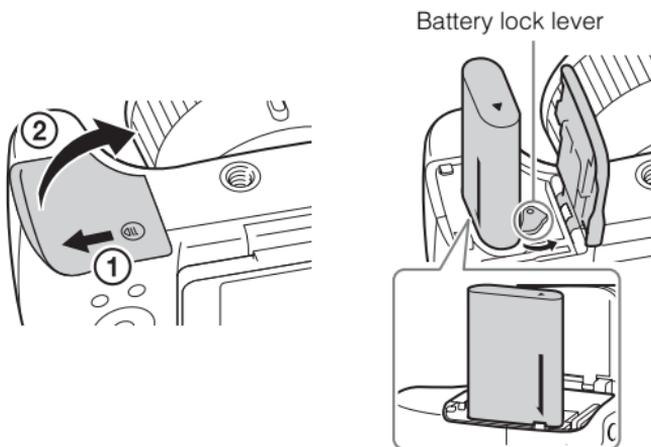
- 1** Diopter-adjustment dial
 - Adjust the diopter-adjustment dial to your eyesight until the display appears clearly in the viewfinder.
 - When adjusting the diopter level, point the camera to a bright area to make it easier to adjust the diopter level.
- 2** Multi/Micro USB Terminal*
 - Supports Micro USB compatible device.
- 3** Connector cover
- 4** HDMI micro jack
- 5** Speaker
- 6** Monitor

- 1** Battery/Memory card cover
- 2** Battery insertion slot
- 3** Battery lock lever
- 4** Access lamp
- 5** Memory card slot
- 6** 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.

* For details on compatible accessories for the Multi/Micro USB Terminal, visit the Sony web site, or consult your Sony dealer or local authorized Sony service facility. Operations with other manufacturers' accessories are not guaranteed.

Inserting the battery pack

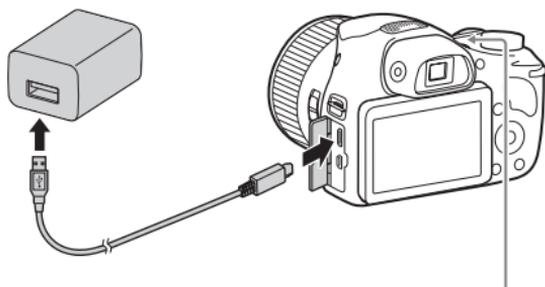


1 Open the cover.

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



Power/Charge lamp
Lit: Charging
Off: Charging finished
Flashing:
Charging error or charging paused temporarily because the camera is not within the proper temperature range

- 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.
- Connect the AC Adaptor (supplied) to the nearest wall outlet (wall socket). If malfunctions occur while using the AC Adaptor, disconnect the plug from the wall outlet (wall socket) immediately to disconnect from the power source.
- 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)

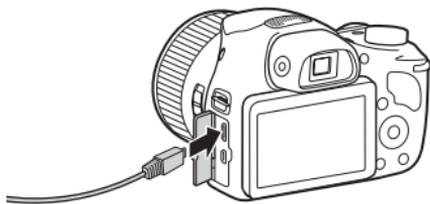
The charging time is approximately 230 minutes using the AC Adaptor (supplied). The Power/Charge lamp lights up and then turns off immediately when the battery pack is fully charged.

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.



←
To a USB jack

- If you connect the camera to a computer when power is turned on, the battery is not charged but the camera will be powered by the computer, which allows you to import images to a computer without worrying about the battery running out.

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 images
Shooting (still images)	Monitor	Approx. 150 min.	Approx. 300 images
	Viewfinder	Approx. 190 min.	Approx. 380 images
Typical movie shooting	Monitor	Approx. 50 min.	—
	Viewfinder	Approx. 55 min.	—
Continuous movie shooting	Monitor	Approx. 85 min.	—
	Viewfinder	Approx. 95 min.	—
Viewing (still images)		Approx. 250 min.	Approx. 5000 images

Notes

- The above number of images applies when the battery pack is fully charged. The number of images may decrease depending on the conditions of use.
- The number of images that can be recorded is for shooting under the following conditions:
 - Using a Sony Memory Stick PRO Duo™ (Mark2) media (sold separately).
 - The battery pack is used at an ambient temperature of 25°C (77°F).
 - [Display Quality] is set to [Standard]

- The number for “Shooting (still images)” is based on the CIPA standard, and is for shooting under the following conditions:
(CIPA: Camera & Imaging Products Association)
 - DISP is set to [Display All Info.].
 - Shooting once every 30 seconds.
 - The zoom is switched alternately between the W and T ends.
 - The flash is used once every two times.
 - The power is turned on and off once every ten times.
- The number of minutes for movie shooting is based on the CIPA standard, and is for shooting under the following conditions:
 - [RECORD] Record Setting]: 60i 17M(FH)/50i 17M(FH).
 - Typical movie shooting: Battery life based on repeatedly starting/stopping shooting, zooming, turning on/off, etc.
 - Continuous movie shooting: Battery life based on non-stop shooting until the limit (29 minutes) has been reached, and then continued by pressing the MOVIE button again. Other functions, such as zooming, are not operated.

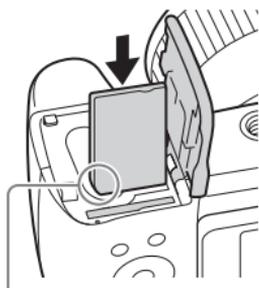
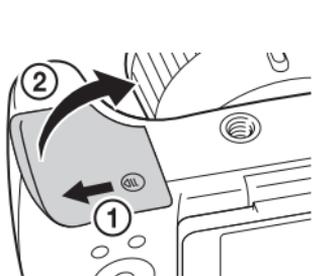
■ Supplying power

You can use the AC Adaptor (supplied) to supply power during shooting or playing back images, reducing battery pack consumption.

Notes

- The camera will not activate if there is no remaining battery. Insert a sufficiently charged battery pack into the camera.
- Do not remove the battery pack while the access lamp (page 9) is lit. The data on the memory card may be damaged.
- As long as the power is on, the battery pack will not be charged even if the camera is connected to the AC Adaptor.
- Under certain conditions, power may be supplied from the battery supplementarily even if you are using the AC Adaptor.
- While power is being supplied via USB connection, the temperature inside the camera will rise and the continuous recording time may be shortened.

Inserting a memory card (sold separately)



Ensure the notched corner faces correctly.

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	
		MP4	AVCHD
Memory Stick PRO Duo	✓	✓	✓ (Mark2 only)
Memory Stick PRO-HG Duo™	✓	✓	✓
Memory Stick Micro™ (M2)	✓	✓	✓ (Mark2 only)
SD memory card	✓	✓*	✓*
SDHC memory card			
SDXC memory card			
microSD memory card	✓	✓*	✓*
microSDHC memory card			
microSDXC memory card			

* SD Speed Class 4 (**CLASS 4**) or faster

- For details on the number of recordable still images and recordable duration of movies, refer to pages 28 to 29. 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

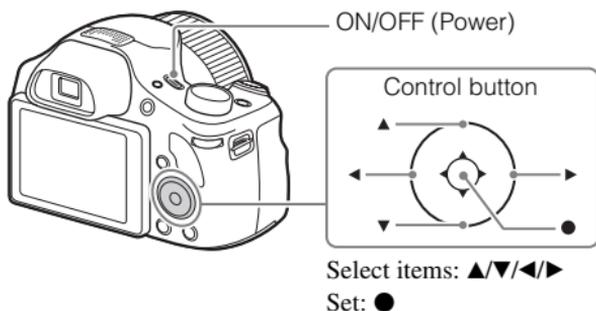
Memory card: Push the memory card in once to eject the memory card.

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 9) is lit. This may cause damage to data in the memory card.

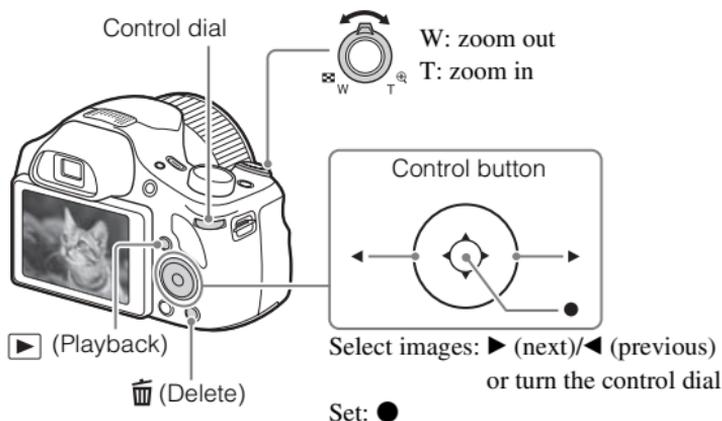
Setting the clock



- 1** Press the ON/OFF (Power) button.
The Date & Time setting is displayed when you turn on the camera for the first time.
 - It may take some time for the power to turn on and allow operation.
- 2** Check that [Enter] is selected on the screen, then press ● on the control button.
- 3** Select a desired geographic location by following the on-screen instructions, then press ●.
- 4** Set [Daylight Savings], [Date/Time] and [Date Format], then press ●.
 - When setting [Date/Time], midnight is 12:00 AM, and noon is 12:00 PM.
- 5** Check that [Enter] is selected, then press ●.

- 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



1 Press the ► (Playback) button.

- When images on a memory card recorded with other cameras are played back on this camera, the registration screen for the data file appears.

■ Selecting next/previous image

Select an image by pressing ► (next)/◄ (previous) on the control button. Press ● in the center of the control button to view movies.

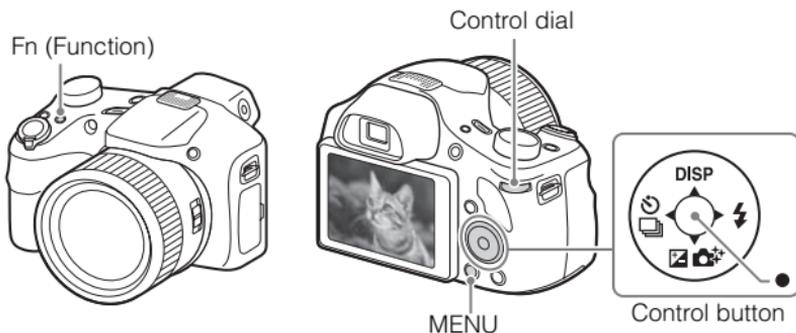
■ Deleting an image

- ① Press the 🗑️ (Delete) button.
- ② Select [Delete] with ▲ on the control button, then press ●.

■ Returning to shooting images

Press the shutter button halfway down.

Introduction of other functions



■ Control button

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

🔄 / 📷 (Drive Mode): Allows you to switch between shooting methods, such as single shooting, continuous shooting or bracket shooting.

📷 (Exposure Comp.): Allows you to compensate the exposure and brightness for the entire image.

📷 (Photo Creativity): Allows you to operate the camera intuitively and shoot creative images easily.

⚡ (Flash Mode): Allows you to select a flash mode for still images.

● (Lock-on AF): The camera tracks the subject and adjusts focus automatically even when the subject is moving.

■ 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 ▲/▼/◀/▶ on the control button.
- ③ Select the setting value by turning the control dial.

■ Control dial

You can instantly change the appropriate setting for each shooting mode just by turning the control dial.

■ 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.
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 the size of the recorded movie frame.
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 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 the brightness of the entire image.
ISO	Sets the ISO sensitivity.
Metering Mode	Selects the method for measuring brightness.
White Balance	Adjusts the 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.
Picture Effect	Selects the desired effect filter to achieve a more impressive and artistic expression.
Focus Magnifier	Enlarges the image before shooting so that you can check the focus.
 High ISO NR	Sets noise reduction processing for high-sensitivity shooting.

Lock-on AF	Sets the function to track a subject and continue focusing.
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 the 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 shooting mode to suit your subject or effect.
 SteadyShot	Sets SteadyShot for shooting movies.
 Auto Slow Shut.	Sets the function that automatically adjusts the shutter speed following the brightness of the environment in movie mode.
Micref Level	Sets the microphone reference level when recording movies.
Wind Noise Reduct.	Reduces wind noise during movie recording.
Shooting Tip List	Displays the shooting tip list.
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.
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.
Exposure Set. Guide	Sets the guide displayed when exposure settings are changed in the shooting screen.
Zoom Setting	Sets whether to use the Clear Image Zoom and Digital Zoom when zooming.
 Write 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	Assigns a desired function to the button.
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.
Slide Show	Shows a slide show.
Rotate	Rotates the image.
 Enlarge Image	Enlarges the playback images.
4K Still Image PB	Outputs still images in 4K resolution to an HDMI-connected TV that supports 4K.
Protect	Protects the images.
Motion Interval ADJ	Adjusts the interval for showing the tracking of subjects in [Motion Shot Video], where the tracking of the subject's motion will be shown when playing back movies.
Specify Printing	Adds a print order mark to a still image.

 **(Setup)**

Monitor Brightness	Sets the monitor brightness.
Volume Settings	Sets the volume for movie playback.
Audio signals	Sets the functional sounds of the camera.
Upload Settings	Sets the upload function of the camera when using an Eye-Fi card.
Tile Menu	Sets whether to display the tile menu every time you press the MENU button.
Mode Dial Guide	Turns the mode dial guide (the explanation of each shooting mode) on or off.
Display Quality	Sets the display quality.
Pwr Save Start Time	Sets the time intervals to automatically switch to power save mode.
PAL/NTSC Selector*	By changing the TV format of the device, shooting in a different movie format is possible.
Demo Mode	Sets demonstration movie playback to on or off.
HDMI Resolution	Sets the resolution when the camera is connected to an HDMI TV.
CTRL FOR HDMI	Operates the camera from a TV that supports BRAVIA™ Sync.
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 the 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).
Folder Name	Sets the folder name for still images.
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.

* If you switch this item, it will be required to format the memory card in the setting compatible with the PAL or NTSC system respectively. Also, note that it may not be possible to play back movies recorded with the NTSC system on a PAL system TV.

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 27).

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/>



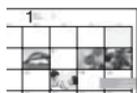
Importing images from
your camera



Playing back imported
images



For Windows, the following functions are also
available:



Viewing images
on a calendar



Creating
movie
discs



Uploading
images to
network services

Sharing images on
PlayMemories Online™



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-HX350].

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 [4:3]***

Quality	Number of still images	
	8 GB	64 GB
Standard	1150 images	9600 images
Fine	810 images	6500 images

* When the  **Aspect Ratio] is set to other than [4:3], you can record more pictures than shown above.**

■ 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
	24p 24M(FX)/25p 24M(FX)	40 m	3 h	6 h
	24p 17M(FH)/25p 17M(FH)	1 h	4 h 5 m	8 h 15 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 maximum continuous recording time of an MP4 (12M) format movie is about 15 minutes (limited by the 2 GB file size restriction).
- 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.
- 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 shaking or 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.

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, electronic viewfinder and lens

- The monitor and electronic viewfinder are 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 and electronic viewfinder. These dots are a normal result of the manufacturing process, and do not affect the recording.
- 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: 7.82 mm (1/2.3 type)

Exmor R™ CMOS sensor

Effective pixel number of camera:

Approx. 20.4 Megapixels

Total pixel number of camera:

Approx. 21.1 Megapixels

Lens: ZEISS Vario-Sonnar T* 50× zoom lens

f = 4.3 mm – 215 mm (24 mm – 1 200 mm (35 mm film equivalent))

F2.8 (W) – F6.3(T)

While shooting movies (16:9):

26.5 mm – 1 325 mm^{*1}

While shooting movies (4:3):

32.5 mm – 1 625 mm^{*1}

^{*1} When [] SteadyShot] is set to [Standard]

Filter diameter: 55 mm

SteadyShot: Optical

File format (Still images):

JPEG (DCF, Exif, MPF Baseline) compliant, 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. 0.5 m to 8.5 m (1.64 ft. to 27.89 ft.) (W)/

Approx. 2.4 m to 3.5 m (7.87 ft. to 11.48 ft.) (T)

[Input and Output connectors]

HDMI connector: HDMI micro jack Multi/Micro USB Terminal*:

USB communication

USB communication: Hi-Speed USB (USB 2.0)

* Supports Micro USB compatible device.

[Viewfinder]

Type: Electronic viewfinder

Total number of dots:

201 600 dots equivalent

Frame coverage: 100%

[Monitor]

LCD monitor:

7.5 cm (3.0 type) TFT drive

Total number of dots:

921 600 dots

[Power, general]

Power: Rechargeable battery pack,
3.6 V

AC Adaptor, 5 V

Power consumption:

Approx. 1.4 W (during shooting
with the monitor)

Approx. 1.1 W (during shooting
with the viewfinder)

Operating temperature: 0 °C to 40 °C
(32 °F to 104 °F)

Storage temperature: -20 °C to +60 °C
(-4 °F to +140 °F)

Dimensions (CIPA compliant)

(Approx.):

129.6 mm × 93.2 mm × 103.2 mm
(5 1/8 inches × 3 3/4 inches ×
4 1/8 inches) (W/H/D)

Mass (CIPA compliant) (Approx.):
652 g (1 lb 7.0 oz) (including NP-
BX1 battery pack, Memory Stick
PRO Duo media)

Microphone: Stereo

Speaker: Monaural

Exif Print: Compatible

PRINT Image Matching III:

Compatible

Rechargeable Battery Pack NP-BX1

Battery type: Lithium-ion battery

Maximum voltage: DC 4.2 V

Nominal voltage: DC 3.6 V

Maximum charge voltage: DC 4.2 V

Maximum charge current: 1.89 A

Capacity: 4.5 Wh (1 240 mAh)

Design and specifications are subject to
change without notice.

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LITHIUM ION  TYPE



AVCHD
Progressive

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

On GNU GPL/LGPL applied software

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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.

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

<http://www.sony.net/>



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

