4-419-863-12(1)

## SONY.

## **Digital Still Camera**

Instruction Manual

## Cyber-shot





CLASS(2)

DSC-W610

## English

## Learning more about the camera ("Cyber-shot User Guide")



"Cyber-shot User Guide" is an on-line manual. Refer to it for in-depth instructions on the many functions of the camera.

① Access the Sony support page.

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

- Select your country or region.
- ③ Search for the model name of your camera within the support page.
  - Check the model name on the bottom of your camera.

## Checking the supplied items

- Camera (1)
- Battery charger BC-CSN/BC-CSNB (1)
- Power cord (mains lead) (not supplied in the USA and Canada) (1)
- Rechargeable battery pack NP-BN (1) (This rechargeable battery pack cannot be used with Cyber-shot that are supplied with the NP-BN1 battery pack.)
- Dedicated USB cable (1)
- Wrist strap (1)
- Instruction Manual (this manual) (1)

#### Owner's Record

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

Model No. DSC-W610

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.

#### Battery charger

Even if the CHARGE lamp is not lit, the battery charger is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet (wall socket). If some trouble occurs while using the battery charger, immediately shut off the power by disconnecting the plug from the wall outlet (wall socket).

The power cord (mains lead), if supplied, is designed specifically for use with this camera only, and should not be used with other electrical equipment.

## 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.rbrc.org/

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

#### Battery pack

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.

This Class B digital apparatus complies with Canadian ICES-003.

## For Customers in the U.S.A.

UL is an internationally recognized safety organization. The UL Mark on the product means it has been UL Listed.

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-W610 Responsible Party: Sony Electronics Inc. Address: 16530 Via Esprillo, San Diego, CA 92127 U.S.A. Telephone No.: 858-942-2230

This device complies with Part15 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

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

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

#### Attention

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

#### 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.

# Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product,

please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

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



This symbol on the battery or on the packaging indicates that the battery provided with this product 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 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 of the battery. 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 will be treated properly, hand over the product 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.

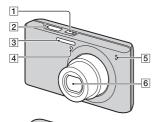
## Notice for customers in the United Kingdom

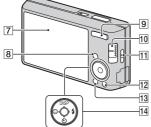
A moulded plug complying with BS 1363 is fitted to this equipment for your safety and convenience.

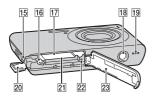
Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS 1362, (i.e., marked with an  $\textcircled{}{}$  or  $\textcircled{}{}$  mark) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

## **Identifying parts**







- 1 ON/OFF (Power) button
- 2 Shutter button
- 3 Flash
- 4 Self-timer lamp/Smile Shutter lamp
- 5 Microphone
- 6 Lens
- <sub>GB</sub> 7 LCD screen
- 8 8 (Playback) button

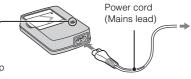
- 9 For shooting: W/T (Zoom) button
   For viewing: Q (Playback zoom) button/ € (Index) button
- 10 Mode switch
- 11 Hook for wrist strap
- 12 🛍 (Delete) button
- 13 MENU button
- 14 Control button Menu on: ▲/▼/◀/►/● Menu off: DISP/♥/☺ / \$
- 15 USB / A/V OUT jack
- 16 Battery eject lever
- 17 Battery insertion slot
- 18 Tripod receptacle
  - 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.
- 19 Speaker
- 20 Terminal cover
- 21 Memory card slot
- 22 Access lamp
- 23 Battery/memory card cover

## Charging the battery pack

## For customers in the USA and Canada

## For customers in countries/regions other than the USA and Canada





CHARGE lamp Lit: Charging Off: Charging finished (normal charge) Flashing: Charging error

## Insert the battery pack into the battery charger.

- You can charge the battery even when it is partially charged.
- 2 Connect the battery charger to the wall outlet (wall socket).
  - If you continue charging the battery pack for about one more hour after the CHARGE lamp turns off, the charge will last slightly longer (full charge).
  - When the CHARGE lamp flashes and charging is not finished, remove and re-insert the battery pack.

## Charging time

Full charge time: approx. 245 min. Normal charge time: approx. 185 min.

#### Notes

- The above charging times apply 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.
- · Connect the battery charger to the nearest wall outlet (wall socket).
- When charging is finished, disconnect the power cord (mains lead) from the wall outlet (wall socket), and remove the battery pack from the battery charger.
- Be sure to use the battery pack or the battery charger of the genuine Sony brand.
- BC-TRN2 battery charger (sold separately) is able to quick-charge the NP-BN rechargeable battery pack supplied with this model. BC-TRN battery charger (sold separately) is not able to quick-charge the NP-BN rechargeable battery pack supplied with this model.

## Battery life and number of still images you can record/view

Battery life: approx. 125 min. (recording)/approx. 290 min. (viewing) Number of images: approx. 250 images (recording)/approx. 5,800 images (viewing)

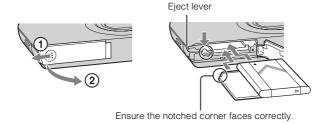
#### Note

 The number of still images that can be recorded is based on the CIPA standard, and is for shooting under the following conditions.

(CIPA: Camera & Imaging Products Association)

- DISP (Screen Display Settings) is set to [Normal].
- [Disp. Resolution] is set to [Standard].
- Shooting once every 30 seconds.
- The zoom is switched alternately between the W and T ends.
- The flash strobes once every two times.
- The power turns on and off once every ten times.
- A fully charged battery pack (supplied) is used at an ambient temperature of 25  $^{\circ}\text{C}$  (77  $^{\circ}\text{F}).$
- Using Sony "Memory Stick PRO Duo" media (sold separately).

## Inserting the battery pack/a memory card (sold separately)



## 1 Open the cover.

## 2 Insert the memory card (sold separately).

• With the notched corner facing as illustrated, insert the memory card until it clicks into place.

### 3 Insert the battery pack.

• Align the battery pack with the guide arrow inside the battery insertion slot. Then, insert the battery pack until the battery eject lever locks into place.

## 4 Close the cover.

Closing the cover with the battery inserted incorrectly may damage the camera.

#### Memory cards that you can use

	Memory card	For still images	For movies
	Memory Stick PRO Duo	0	0
Α	Memory Stick PRO-HG Duo	0	0
	Memory Stick Duo	0	—
	SD memory card	0	0
в	SDHC memory card	0	0
	SDXC memory card	0	0

- In this manual, products in A are collectively referred to as "Memory Stick Duo" media.
- In this manual, products in B are collectively referred to as SD card.
- When recording movies, it is recommended that you use Mark2 "Memory Stick Duo" media and Class 2 or faster SD cards.

### To remove the memory card/battery pack

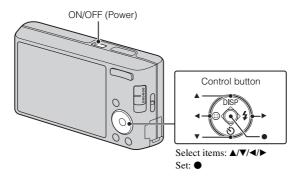
Memory card: Push the memory card in once.

Battery pack: Slide the battery eject lever. Be sure not to drop the battery pack.

#### Note

• Never remove the memory card/battery pack when the access lamp (page 8) is lit. This may cause damage to data in the memory card/internal memory.

## Setting the date and time



Press the ON/OFF (Power) button. Date & Time setting is displayed when you press the ON/OFF (Power) button for the first time.

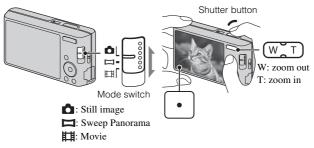
• It may take time for the power to turn on and allow operation.

2 Set [Date & Time Format] and [Date & Time], then press [OK].

• Midnight is indicated as 12:00 AM, and noon as 12:00 PM.

3 Select the desired display color and display resolution mode, following the instructions on the screen.

## 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 ● indicator lights.

2 Press the shutter button fully down.

#### Shooting movies

Press the shutter button fully down to start recording.

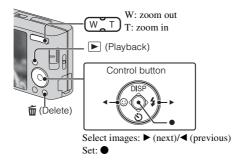
• Use the zoom button to adjust the zoom before recording.

2 Press the shutter button fully down again to stop recording.

#### Note

 The panoramic shooting range may be reduced, depending on the subject or the way it is shot. Therefore even when [360°] is set for panoramic shooting, the recorded image may be less than 360 degrees.

## Viewing images



Press the 🕨 (Playback) button.

• The last image shot is displayed.

#### Selecting next/previous image

Select an image with  $\blacktriangleright$  (next)/ $\blacktriangleleft$  (previous) on the control button. Press  $\bigcirc$  in the center of the control button to view movies.

### Deleting an image

① Press 💼 (Delete) button.

② Select [This Image] with  $\blacktriangle$  on the control button, then press  $\blacksquare$ .

### Returning to shooting images

Press the shutter button halfway down.

## List of icons displayed on the screen (When shooting still images)

	<sup>(14)</sup> <sup>(14</sup>	
2- ISO400	N∎ 125 F2.8 +2.0EV ₪	
1		
¢777	Battery remaining	
	Low battery warning	
4:3 14M	Image size	
<b>*</b>	Scene Selection	
i <b>C</b>	Shooting mode	
<b>*</b>	Scene Recognition icon	
4	White balance	
•	Metering Mode	
	Vibration warning	
i <mark>scn⁺</mark>	Scene Recognition	
DRO DRO		
	Smile Detection Sensitivity indicator	
×1.4 sQ, pQ,	Zoom scaling	

125	Shutter speed	
F2.8	Aperture value	
+2.0EV	Exposure Value	
[]	AF range finder frame indicator	

3

102	Recording folder
96	Number of recordable images
100Min	Recordable time
J	Recording Media (Memory card, internal memory)
۲	Flash mode
٢	Red-eye reduction
<b>\$</b> •	Flash charging

#### 4

<b>ئ</b> اں	Self-timer
C:32:00	Self-diagnosis display
[•] FOFF	Face Detection
ŋ	Burst Settings
[]]	Overheating warning
г ¬	AF range finder frame
u	
+	Spot metering cross hair

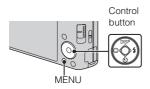
2

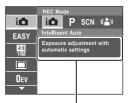
•	AE/AF lock
ISO400	ISO number
NR	NR slow shutter

<sup>GB</sup>

## Introduction of other functions

Other functions used when shooting or playing back can be operated using the control button or MENU button on the camera. This camera is equipped with a Function Guide that allows you to easily select from the functions. While displaying the guide, try the other functions.





Function Guide

### Control button

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

- S (Self-Timer): Allows you to use the self-timer.
- ③ (Smile Shutter): Allows you to use the Smile Shutter mode.
- **\$** (Flash): Allows you to select a flash mode for still images.

### Menu Items

#### Shooting

REC Mode	Select recording mode.
Scene Selection	Select pre-set settings to match various scene conditions.
Easy Mode	Shoot still images using minimal functions.
Shooting Direction	Set the direction to pan the camera when shooting Sweep Panorama images.
Image Size	Select the image size for still images, panorama images or movie files.
Burst Settings	Select single-image mode or burst mode.
EV	Adjust the exposure manually.
ISO	Adjust the luminous sensitivity.
White Balance	Adjust color tones of an image.

Focus	Select the focus method.
Metering Mode	Select the metering mode that sets which part of the subject to measure to determine the exposure.
Scene Recognition	Set to automatically detect shooting conditions in Intelligent Auto mode.
Smile Detection Sensitivity	Set the Smile Shutter function sensitivity for detecting smiles.
Face Detection	Select to detect faces and adjust various settings automatically.
DRO	Set DRO function to correct the brightness and contrast and improve the image quality.

#### Viewing

Easy Mode	Set the text-size increases and all indicators become easier to see.
Slideshow	Select a method of continuous playback.
Retouch	Retouch an image using various effects.
Delete	Delete an image.
Protect	Protect the images.
DPOF	Add a print order mark to a still image.
Rotate	Rotate a still image to the left or right.
Select Folder	Select a folder which contains the images you want to play back.

### Setting items

If you press the MENU button while shooting or during playback, (Settings) is provided as a final selection. You can change the default settings on the (Settings) screen.

Shooting Settings	Grid Line/Disp. Resolution/Digital Zoom/Red Eye Reduction
প <b>T</b> Main Settings	Beep/Language Setting/Function Guide/Display color/ Power Save/Initialize/Video Out/USB Connect/LUN Setting

Memory Card Tool*	Format/Create REC. Folder/Change REC. Folder/Delete REC. Folder/Copy/File Number
Clock Settings	Date & Time Setting

\* If a memory card is not inserted, (i) (Internal Memory Tool) will be displayed and only [Format] and [File Number] can be selected.

## Install PC application (Windows)

"PlayMemories Home" allows you to import images shot with the camera to a computer for display.

- Connect the camera to a computer.
- 2 Click [Computer] (in Windows XP, [My Computer])  $\rightarrow$  [PMHOME], and double-click [PMHOME.EXE]
- 3 Follow the instructions on the screen to complete the installation.

#### Note

 "PlayMemories Home" is not compatible to Mac OS. If you play back images on a Mac, use the applications that are installed on your Mac.
 For details, see http://www.sony.co.jp/imsoft/Mac/

### Features of "PlayMemories Home"

Below are examples of the functions available when you use "PlayMemories Home". To take advantage of the various "PlayMemories Home" functions, connect to the Internet and install the "Expanded Feature".

- · You can import images shot with the camera to a computer and display them.
- You can display images stored on a computer by shooting date in a calendar display.
- You can correct (Red Eye Correction, etc.) still images, print the images, send images by e-mail, and change the shooting date and time.
- You can save and print images with the date.

## 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

(Units: Images)

Capacity	Internal memory	Memory card
Size	Approx. 21 MB	2 GB
14M	3	295
VGA	110	9800
16:9(11M)	4	360

#### Movies

The table below shows the approximate maximum recording times.

(Units: hour : minute : second)

Capac	ity Internal memory	Memory card
Size	Approx. 21 MB	2 GB
VGA	0:00:18	0:25:00
QVGA	0:01:00	1:40:00

### Notes on using the camera

#### Changing the language setting

To change the language setting, press MENU  $\rightarrow \bigoplus$  (Settings)  $\rightarrow \varphi T$  (Main Settings)  $\rightarrow$  [Language Setting].

#### 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.
- Avoid exposing the camera to water. If water enters inside the camera, a
  malfunction may occur. In some cases, the camera cannot be repaired.
- 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.
- 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 the LCD screen and lens

 The LCD screen is manufactured using extremely high-precision technology so 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 LCD screen. These dots are a normal result of the manufacturing process, and do not affect the recording.

#### On camera's temperature

Your camera and battery may get hot due to continuous use, but it is not a malfunction.

#### 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 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, and is not a malfunction. Charge the battery again.

#### 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 compensation for damaged content or recording failure

Sony cannot compensate for failure to record or loss or damage of recorded content due to a malfunction of the camera or recording media, etc.

#### 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.

#### 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.

## Specifications

#### Camera

#### [System]

Image device: 7.76 mm (1/2.3 type) color CCD, Primary color filter Total pixel number of camera: Approx, 14.5 Megapixels Effective pixel number of camera: Approx. 14.1 Megapixels Lens: 4x zoom lens f = 4.7 mm - 18.8 mm (26 mm - 18.8 mm)105 mm (35 mm film equivalent)) F2.8 (W) - F5.9 (T) Exposure control: Automatic exposure, Scene Selection (9 modes) White balance: Automatic, Davlight, Cloudy, Fluorescent 1/2/3, Incandescent, Flash Recording interval for Burst mode: Approx. 1.0 second File format: Still images: JPEG (DCF Ver. 2.0, Exif Ver. 2.21, MPF Baseline) compliant, DPOF compatible Movies: AVI (Motion JPEG) Recording media: Internal Memory (Approx. 21 MB), "Memory Stick Duo" media, SD cards Flash: Flash range (ISO sensitivity (Recommended Exposure Index) set to Auto): Approx. 0.3 m to 3.5 m (W) (11 7/8 inches to 11 feet 5 7/8 inches) Approx. 0.6 m to 1.8 m (T) (1 foot 11 5/8 inches to 5 feet 10 7/8 inches)

#### [Input and Output connectors]

USB / A/V OUT jack Video output Audio output USB communication USB communication: Hi-Speed USB (USB 2.0)

#### [LCD screen]

LCD screen: 6.7 cm (2.7 type) TFT drive Total number of dots: 230 400 (960 × 240) dots

#### [Power, general]

Power: Rechargeable battery pack NP-BN. 3.6 V Power consumption (during shooting): 1.0 W 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: 92.9 mm × 52.4 mm × 19.3 mm  $(3.3/4 \text{ inches} \times 2.1/8 \text{ inches} \times 2.1/8 \text{ inches} \times 1/8 \text{ inches}$ 25/32 inches) (W/H/D, excluding protrusions) Mass (including NP-BN battery pack, "Memory Stick Duo" media): Approx. 113 g (4.0 oz.) Microphone: Monaural Speaker: Monaural Exif Print: Compatible PRINT Image Matching III: Compatible

## BC-CSN/BC-CSNB battery charger

Power requirements: AC 100 V to 240 V, 50 Hz/60 Hz, 2 W Output voltage: DC 4.2 V, 0.25 A 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: Approx. 55 mm × 24 mm × 83 mm (2 1/4 inches × 31/32 inches × 3 3/8 inches)

(W/H/D) Mass: Approx. 55 g (1.9 oz.)

## Rechargeable battery pack NP-BN

Used battery: 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: 0.9 A Capacity:

typical: 2.3 Wh (630 mAh) minimum: 2.2 Wh (600 mAh)

Design and specifications are subject to change without notice.

#### Trademarks

 The following marks are trademarks of Sony Corporation.
 Cyber-shot, "Cyber-shot,"

"Memory Stick PRO Duo," "Memory Stick PRO-HG Duo," "Memory Stick Duo"

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