Digital Still Camera

Instruction Manual

Before operating the unit, please read this manual and "Cyber-shot Handbook" (PDF) on supplied CD-ROM thoroughly, and retain it for future reference

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.

DSC-S45

Cyber-shot





Refer to "Cyber-shot Handbook" (PDF) on supplied CD-ROM

Explains advanced techniques and what to do if you experience ouble with your camera.

For Windows users, place the supplied CD-ROM in the CD-ROM drive of your computer, and install "Cyber-shot Handbook" following the instruction on the screen.

For Macintosh users, copy "Handbook.pdf" stored in the "US" folder in "Handbook" on the supplied CD-ROM to your computer.

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

http://www.sonv.net/

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USB communication

Total number of dots

[Power, general]

2.4 V

Power consumption

Operating temperature

Storage temperature

 $92 \times 62 \times 31 \text{ mm}$

1.65 W

Microphone

Buzzer

Exif Print

PictBridge

[I CD screen]

LCD panel

Printed in China

Full-Speed USB (USB 2.0 compliant)

LR6 (size AA) Alkaline batteries (2), 3 V

ZR6 (size AA) Oxy Nickel Primary Battery

AC-LS5K AC Adaptor (not supplied), 4.2V

HR15/51:HR6 (Size AA) Nickel-Metal

Hydride batteries (not supplied) (2),

(during shooting with the LCD screen on)

6.2 cm (2.4 type) TFT drive

 $110\,000\,(480\times234)\,\mathrm{dots}$

(2) (not supplied), 3 V

0 to 40°C (32 to 104°F)

 $-20 \text{ to } +60^{\circ}\text{C} \text{ (}-4 \text{ to } +140^{\circ}\text{F)}$

 $(3\ 3/4 \times 2\ 1/2 \times 1\ 1/4\ inches)$

(W/H/D, excluding protrusions)

batterries and wrist strap, etc.)

Electret condenser microphone

Design and specification are subject to change

Piezo-electric buzzer

PRINT Image Matching III

Compatible

Approx. 198 g (7.0 oz) (including two

Specifications

[System]

Image device

7.17 mm (1/2.5 type) color CCD, Primary color filter

Total pixel number of camera

Approx. 5 255 000 pixels

Effective pixel number of camera Approx. 5 090 000 pixels

3× zoom lens f = 5.4 - 16.2 mm (32 - 96 mm when)converted to a 35 mm still camera)

F2.8 - 4.8

Exposure control Automatic exposure, Scene Selection (6

White balance Automatic, Daylight, Cloudy, Fluorescent,

Incandescent

File format (DCF compliant)

Still images: Exif Ver. 2.2

JPEG compliant, DPOF compatible Movies: AVI (Motion JPEG)

Recording media

Internal memory (10 MB) "Memory Stick Duo (with MagicGate/ without MagicGate)"

'Memory Stick PRO Duo' "MagicGate Memory Stick Duo"

Recommended distance (ISO set to Auto): Approx. 0.5 m to 2.5 m (19 3/4 inches to 98 1/2 inches) (W)/ prox. 0.5 m to 2.0 m

(19 3/4 inches to 78 3/4 inches) (T)

[Input and Output connectors] A/V OUT jack

Mini-jack Video signal : 1 Vp-p, 75 Ω (ohms), unbalanced, sync negative Audio signal: 2 V (at load impedance more than 47 k Ω (kilohms))

Output impedance with less than 2.2 $k\Omega$ (kilohms)

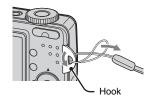
USB jack mini-B

Checking the accessories supplied

- LR6 (size AA) alkaline batteries (2)
- A/V cable (1)
- USB cable (1)
- Wrist strap (1)
- CD-ROM (Cyber-shot application software, handbook "Cyber-shot Handbook") (1)
- Operating instructions for digital still camera "Instruction Manual" (this manual) (1)

Notes before use

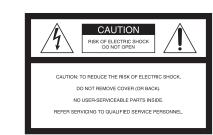
• The camera is a precision instrument. Be careful not to bump the lens or the LCD screen, and not to apply force to it. Attach the strap to prevent the camera from damage by being dropped, etc.



WARNING

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

For Customers in the U.S.A





This symbol is intended to alert the user to the presence of uninsulated "dangerous oltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to pers



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) accompanying the appliance.

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 nterference 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

Note:

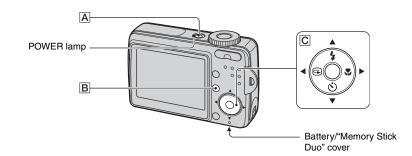
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

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 o correct the interference by one or more of the

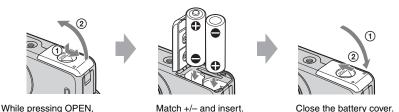
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment
- Connect the equipment into an outlet on a circuit different from that to which the receiver
- Consult the dealer or an experienced radio/TV technician for help.

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

Preparation



Insert the batteries



Available batteries

open the battery/"Memory Stick Duo" cover.

You can use LR6 (size AA) alkaline batteries (supplied, non-rechargeable)/HR 15/51:HR6 (size AA) Nickel-Metal Hydride batteries (rechargeable)/ZR6 (size AA) Oxy Nickel Primary Battery (non-rechargeable).

To check the remaining battery time

Press POWER to turn on and check the time on the LCD screen.

- Sufficient power remaining **-----**Battery half full Battery low, recording/playback will stop soon. Replace the batteries with new ones. 4 The warning indicator flashes.
- The displayed time remaining may not be correct under certain circumstances
- · When using alkaline batteries/Oxy Nickel Primary Battery, the battery remaining indicator may not display

To remove the hatteries

Hold the camera with the battery/"Memory Stick Duo" cover facing upward, then open the battery cover and remove the batteries. Be careful not to drop the batteries.

Turn the power on/off

To turn on, press POWER (A). The POWER lamp lights up.

To turn off, press POWER again. The POWER lamp goes out.

- When turning on the power, do not touch the lens portion as the cover opens and the lens portion extends Also, do not leave the camera with the lens portion extended for a long period of time with the power off as this may cause a malfunction
- If the camera is running on battery power and you do not operate the camera about three minutes, the camera turns off automatically to prevent battery drain (Auto power-off function)

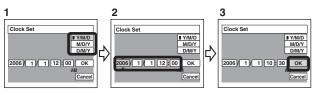
Set/Change the date and time

First, enter the \blacksquare (Setup) menu to select [Clock Set].

- 1 Press MENU (B) to display the menu.
- ② After pressing ▶ on the control button (C), go to the ➡ (Setup) setting, then press ▶ again.
- 3 Select = (Setup 2) with ▼, then press ►.
- 4 Select [Clock Set] with ▼, then press ▶.
- 5 Select [OK] with ▲, then press ●.

Now you can adjust the date and time.

- **1** Select the desired date display format with \triangle/∇ , then press \bigcirc .
- **2** Select each item with $\blacktriangleleft / \triangleright$ and set the numeric value with $\triangle / \blacktriangledown$, then press \blacksquare .
- **3** Select [OK] with ▶, then press ●.
- To cancel, select [Cancel] and press



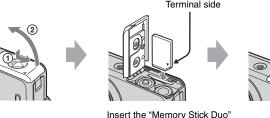
To turn off the 🖶 (Setup) menu screen

Press MENU

About the "Memory Stick Duo" 2 (not supplied)



Insert a "Memory Stick Duo"



all the way in until it clicks.

The camera has 10 MB of internal memory. However, purchase of a "Memory Stick Duo" is recommended. Only "Memory Stick Duo" can be used.

(Units: Images)

(Units: hour: minute: second)

The table below shows the approximate total number of still images and approximate movie recording time that can be recorded on the various capacities of "Memory Stick Duo," for reference before purchasing.

Total number of still images (Image quality is [FINE].)

Size	memory	64MB	128MB	256MB	512MB
5M	3	24	50	96	191
3:2	3	24	50	96	191
3M	6	39	81	155	308
1M	15	98	201	384	759
VGA (E-Mail)	60	387	789	1503	2972

Movie recording time

Size	Internal memory	64MB	128MB	256MB	512MB
320 × 240	0:00:30	0:03:17	0:06:38	0:12:50	0:25:24

To remove a "Memory Stick Duo"

Open the battery/"Memory Stick Duo" cover, then push the "Memory Stick Duo" in once.

When the access lamp is lit

Never open the battery/"Memory Stick Duo" cover or turn off the power as data may be corrupted.

Select the image size for still images

The factory setting for image size is [5M]. This setting requires more memory capacity, which reduces the number of images you can take. Set the image size according to purpose

- 1 Press . / (Image Size) (A).
- 2 Select the size with ▲/▼ (B).
- 3 Press ∰ / m (Image Size) to complete the setting.

Image size	Guidelines	No. of images	Printing
5M (2592 × 1944) (the default setting)	For printing A4 size or high density images in A5 size	Less	Fine
3:2 (2592 × 1728)*			8888
3M (2048 × 1536)		†	†
$1M (1280 \times 960)$	For printing in postcard size	+	+
VGA(E-Mail) (640 × 480)	For recording a larger number of images For attaching images to e-mail or creating		
	web pages	More	Rough

- * Images are recorded in the same 3:2 aspect ratio as photograph printer paper or postcards, etc.
- Recordable number of still images vary depending on the image size selected.

Battery life and number of images that can be recorded

When shooting still images

Battery	No. of images (Approx.)	Battery life (min.) (Approx.)
Alkaline	90	45
Ni-MH (2500 mAh)	350	170

- The measurement method is based on the CIPA standard, (CIPA: Camera & Imaging Products Association)
- The values shown for alkaline battery are based on commercial norms, and do not apply to all alkaline batteries. The values may vary, depending on the battery manufacturer/type
- The supplied alkaline battery is for trial use. The actual values may be smaller than shown in the table, depending on usage environi



Shoot images easily (Auto adjustment mode)



Hold the camera





Shoot an image

1 Select a mode (A).

Still image: Select . Movie: Select

2 Shoot with the shutter button (B).

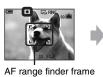
Still image:

Press and hold halfway down to focus









AE/AF lock indicator

Movie:



Press fully down



View/delete images



To view images

1 Select ► (A).

2 Select an image with **◄/▶** (B).

3 Movie only : Press ● (B).

Rewind/Fast forward: **◄/▶** (Return to normal playback: **●**)

Stop playback: ●

• Sound is not output during movie playback on this camera. Sound can be heard when viewing a movie on a computer or TV.

To delete images

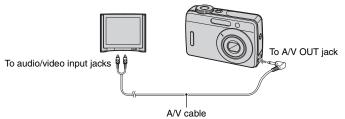
1 Display the image you want to delete and press 1 / ((Delete)

2 Select [Delete] with ▲, then press ● (B).

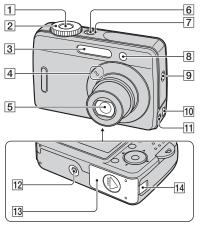
To cancel the deletion, select [Exit], then press ● in step ②

To view images on a TV screen

You can view images on a TV screen by connecting the camera to a TV.



Identifying parts



- 1 Shutter button
- 2 Mode dial
- : To shoot movies
- ► : To view or edit images • For details on modes available to shoot still images, see "Using the mode dial to shoot still images" below.
- 3 Flash
- 4 Microphone
- 5 Lens
- 6 POWER button
- 7 POWER lamp 8 Self-timer lamp
- 9 Buzzer
- $10 \psi (USB)$ jack
- 11 A/V OUT jack
- 12 Tripod receptacle
 - Use a tripod with a screw length of less than 5.5 mm (7/32 inch). You will be unable to firmly secure the camera to tripods having screws longer than 5.5 mm (7/32 inch), and may damage the camera
- 13 Battery/"Memory Stick Duo" cover
- 14 AC Adaptor cord cover

- 15 For shooting: Zoom (W/T) button For viewing: Q/⊕ (Playback zoom) button/ (Index) button
- 16 LCD screen
- 17 # / iii (Image Size/Delete) button
- [18] [(Screen status) button 19 Hook for wrist strap
- 20 MENU button
- 21 Control button
- Menu on: **▲/**▼/**◄**/▶/● Menu off: \$/♦/\$/\$
- 22 Access lamp

Using the mode dial to shoot still images (2)

- 1 Set the mode dial to the desired still image shooting mode.
- **2** Shoot with the shutter button.

Auto adjustment mode (

Adjusts settings automatically for easy shooting.

Scene Selection modes (), , , , , , , , , , , , , , , , ,)

Allows you to shoot using an appropriate preset setting for a scene. The following modes are predetermined to match the scene conditions

→ Twilight*

♦ Candle*

Captures the dark surroundings in distant night shots.

For portraits in dark places.

 Beach Captures the blue color of water in beach scenes, etc.

■ Twilight portrait*

▲ Landscape For landscapes, etc., with a distant

Captures the atmosphere of candlelit

Soft snap For soft portraits of people, flowers, etc.

* The shutter speed becomes slower, so using a tripod is recommended.

Program auto shooting mode (P)

Allows you to shoot with automatic exposure (adjusts both shutter speed and aperture). You can also make various settings using the menu.



To shoot an image using the zoom

Press T (telephoto) to zoom in, or W (wide angle) to zoom out when composing your shot



- · You cannot change the zoom scale while shooting a movie
- When the zoom scale exceeds 3×, the camera uses [Digital Zoom].

To view an enlarged image (playback zoom)

While displaying a still image, press \oplus to zoom in on the image.

To undo the zoom, press \mathbb{Q} .

Adjust the portion: $\triangle/\nabla/\triangle/$ Cancel playback zoom:

Viewing an index screen

While displaying a still image, press \blacksquare (Index), then select an image with $\triangle/\nabla/\blacktriangleleft/\triangleright$. To return to the single-image screen, press •. To display the next (previous) index screen, press

To delete images in index mode

- 1 While an index screen is displayed, press \\ / m (17) and select [Select] with △/▼ on the control button, then press .
- 2 Select the image you want to delete with △/▼/◄/▶, then press to display the (Delete) indicator on the selected image.
- **3** Press **1** / 🗑.
- **4** Select [OK] with ▶, then press ●.
- To delete all the images in a folder, select [All In This Folder] with △/▼ in step 1 instead of [Select], then
- To cancel a selection, select an image previously selected for deletion, then press to delete the □ indicator from the image in step 2.



Using the control button (21)

Checking the last still image you shot (Quick Review) (🖘)

Press ◀ (⑤) on the control button.

- To cancel, press ◀ again.
- The image may appear rough right after playback starts.

Selecting a flash mode for still images (\$)

• To delete an image, press \blacksquare / m (Delete) and select [Delete] with \blacktriangle on the control button, then press \blacksquare

Before you shoot, press \blacktriangle (\clubsuit) on the control button repeatedly until the desired mode is selected

No indicator Strobes if it is dark or against light (default setting) Flash forced on Slow synchro (Flash forced on) **4**SL The shutter speed slows down in low light to capture details of background that is out of flash light range.

• Shooting distance (when [ISO] is set to [Auto])

Flash forced off

- W side: Approx. 0.5 to 2.5 m (19 3/4 to 98 1/2 inches) T side: Approx. 0.5 to 2.0 m (19 3/4 to 78 3/4 inches)
- The flash strobes twice. The first time is to adjust flash intensity
- While charging the flash, 🗲 is displayed.

Shooting close-up (Macro) (😮)

Before you shoot, press \triangleright (\clubsuit) on the control button.

- To cancel, press ▶ again.
- Setting the zoom all the way to the W side is recommended.

Shortest shooting distance from the lens surface

Setting all the way to the W side: Applox. 5 cm (2 inches)

- The in-focus range becomes narrow, and the complete subject may not be entirely in focus.
- The AF speed drops.

Setting all the way to the T side: Applox. 35 cm (13 7/8 inches) Using the self-timer (3)

Before you shoot, press \blacktriangledown (\lozenge) on the control button repeatedly until the desired mode is selected

No indicator Not using the self-times

Č10 Setting the 10-second delay self-timer Setting the 2-second delay self-timer - <u>හ</u>2

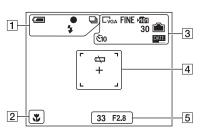
Press the shutter button, the self-timer lamp (8) flashes and a beep sounds until the shutter operates.

To cancel, press ▼ again.

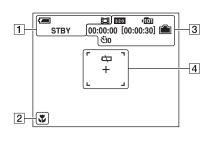
• Use the 2-second delay self-timer to reduce the risk of blur.

Indicators on the screen

When shooting still images (Auto adjustment mode)



When shooting movies (Factory setting)



1

Display	Indication
Į.	Battery remaining
•	AE/AF lock
	Recording mode
STBY REC	Standby/Recording a movie
4 4sl 🚯	Flash mode
4.	Flash charging

Indication



Image size INE Image quality Recording folder • This does not appear when using the internal memory. Remaining internal memory capacity Remaining "Memory Stick" capacity Recording time [maximum recordable time] Remaining number of
Recording folder • This does not appear when using the internal memory. Remaining internal memory capacity Remaining "Memory Stick" capacity 0:00:00 Recording time [maximum recordable time]
This does not appear when using the internal memory. Remaining internal memory capacity Remaining "Memory Stick" capacity 0:00:00 Recording time [maximum recordable time]
capacity Remaining "Memory Stick" capacity 0:00:00 Recording time [maximum recordable time]
capacity 0:00:00 Recording time [maximum recordable time]
00:00:30] recordable time]
Remaining number of
recordable images
Self-timer
Date/Time

Display	Indication
ť	Low battery warning
r 1	AF range finder frame

Display	Indication
33	Shutter speed
F2.8	Aperture value
Mode (not displayed on the screen shown above)	Menu

Trademarks

- Cuber-shot is a trademark of Sony Corporation.
 "Memory Stick," "Memory Stick PRO," MEMORY STICK PRO, "Memory Stick Duo," MEMORY STICK PRO DUO, "Memory Stick PRO Duo," MEMORY STICK PRO DUO, "MagicGate," and
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