

SANYO

VPC-HD1000 Series



Quick Manual

Xacti HD1000
FULL HD MOVIE CAMERA

FULL HD
1920 X 1080

Full High-Definition Movies with Beautiful Images

1920 x1080i Full High Definition

MPEG-4 AVC/H.264 Movies

F1.8, 10x Optical zoom (Max. 100x with Digital zoom)

Docking Station with HDMI Terminal

Digital Stereo Recording

High Sensitivity (Movie : Minimum Illumination 3Lux, Stills : ISO 3200)

4-Megapixel Stills

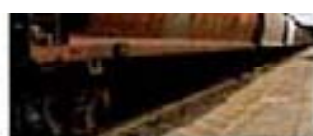
Electronic Image Stabilizer for Movies & Stills



Black

Silver

Xacti HD1000
FULL HD MOVIE CAMERA

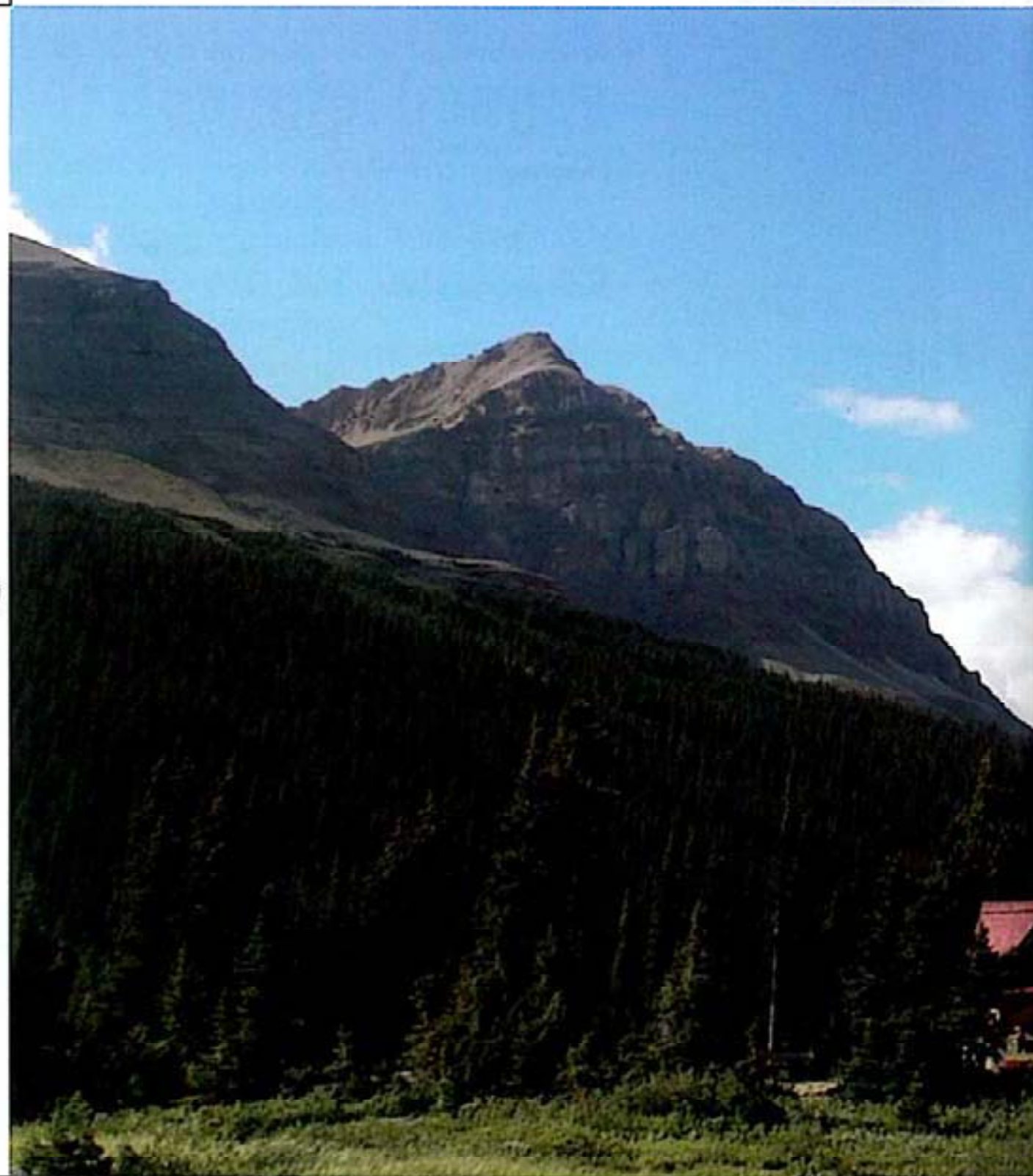


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1920

1080

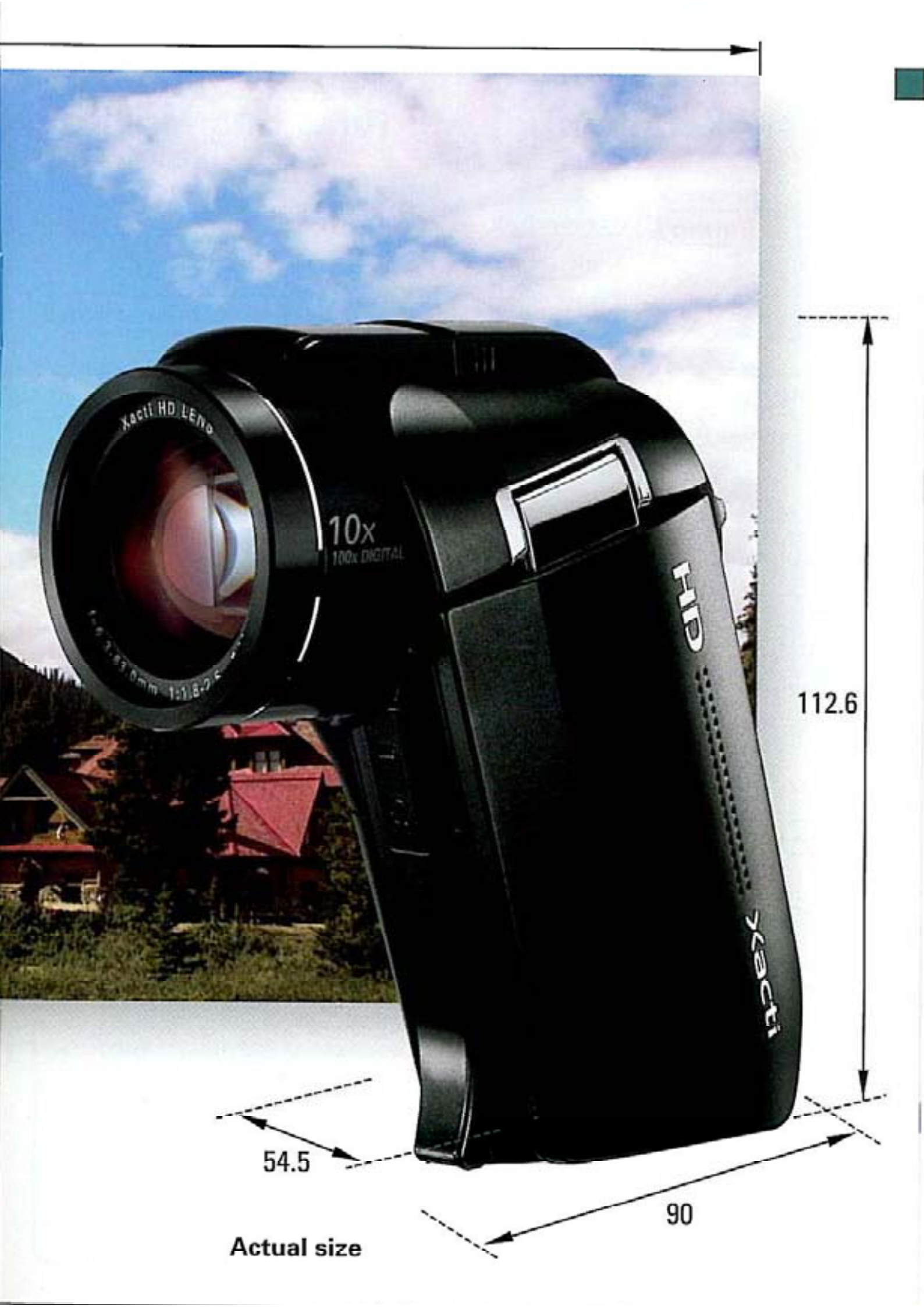


High-Quality

Full High Definition movie (1920 x 1080i) with beautiful images.
MPEG-4 AVC/H.264 format for high-compression recording.

Compact

With its compact body (90 x 112.6 x 54.5 mm, 268 g, body only), the Xacti HD1000 makes it easier to take Full-HD digital movies since it can be easily carried anywhere.



Xacti HD LENS

10x
100x DIGITAL

HD

xacti

112.6

54.5

90

Actual size

Camera Functions and Getting Ready to Take Pictures and Movies



Turning on the Camera



Press the ON/OFF button for at least 1 second.

Shoe Mount

Accommodates an external flash, video light, and other accessories.



Speaker



Remote Control Unit

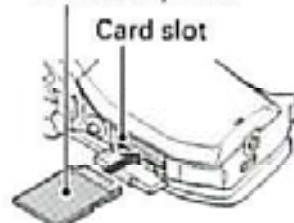
The remote control unit can be used to perform the same operations as the buttons on the camera. This feature is especially convenient when controlling the camera while it is connected to a television.



Memory Card



SD Memory Card
Card slot



Shooting

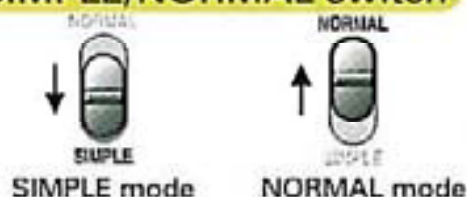
REC



Set the main switch to REC.



SIMPLE/NORMAL switch



(see page 9,10)

SET button

You can review the pictures or movie you have just taken while still in REC mode.



For movies press the SET button to start playback.



To display the previous image.



To erase the image toggle the SET button up.



To display the next image.

Zoom switch

Zoom in.



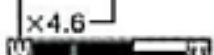
Zoom out.



When the zoom switch is pressed, the zoom bar will appear on the monitor.

Zoom bar

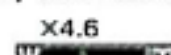
Magnification



Optical zoom

Digital zoom (yellow)

When optical zoom only is enabled



Pointer

Assigning SET button functions

You can assign functions to the SET button when it is toggled when the Shooting Screen is displayed(see page 14).



Full Auto button

Pressing this button changes the camera settings to their default value. Pressing it again returns to the user settings.



Shooting Movies




Press the [] button.
(Press the [] button again to stop recording.)

Recording time



Shooting Still Images



Press the [] button to capture an image. You can capture still images while recording a movie.

Flash button

Press the flash button to extend the flash.

(see page 13 "Flash mode select")

Flash button Flash



MENU button

Switches to the settings screen. Press again to return to the original display (see page 17).



Operation Buttons

REC

NORMAL MODE

NORMAL mode enables full use of all camera functionality. Set the mode switch to NORMAL.

- ① Press the MENU button.
- ② Use the SET button to configure settings as desired.



NORMAL



Toggle the SET button up or down to select a tab.



Tab



Toggle the SET button to the right.



Toggle the SET button up or down to select a mode.



Select an item to change



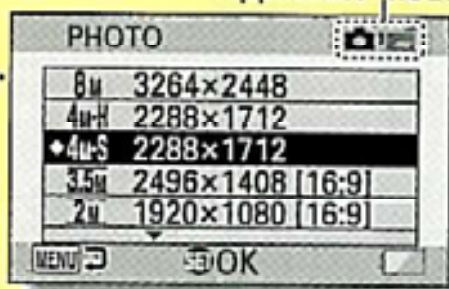
Toggle the SET button to the right.



Toggle the SET button up or down to select a setting.



Applicable mode



<Setting Screen>

Press the SET button.



The Setting Screen for the selected item will appear. To return to the Menu Screen, press the MENU button.

SIMPLE MODE

SIMPLE mode includes only those functions that are most often used and necessary to operate the camera.

Set the mode switch to SIMPLE.

① Press the MENU button.

② Use the SET button to configure settings as desired.



Select an item to change
Description of selected mode

Toggle the SET button up or down to select a mode.

To keep in HDTV size

<Settings Screen>
Toggle the SET button right or left to select a setting.

Press the SET button.

Overview of the Settings Screen (SIMPLE MODE)

Recording size

Select the size to record.

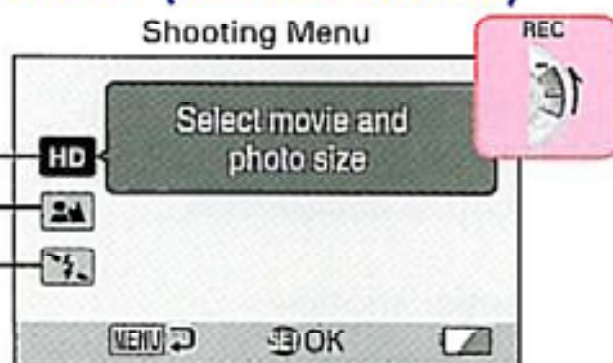
Focus range

Select a focus range based on the distance to the subject.

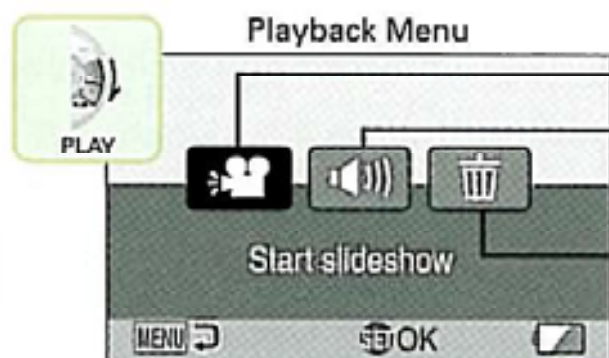
Flash

Specify how the flash will operate.

Shooting Menu



Playback Menu



Slideshow

Specify the slideshow settings and play the slideshow.

Playback volume

Adjust the volume for Movie and audio file playback.

Delete

Delete files.

Recording Size

The image quality of video clips and still images is determined by the recording size (number of pixels). The larger the recording size, the better the image quality will be, but the file size will also be larger. Select the best recording size for the intended purpose.



NORMAL



Still images

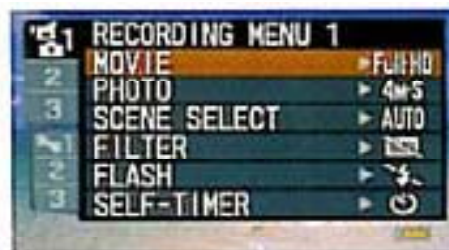


- 8M** : 3264 × 2448 pixels
- 4M-H** : 2288 × 1712 pixels (low compression)
- 4M-S** : 2288 × 1712 pixels (normal compression)
- 3.5M** : 2496 × 1408 pixels (16:9)
- 2M** : 1920 × 1080 pixels (16:9)
- 2M** : 1600 × 1200 pixels
- 0.9M** : 1280 × 720 pixels (16:9)
- 0.3M** : 640 × 480 pixels

<Sequential shots>

- : 4M, 7fps/Max.7 still images

Movies



<HD mode>

(16:9 horizontal to vertical aspect ratio)

- Full HD** : 1920 × 1080 pixels, 60 fields/s
- HD-HR** : 1280 × 720 pixels, 60 frames/s
- HD-SHQ** : 1280 × 720 pixels, 30 frames/s

<SD mode>

(4:3 aspect ratio)

- TV-HR** : 640 × 480 pixels, 60 frames/s
- TV-SHQ** : 640 × 480 pixels, 30 frames/s
- 1/6 SHQ** : 320 × 240 pixels, 30 frames/s

<Audio mode>

- : Audio recording (Voice Memo)



Sequential Shots

- ① Select [] and press the SET button.(see page 11)
- ② Press the [] button.

Shooting continues as long as the [] button is depressed.



- The maximum number of images that can be captured in a sequential shots sequence is 7.



Audio Recording (Voice Memo)

- ① Select [] and press the SET button.
(see page 11)
- ② Press the [] button.



- The maximum time for recording a continuous audio memo is about 13 hours.
- It enables capture [0.3M] still images during an audio recording.

Setting



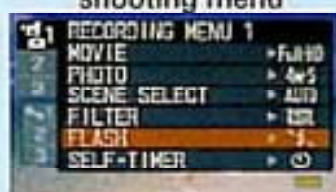
Flash mode select

The flash works only when shooting Single Shot Still images. Press the FLASH button to open the flash unit. The FLASH mode icon will appear on the screen.

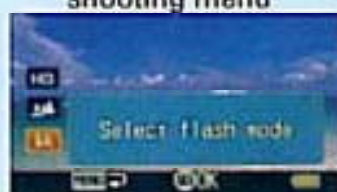


- ① Display the Shooting menu, select 'FLASH', and press the SET button.

NORMAL mode
shooting menu



SIMPLE mode
shooting menu



- ② Select the desired FLASH mode and press the SET button.



The flash off icon (⚡) is displayed whenever the flash is not extended.



:The camera detects the subject brightness and uses the flash only when necessary.(Auto flash)



:The flash operates with every image captured, regardless of the subject brightness.(Forced flash)



:The flash does not operate even in dark surroundings.(Flash off)



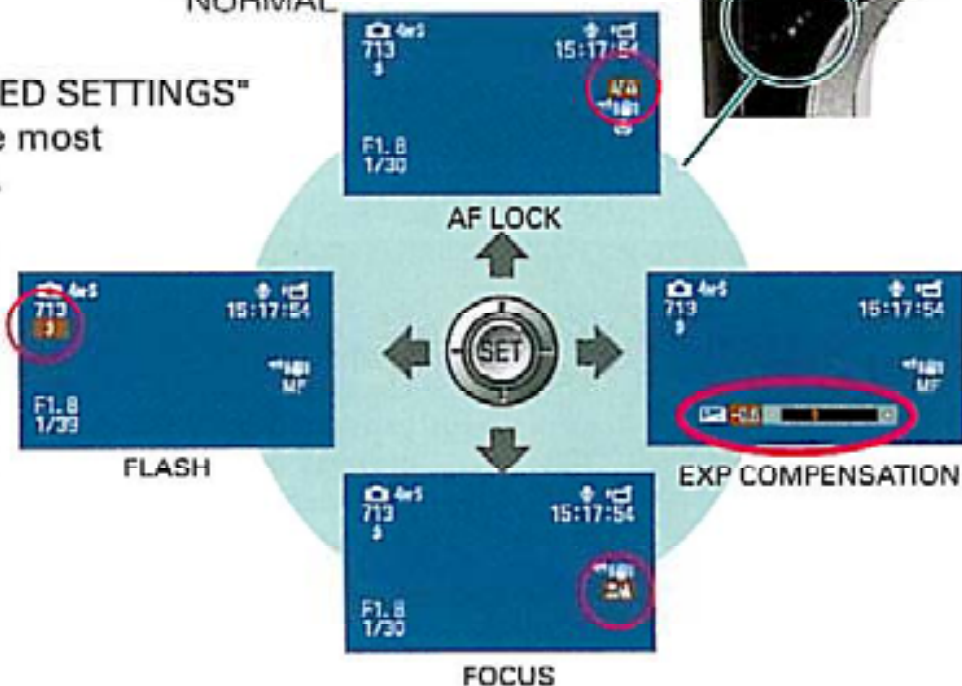
:This has the effect of minimizing the red reflection ("red-eye") in the subject's eyes.(Red-eye reduction)

Assign SET button functions

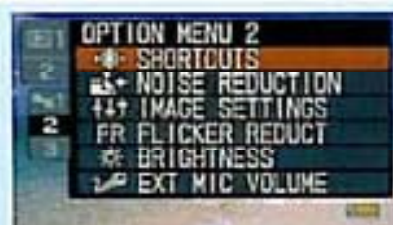
Assign functions (operation shortcuts) to the SET button when it is toggled up, down, left or right when the Shooting Screen is displayed.



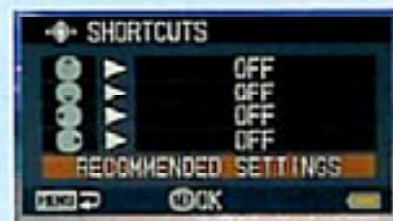
Selecting "RECOMMENDED SETTINGS" automatically assigns the most commonly used settings.



- ① Display the Option Setting Menu.
- ② Select SHORTCUTS, and press the SET button.
- ③ Toggle the SET button to select the desired function (up, down, left, or right) and press to accept.



OFF: No operation shortcut is assigned to the key.
 AF LOCK / FOCUS / FLASH / EXP COMPENSATION /
 ISO / SELF-TIMER / EXPOSURE
 RECOMMENDED SETTINGS



- ④ Press the MENU button.
 The screen to confirm the shortcut settings appears, and then you are returned to the Option Setting Menu.





Setting

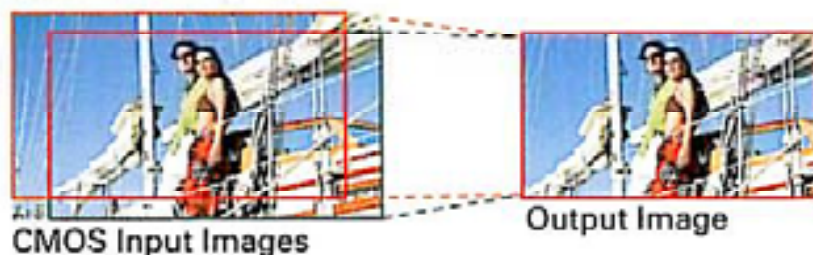




Motion Compensation (IMAGE STABILIZER)



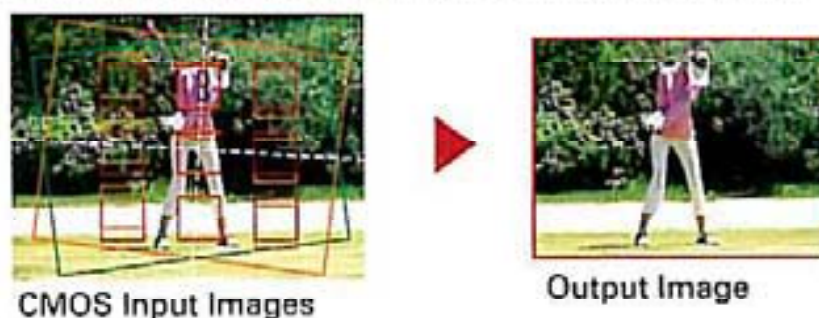
- : Motion compensation is enabled.
: Motion compensation is not enabled.

For movie recording, the Xacti HD1000 incorporates a digital image stabilizer capable of accurately discerning camera shake that can be interpreted as intended camera work and deliberate panning and tilting. It corrects unwanted shake without sacrificing the natural feel of recording clips.

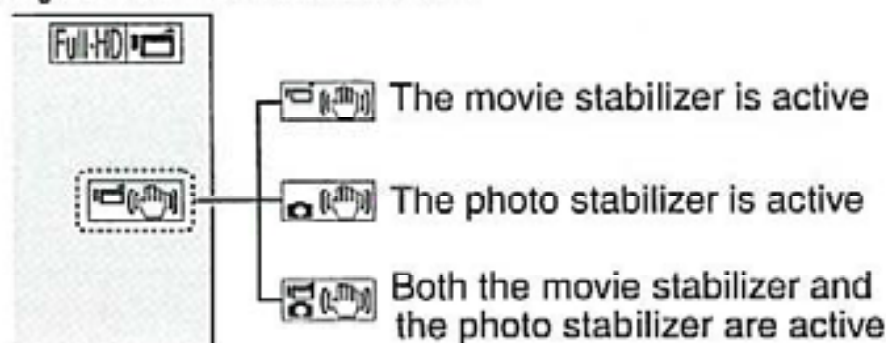


- : Motion compensation is enabled.
: Motion compensation is not enabled.

When shooting still images, the new electric image stabilizer compensates for camera shake that cannot be corrected by optical stabilizer systems. It handles both vertical and horizontal motion, as well as rotary shake.



When motion compensation is enabled,
 The following icons are shown on the monitor:



Scene Select

You can select from various preset settings (aperture shutter speed etc.) for specific shooting conditions.



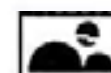
Sports Mode

The high-speed shutter captures fast-moving subjects.



Portrait Mode

The subject stands out against a deemphasized background.



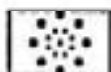
Landscape Mode

The entire image is brought into sharp focus.



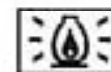
Night Portrait Mode

Both a foregrounded subject and any ambient illumination stand out against a night-time background.



Fireworks Mode

Fireworks are captured in all their vivid brightness.



Lamp Mode

Captures fine details under candlelight or lamp light.



Snow & Beach Mode

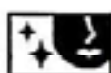
Beautiful pictures can be taken in the snow and on the beach without suffering from white-out.



The camera automatically makes the optimum settings suitable for the surrounding conditions (full auto).

Filters

The filter feature changes image characteristics such as color tones to apply unique effects to the photographed image.



Cosmetic Mode

Skin comes out beautifully in close-ups of people.



Monochrome Mode

Pictures have the atmosphere of a black-and-white photo.



Sepia Mode

The color tone is changed for a nostalgic look.

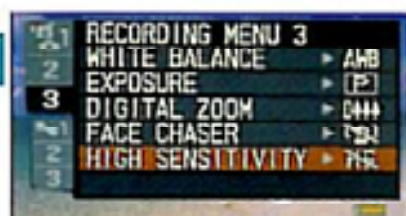


No filter is used (none).

Setting



High Sensitivity



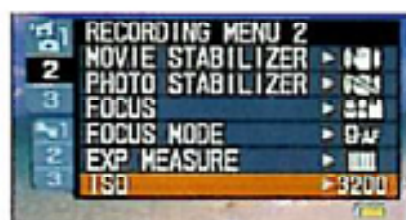
In high sensitivity mode, the condition of the illumination of approx. 3 lux is sufficient to shoot, which allows you to record by candlelight.

⚠ The recording speed changes to 15 fps in high sensitivity mode.



[HS]: The high sensitivity mode is activated.

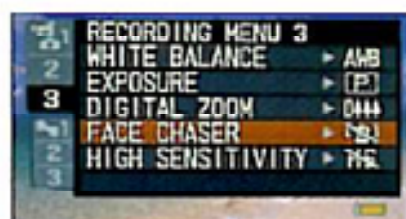
[HS]: The high sensitivity mode is not activated.



High-Sensitivity ISO 3200 Stills
You can shoot still images at the equivalent of ISO 3200. This makes it easy to get great shots in situations where blurring commonly occurs, like dimly lit rooms and nightscapes.



Face Chaser Function



As you capture a still image, the face chaser detects the subject's face, and adjusts the brightness and focus in a way that produces a clear and bright photo of the subject's face.

This allows it to instantly and simultaneously detect up to twelve faces within the frame.

[ON]: The face chaser function is enabled.

















[OFF]: The face chaser function is not enabled.




During playback, zooming in on a still image taken with the face chaser function causes the display to zoom in on the face detected by the function at the time of capture.

SD Memory Card Recording Times and Capacity

The table shows the possible number of captured images and the possible recording times for commercially available SD Memory Cards (2 GB, 4 GB, 8 GB).

Shooting/ recording mode	Resolution setting	SD Memory Card		
		2 GB	4 GB	8 GB
Still image mode		756	1,510	3,030
		1,010	2,030	4,080
		1,510	3,020	6,070
		1,670	3,350	6,730
		2,810	5,640	11,300
		2,950	5,900	11,800
		6,200	12,400	24,900
		15,500	31,000	62,200
		1,510	3,020	6,070
Video clip mode	 	21 min. 21 sec.	42 min. 44 sec.	1 hr. 25 min.
		28 min. 11 sec.	56 min. 25 sec.	1 hr. 53 min.
		41 min. 26 sec.	1 hr. 22 min.	2 hr. 46 min.
		1 hr. 18 min.	2 hr. 36 min.	5 hr. 14 min.
		4 hr. 19 min.	8 hr. 38 min.	17 hr. 21 min.
Audio recording mode		32 hr. 25 min.	64 hr. 53 min.	130 hr. 12 min.

- The maximum video clip continuous recording time is approx. 5 hours 30 minutes at the  setting.
- Up to 13 hours of continuous audio recording is possible.
- When recording a video clip using an 8 GB card, recording terminates when the size of the file currently being recorded reaches approx. 4 GB.
- The above values apply when an SD Memory Card by Sandisk is used.
- Even with cards of the same capacity, the amount of data that can actually be stored may differ depending on the card brand, etc.
- The continuous shooting time for each video clip will differ depending, for example, on the card capacity, environmental conditions (temperature and shooting conditions, etc.).

Overview of the Settings Screen



Normal Mode Shooting Menu



<Tab 1>

1	2	3	4	5
1	RECORDING MENU1			
2	MOVIE	Full-HD		
3	PHOTO	4M-S		
4	SCENE SELECT	AUTO		
5	FILTER			
6	FLASH			
7	SELF-TIMER			

- Recording size (page11)
- Number of pixels (page11)
- Various preset settings (page16)
- Change image characteristics (page16)
- Flash operation (page13)
- 2 sec. or 10 sec.

<Tab 2>

1	2	3	4	5
1	RECORDING MENU2			
2	MOVIE STABILIZER	ON		
3	PHOTO STABILIZER	OFF		
4	FOCUS			
5	FOCUS MODE	9-AF		
6	EXP MEASURE			
7	ISO	AUTO		

- Compensate for camera shake during video shooting (page15)
- Compensate for camera shake during still image shooting (page 15)
- Select from 4 focus ranges
- Select from 2 autofocus modes
- Light-measuring mode
- ISO sensitivity (page17)

<Tab 3>

1	2	3	4	5
1	RECORDING MENU3			
2	WHITE BALANCE	AWB		
3	EXPOSURE	P		
4	DIGITAL ZOOM	D44		
5	FACE CHASER	OFF		
6	HIGH SENSITIVITY	OFF		

- Lighting conditions
- Select Program, Shutter priority, Aperture priority or Manual
- Specify digital zoom
- ON/OFF (page17)
- ON/OFF (page17)

Normal Mode Playback Menu

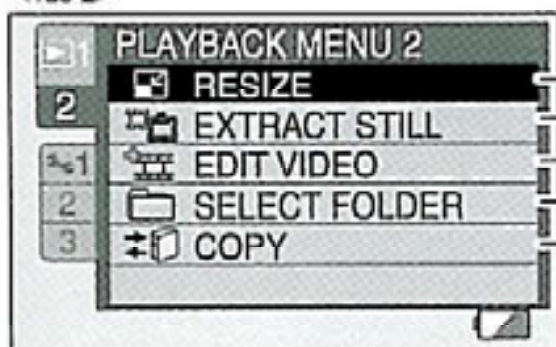


<Tab 1>



- Slideshow playback
- Adjust the volume
- Protect a file (disable deletion)
- Delete files
- DPOF settings
- Rotate a still image

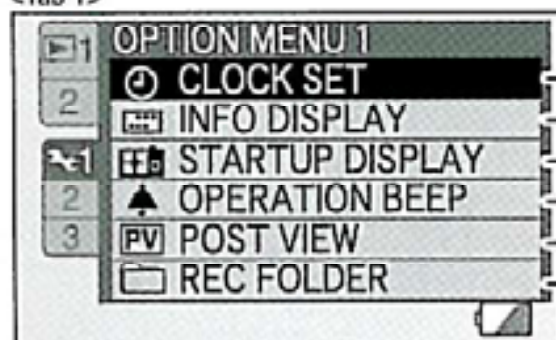
<Tab 2>



- Reduce the resolution of a still image
- Extract a still image from a video clip (page24)
- Edit video clips (page24)
- Select a folder to play back (page22)
- Used for the Xacti Library feature (page25)

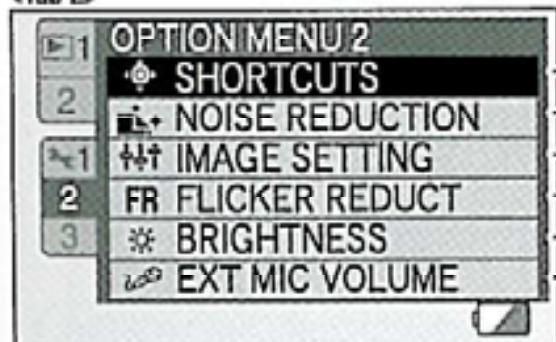
Options Menu

<Tab 1>



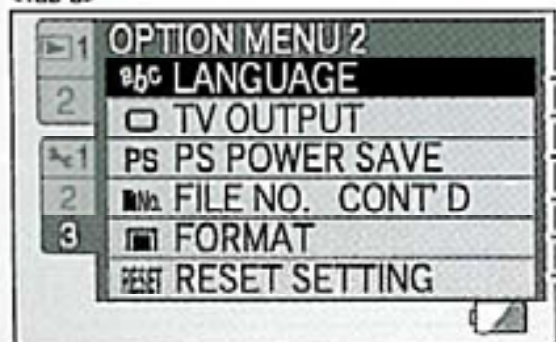
- Set the clock
- Specify what information is displayed on the playback screen
- Select the screen to display when the camera is turned on
- Type of beep sound
- Specify the duration of pre-view
- Create or select a recording folder

<Tab 2>



- Assign functions to the SET button (page14)
- Minimised noise
- Adjust the color setting
- Reduce flicker
- Adjust the brightness of the monitor
- Adjust the input level of microphone

<Tab 3>



- Select from 13 languages
- Specify the type of TV output signal (page28)
- Specify period of inactivity
- File no. management
- Format
- Reset the camera to the factory-preset settings

Viewing

Set the main switch to PLAY.

The recorded image is displayed on the monitor.



PLAY



Example : Still image



Example : Movie



MPEG-4 AVC/H.264

Xacti



For video clips and audio data press the SET button to start playback.



To the left : Display the previous image.



To the right : Display the next image.



To erase the image toggle the SET button up.

Magnifying (zooming in) the image


For a video clip, pause playback at the place you want to magnify.

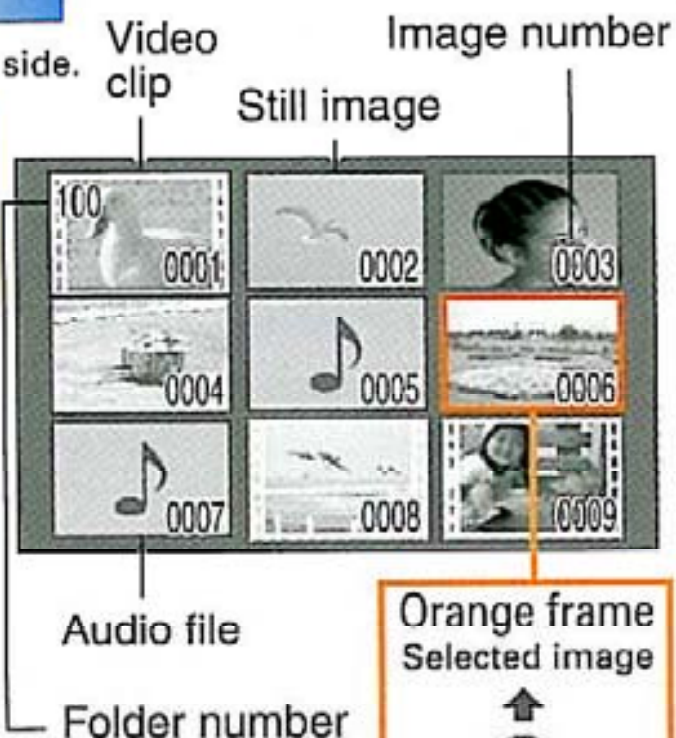
Push the zoom switch toward the [T] ([Q]) side. Magnification is enabled.



The magnified portion of the image can be saved as a separate image. Press the [] button. The magnified portion is saved as a new still image.

9-image display playback

Push the zoom switch toward the [W] ([) side.
The 9-image display appears.




Orange frame
Selected image



Press the SET button
to view the image.

Selecting the playback folder

Push the zoom switch toward the [W] ([) side 2 times.

If the card contains multiple folders,
you can select from which folder you want to play back.

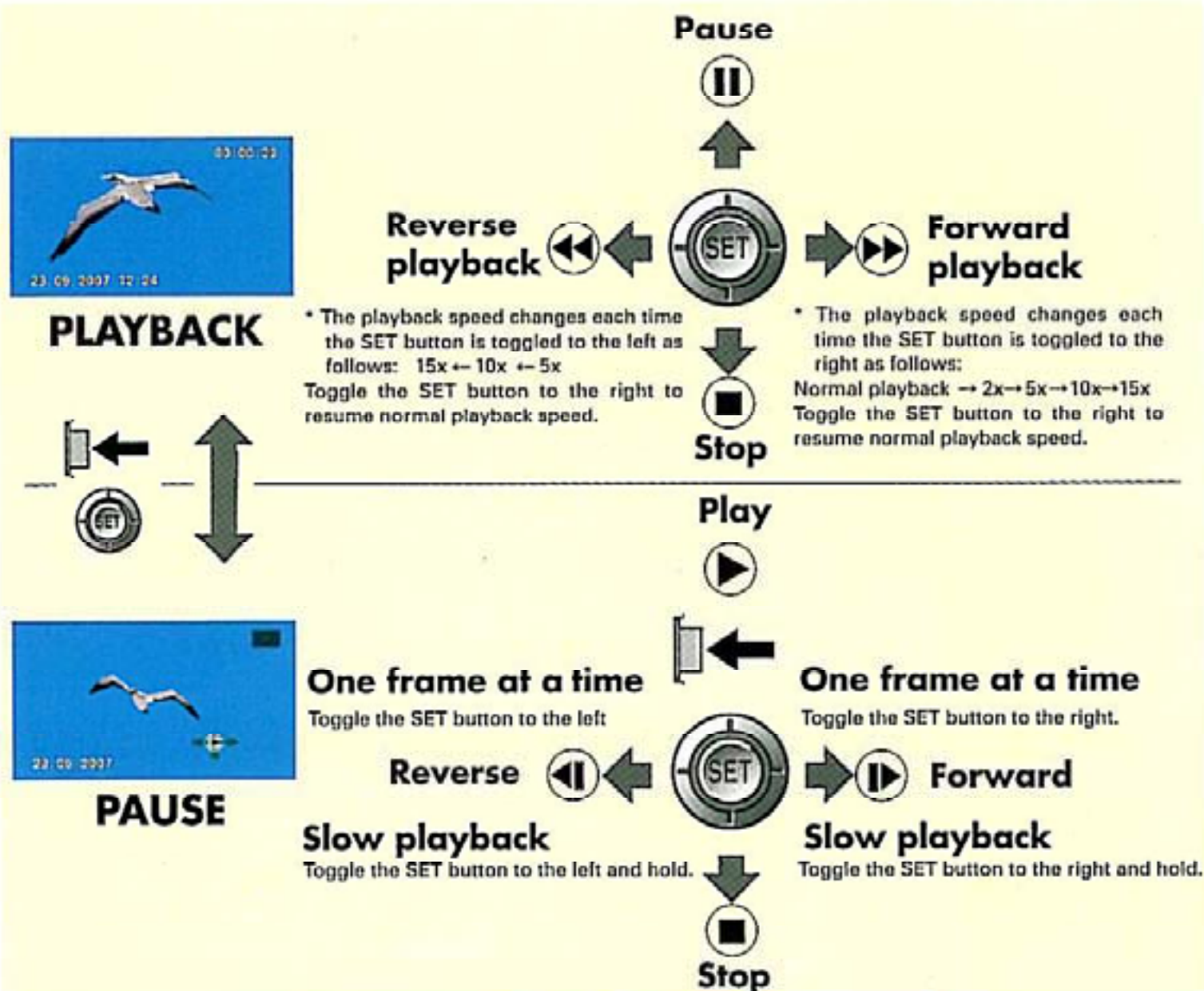


Orange frame
Selected folder



Viewing

Display the video clip you want to play back on the LCD monitor, then press the SET button.



Volume setting (for video clips and audio files)

Louder:

During playback, push the zoom switch toward the [T] side.

Softer:

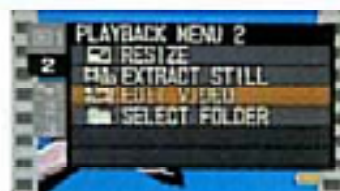
During playback, push the zoom switch toward the [W] side.



Editing Video Clips

You can trim away unwanted portions from a video clip and save it as a new video clip (video clip cutting). You can also join video clips together and save them as one separate clip (joining).

- ① Select the video clip you wish to edit and press the MENU button.



Cutting video clip

- ② Select CUT and press the SET button to switch to the Cut Editing screen.
- ③ Use the SET button to specify edit points while playing the video clip.

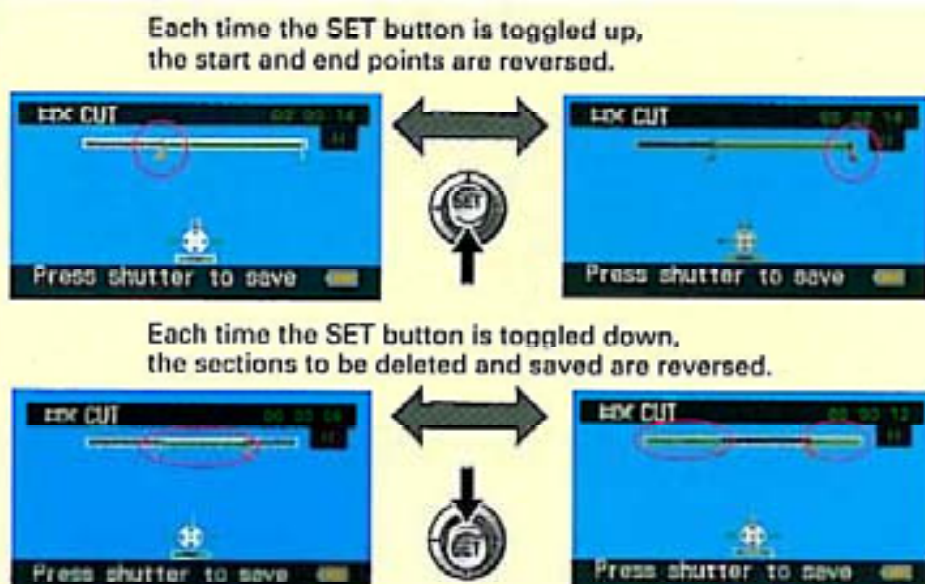


Portion to be deleted

- ④ Press the [] button to switch to the Save screen.



- ⑤ Specify the desired save method and press the SET button.



Joining video clip

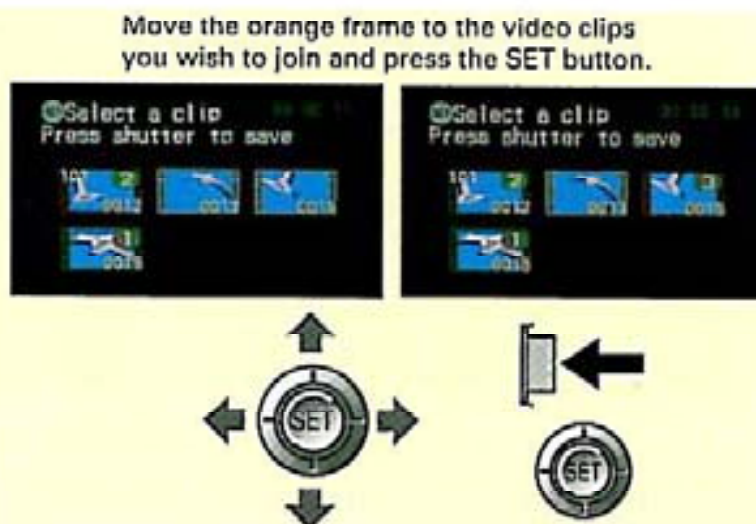
- ② Select JOIN and press the SET button to switch to the Join Editing screen.
- ③ Use the SET button to select/specify the order in which to join video clips.



- ④ Press the [] button to switch to the Save screen.



- ⑤ Specify the desired save method and press the SET button.



Video clips that were recorded in different modes cannot be joined.

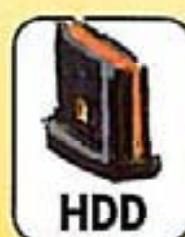
Xacti Library

You can connect an external hard disk drive directly to the USB port of the supplied cradle. This lets you copy image files saved in the Xacti HD1000 to the external hard disk without having to use a PC.

Shoot



Store



View



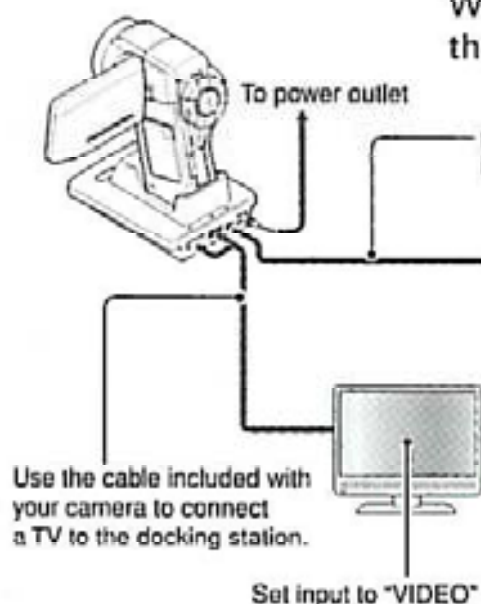
Build an Xacti Library onto an External Hard Disk Drive

Create



Turn on the devices in the following order:
TV→Harddisk→Camera.

When the [⚡] button on the docking station is pressed, the Xacti Library Main Menu will appear.



Use the USB cable and the dedicated USB converter cable included with your camera to connect the hard disk to the docking station.

Xacti Library compatible hard disks

A hard disk that meets the following conditions can be used with the Xacti Library.

USB 2.0 compatible

A USB 1.x compatible hard disk cannot be used.

Powered by self power

A hard disk that is powered through the USB cable (bus power) cannot be used.

FAT32 format

Only a hard disk drive that has been initialized in the FAT32 format can be used with the Xacti Library. Hard disk initialized in other format can be reformatted on the HD1000.

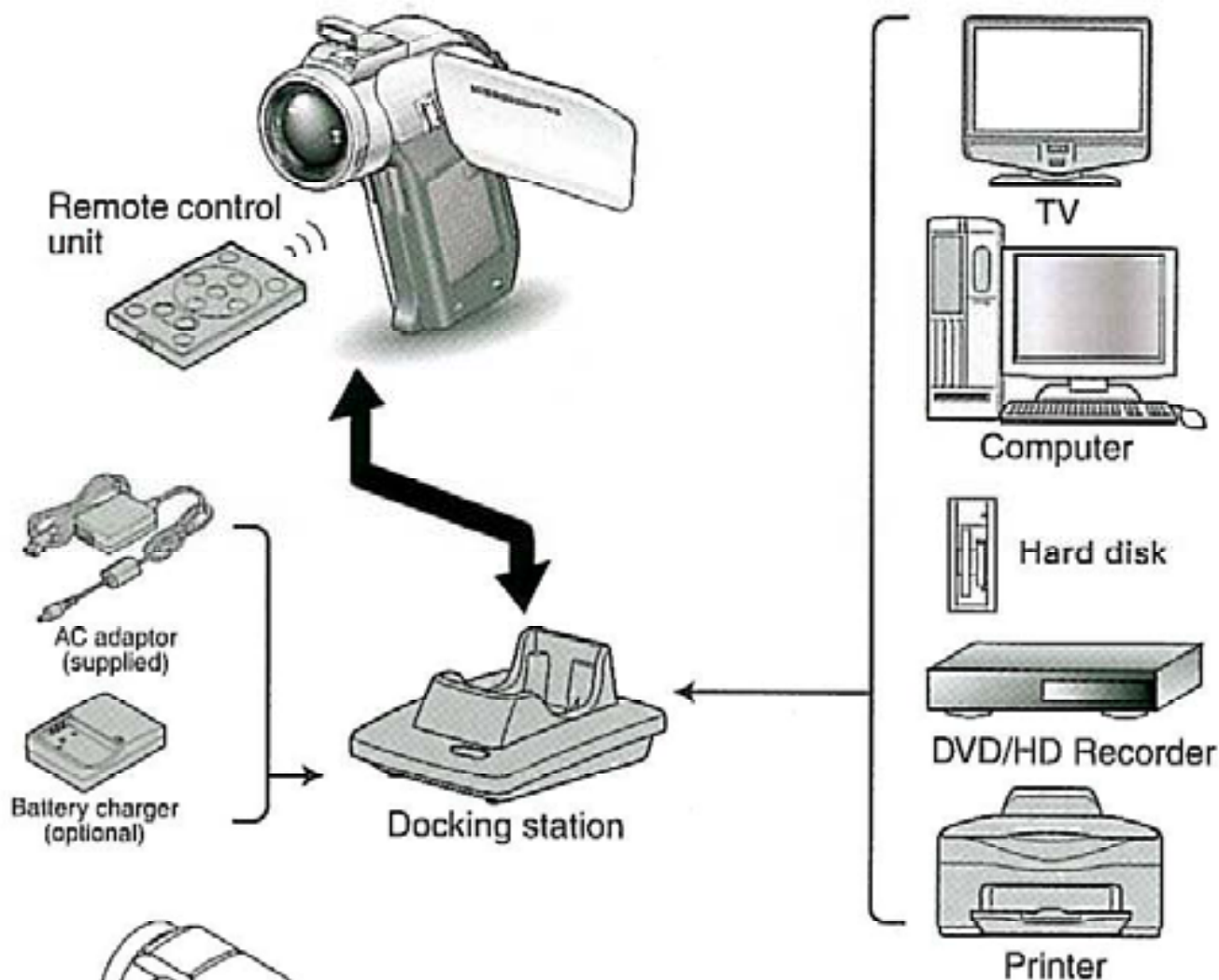
Hard Disk



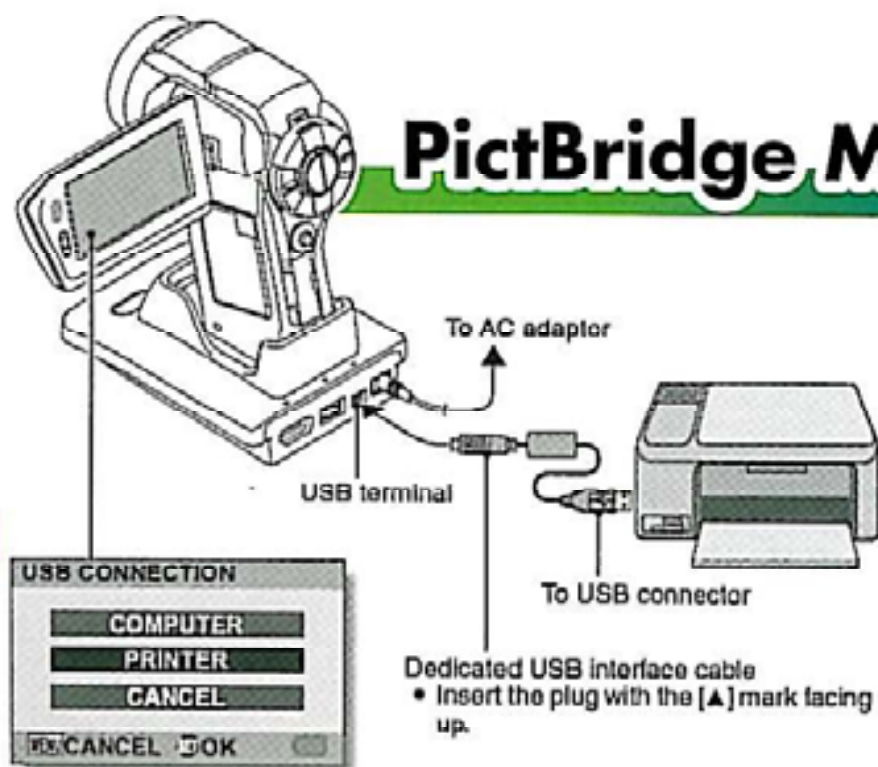
*HDMI cable is bundled or not depending on the country of the purchase.

Docking Station

You can connect the camera to various devices to expand its capabilities.



PictBridge MODE





Connecting to a TV

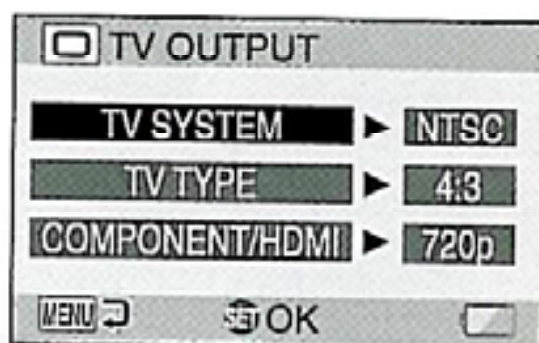
TV output settings

Specify the type of image signal that is output from your camera's USB/AV terminal, COMPONENT/AV terminal or HDMI terminal.

Set the type of TV signal that is output from the COMPONENT/AV terminal.

TV TYPE: Set the TV's aspect ratio.

COMPONENT/HDMI: Set the signal that is output from the COMPONENT/AV and/or HDMI terminal



<If "TV SYSTEM" is selected>

NTSC : Outputs NTSC video signals.

PAL : Outputs PAL video signals.

<If "TV TYPE" is selected>

4:3 : Use this setting when a TV having an aspect ratio of 4:3 is connected.

16:9 : Use this setting when a TV having an aspect ratio of 16:9 is connected.

<If "COMPONENT/HDMI" is selected>

1080i : The output signal is set to 1080i.

720p : The output signal is set to 720p.

480p : The output signal is set to 480p.

This product can manage data stored on an external hard disk without using a computer.

Xacti Library compatible hard disks

A hard disk that meets the following conditions can be used with the Xacti Library.

USB 2.0 compatible

A USB 1.x compatible hard disk cannot be used.

Powered by self power

A hard disk that is powered through the USB cable (bus power) cannot be used.

FAT32 format

Only a hard disk that has been initialized in the FAT32 format can be used with the Xacti Library. Hard disks initialized in other formats cannot be used.



Refer to the following system requirements when connecting this product to a computer.



PERSONAL COMPUTER ENVIRONMENT

	for Windows			for Mac OS
Software	QuickTime 7.1 ^{※1} iTunes 7.3 Xacti Screen Capture 1.1 ^{※2}	Nero 7 Essentials	Ulead DVD MovieFactory 5 SE	QuickTime 7.1 ^{※1} iTunes 7.3
OS	Windows [®] 2000 Windows [®] XP with standard USB port	Windows [®] 2000 Windows [®] XP Windows [®] Vista with standard USB port	Windows [®] XP Windows [®] Vista with standard USB port	Mac OS X 10.3.9 Mac OS X 10.4.9 or later with standard USB port
CPU	Pentium4 HT 3.2GHz or faster Athlon 3800+ or faster	Athlon X2 5000+ or faster Core2Duo 2.40GHz or faster	PentiumD 3.2GHz or faster Core2Duo 1.860GHz or faster	Core2Duo or faster
RAM	1GB (Recommended 2GB or greater)	1GB (Recommended 2GB or greater)	1GB(2GB for Vista model) (Recommended 2GB or greater)	512MB or greater (Recommended 1GB or greater)
HDD	4GB or more unused disc space			-----
Drive	DVD-ROM			DVD-ROM
Other	Direct X9.0 or later			-----

※1 1080i movie playback is not guaranteed.

※2 Compatible with Windows[®] Vista

Nero 7 Essentials: Movie player.

Ulead DVD MovieFactory 5 SE: Software for authoring original DVDs from MPEG-4 video and still images.

QuickTime 7.1: Software for playing MPEG-4 format movies.

iTunes: Software for easily transferring songs to an iPod.

Xacti Screen Capture 1.1: Software for capturing computer screens as still images.

Optional Accessories



Telephoto Conversion Lens
(VCP-L16T)



Semi Fish-Eye Lens
(VCP-L04F)



Wide Conversion Lens
(VCP-L07W)



49mm Adaptor
(VCP-AL4049)



Battery
(DB-L50)



Charger
(VAR-L50)



HDMI Cable
(VCP-HDMI01)



Shoulder Strap
(VCP-S03S)



Shoulder Bag
(VCP-B01S)

