

Video Mode : Setting Various Functions

Setting the Video file Record mode

You can set the record mode before starting video file record.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record Screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <Record Mode> and press the [▶] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ **TV (i):** The system generates clear images when played back on TV.
- ◆ **PC (p):** The system generates clear images when played back on PC.

5. Press the [MENU] button to finish setting.



Notes

- ✦ In case <TV> is selected as the Record Mode, the size is set to 720i only.
- ✦ In case <PC> is selected as the Record Mode, the size is set to 720p or 352p.
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ When the size is set to <352>, <PC> is automatically selected for Video files recording.

Video Mode : Setting Various Functions

Setting the External Input/Output

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record Screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <Line In/Out> and press the [▶] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ **Out:** Select this when recording or playing back the contents of the CAM into an external device.
- ◆ **In:** Select this when recording the contents of an external device into the CAM.

5. Press the [MENU] button to finish setting.

- ◆ The CAM is set to the selected setting.



Note

- ✦ If you select <<|> in the menu, the previous menu appears.

Video Mode : Setting Various Functions

Setting the Focus

You can set the focus depending on the subject or the environment. In most situations, you can record best using AF(Auto Focus).

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings. (Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <Focus> and press the [►] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ **AF:** Set the focus automatically. When the CAM turns on, AF is selected in default.
- ◆ **MF**(): Set the focus manually. .

5. Press the [MENU] button to finish setting.

- ◆ The icon of selected function is displayed.
- ◆ If you select the AF, no icon is displayed.



Manual Focus

Adjust the focus using MF [+] / [-] button to zoom in or out manually.

- ◆ When a picture contains objects that are both close and far away from the CAM.
- ◆ When a person is enveloped in fog or surrounded by snow.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Changes in the set-up made in the Photo mode are all retained in the Video mode.
- ✦ The focus is set to AF mode automatically when the CAM is turned off.

Video Mode : Setting Various Functions

Setting the EIS (Electronic Image Stabilizer)

The Electrical Image Stabilizer is a function that compensates for hand shake and other movements while recording.

EIS provides more stable video when:

- ◆ Recording with zooming
- ◆ Recording small objects
- ◆ Recording while walking or moving
- ◆ Recording through the window in the vehicle

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings. (Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <EIS> and press the [▶] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ On(): Set the EIS function.
- ◆ Off: Cancel the EIS function.

5. Press the [MENU] button to finish setting.

- ◆ If you select <On>, the icon of EIS is displayed.
- ◆ If you select <Off>, no icon is displayed.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The EIS is set to Off automatically when the CAM is turn off.

Video Mode : Setting Various Functions

Setting the White Balance

The White Balance may vary depending on the lighting conditions.

The White Balance is used to preserve natural colors under different lighting conditions.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <White Balance> and press the [▶] button.

4. Move the [W/T] button to select desired setting and press the [OK] button.

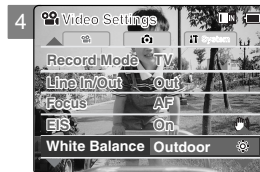
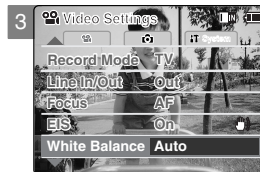
- ◆ **Auto**: Adjust the color depending on the condition automatically.
- ◆ **Hold** (📷): Record with first selected color without adjusting color.
- ◆ **Outdoor** (☀️): Record with the balanced light. (Natural light)
- ◆ **Indoor** (💡): Record with the balanced light. (Glow lamp or light in the studio)

5. Press the [MENU] button to finish setting.

- ◆ The icon of selected function is displayed.
- ◆ If you select <Auto>, no icon is displayed.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Turn the Digital Zoom off for more accurate White Balance setting.
- ✦ Changes in the set-up made in the Photo mode are all retained in the Video mode.



Video Mode : Setting Various Functions

Setting the Program AE (Programmed Auto Exposure)

It allows you to adjust the aperture setting to suit different conditions.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

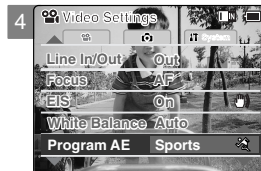
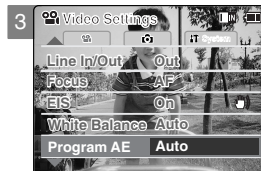
3. Move the [W/T] button to select <Program AE> and press the [▶] button.

4. Move the [W/T] button to select desired setting and press the [OK] button.

- ◆ **Auto:** Auto mode balances exposure and shutter speed to get the best result .
The shutter speed automatically varies from 1/60 to 1/250 per second depending on the scene.
- ◆ **Sports**(): For recording fast-moving people or objects. It is suitable for sports events, recording outside in the car.
- ◆ **Spotlight**(): Compensates for a subject that appears too bright under strong direct light such as spotlight. It is suitable for concert and school performance.
- ◆ **Sand/Snow**(): Use when the light is very strong such as on the beach or in the snow.
- ◆ **HS Shutter**(): Allows fast-moving images to be captured one frame at a time.

5. Press the [MENU] button to finish setting.

- ◆ The icon of selected function is displayed.
- ◆ If you select <Auto>, no icon is displayed.



Note

- ✦ If you select <◀> in the menu, the previous menu appears.

Video Mode : Setting Various Functions

Setting the BLC (Backlight Compensation)

The Backlight Compensation function helps to make the subject brighter when the subject is in front of a window or the subject is too dark to distinguish. You can use this function when use the CAM in the bright background and snowy background.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <BLC> and press the [▶] button.

4. Move the [W/T] button to select desired setting and press the [OK] button.

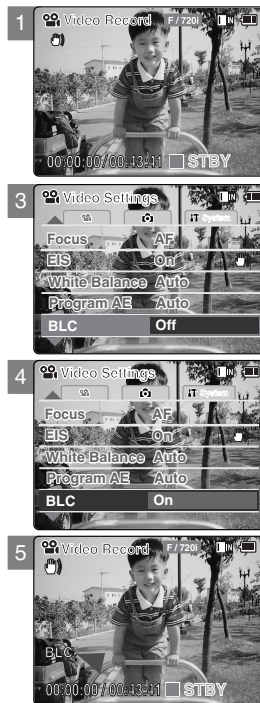
- ◆ On(BLC): Set the BLC function.
- ◆ Off: Cancel the BLC function.

5. Press the [MENU] button to finish setting.

- ◆ <BLC> is displayed.
- ◆ If you select <Off>, <BLC> is not displayed.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The BLC is released when the CAM is turned off.
- ✦ Changes in the set-up made in the Photo mode are all retained in the Video mode.



Video Mode : Setting Various Functions

Setting the Effect

You can create professional looking effect on your video file.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings. (Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

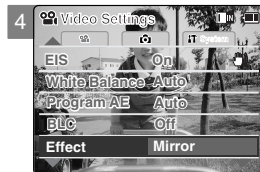
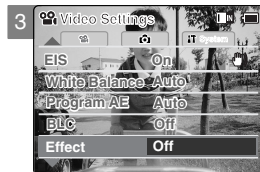
3. Move the [W/T] button to select <Effect> and press the [▶] button.

4. Move the [W/T] button to select desired setting and press the [OK] button.

- ◆ **Off**: Cancel the <Effect>.
- ◆ **Art**: Artistic effects on your video file.
- ◆ **Mosaic**: A mosaic overlay appears on your video file.
- ◆ **Sepia**: The picture is displayed in sepia color similar to that of an old photograph.
- ◆ **Negative**: Reverses the colors, creating the look of a negative.
- ◆ **Mirror**: This mode cuts the picture in half using a Mirror effect.
- ◆ **B&W**: Changes the images into Black and White.

5. Press the [MENU] button to finish setting.

- ◆ The effect and letter of selected function are displayed.
- ◆ If you select <OFF>, no icon is displayed.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ When the screen size is set to 352(352X240), it is played back in smaller size than 720(720X480) on PC.

Video Mode : Setting Various Functions

Setting the Digital Zoom

Zooming more than X10 is achieved digitally, up to X100 when combined with optical zoom. The Digital Zoom processes data to enlarge the center portion of the image to fill the frame. It may produce a less detailed and slightly grainy picture.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings. (Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

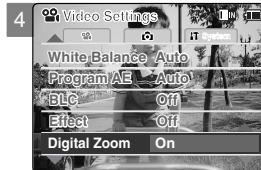
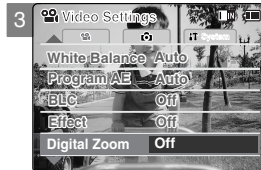
3. Move the [W/T] button to select <Digital Zoom> and press the [►] button.

4. Move the [W/T] button to select desired setting and press the [OK] button.

- ◆ On: Set the Digital Zoom. (X100)
- ◆ Off: Cancel the Digital Zoom.

5. Press the [MENU] button to finish setting.

- ◆ The digital zoom indicator appears.



Note

- ✦ If you select <◀> in the menu, the previous menu appears.

Video Mode : Setting Various Functions

Setting the Backlight Auto Control

This function enables to save power consumption by control the brightness of LCD monitor automatically in outdoor.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.
- ◆ You can select Video mode or Previous mode as the start-up mode in System Settings.
(Refer to page 98)

2. Press the [MENU] button.

- ◆ The Video Settings screen appears.

3. Move the [W/T] button to select <B.L. Auto Ctl> and press the [▶] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ On: Set the B.L. Auto Ctl function.
- ◆ Off: Cancel the B.L. Auto Ctl function.

5. Press the [MENU] button to finish setting.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Recording or Playing back the video file is not affected by Backlight Auto Control function.

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Photo Mode

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Photo Mode : Capturing

Capturing Images

You can take photo as well as record video files.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 ♦ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
 ♦ The Photo Capture screen appears.
 ♦ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 ♦ [] indicator is displayed in LCD monitor and the CAM is ready for taking pictures.
3. Press [Record/Stop] button to take pictures.



Notes

- ✦ If the battery is low and the battery charge icon blinks, the light will not operate and light icon is set to off state.
- ✦ In order to take pictures in an external memory (Memory Card), insert the Memory Card and then set the memory type to <External>. (Refer to page 32.)
- ✦ Press the [MENU] button in the Photo Capture mode to see the Photo Settings screen.

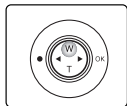
Photo Mode : Capturing

Zooming In and Out

Zooming technique lets you change the size of the subject captured in a scene.

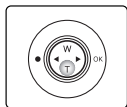
1. Move [POWER/MODE Selector] down to turn on the CAM.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.



Press the [W] button to zoom out.

- The subject appears farther away when you zoom out.



Press the [T] button to zoom in.

- The subject appears closer when you zoom in.

3. Press the [Record/Stop] button to take pictures.

Zoom Out



Zoom In



Notes

- ✦ Zooming in the CAM is X10 -optical electro motion zoom and the quality and definition of the captured photo file are well maintained even when zooming is on.
- ✦ Frequent use of zooming may result in higher battery power consumption.

Photo Mode : Viewing

Viewing Photo files on the LCD Monitor

It is handy and practical to view pictures using the LCD monitor almost anywhere such as in a car, indoors or outdoors.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.

3. Press the [OK] button.

- ◆ It moves to Photo View mode.

4. Press the [W] button.

- ◆ The Multi-play screen appears.

5. Move the [W/T, ◀/▶] button to find the photo you want to view.

- ◆ Each time you move the [W/T, ◀/▶] button, the frame moves vertically and horizontally.
- ◆ Each time you press the VOL [+] / [-] button, another page of 9 frames is displayed.

6. Press [OK] button to view the photo you want.

- ◆ The full screen is displayed.



Notes

- ✦ Display time may vary depending on the picture size.
- ✦ The image edited (turned) in Image Viewer Programme on your PC may not be displayed.

Photo Mode : Selecting File Options

Deleting Photo files

You can delete photo files in <File Options>.

1. Move [POWER/MODE Selector] down to turn on the CAM.
◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
◆ The Photo Capture screen appears.
3. Press the [OK] button.
◆ It moves to Photo View mode.
4. Press the [W] button.
◆ The Multi-play screen appears.
5. Move the [W/T, ◀/▶] button to select the photo file you want to delete.
◆ Each time you move the [W/T, ◀/▶] button, the frame moves horizontally and vertically.
◆ Each time you move the VOL [+]/[-] button, another page of 9 frames is displayed.
6. Press the [MENU] button.
Move [W/T] button to select <Delete> and press the [OK] button.
7. Move the [W/T] button to select the followings and press the [OK] button.
◆ **Selected:** The selected photo file is deleted.
◆ **All:** All photo files are deleted.
◆ **Cancel:** Cancel deleting photo files.

Note

✦ The locked file can not be deleted.

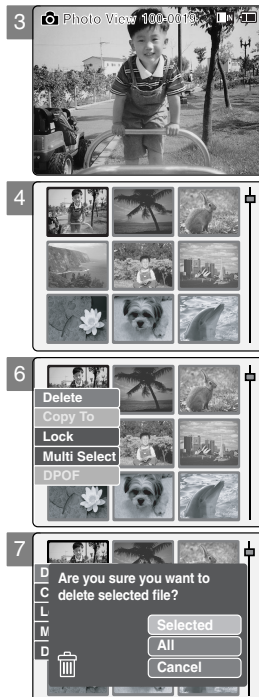
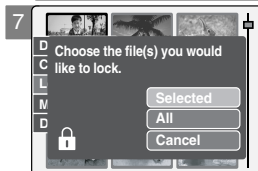


Photo Mode : Selecting File Options

Locking Photo files

You can lock the important photo file not to be deleted.

1. Move **[POWER/MODE Selector]** down to turn on the **CAM**.
 - ◆ The Video Record screen appears.
2. Move **[POWER/MODE Selector]** down again to select **Photo** mode and press the **[OK]** button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the **[OK]** button is not pressed.
 - ◆ The Photo Capture screen appears.
3. Press the **[OK]** button.
 - ◆ It moves to Photo View mode.
4. Press the **[W]** button.
 - ◆ The Multi-play screen appears.
5. Move the **[W/T, ◀/▶]** button to select the photo file you want to lock.
6. Press the **[MENU]** button.
Move **[W/T]** button to select **<Lock>** and press the **[OK]** button.
7. Move the **[W/T]** button to select the followings and press the **[OK]** button.
 - ◆ **Selected**: The selected photo file is locked.
 - ◆ **All**: All photo files are locked.
 - ◆ **Cancel**: Cancel locking photo files.



Note

- ✦ The **< 🔒 >** icon is displayed on the locked file.

Photo Mode : Selecting File Options

Copying Photo files

You can copy photo files to the internal or external memory.
Insert the Memory Card into the MULTI CARD slot.

1. Move [POWER/MODE Selector] down to turn on the CAM.
◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
◆ The Photo Capture screen appears.
3. Press the [OK] button.
◆ It moves to Photo View mode.
4. Press the [W] button.
◆ The Multi-play screen appears.
5. Move the [W/T, ◀/▶] button to select the photo file you want to copy.
6. Press the [MENU] button. Move [W/T] button to select <Copy To> and press the [OK] button.
◆ If you select the Storage type 'External', the file is copied to 'Internal' and vice versa.
7. Move the [W/T] button to select the followings and press the [OK] button.
◆ **Selected:** Copy the selected photo file.
◆ **All:** Copy all photo files.
◆ **Cancel:** Cancel copying photo files.

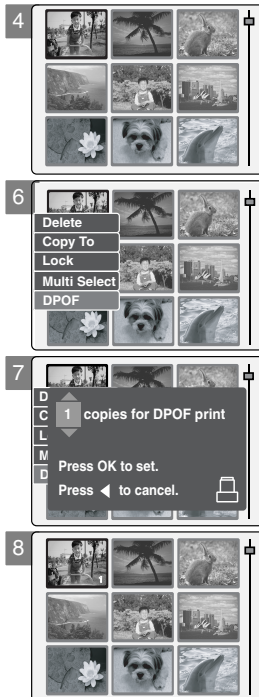


Photo Mode : Selecting File Options

Setting DPOF (Digital Print Order Format) Function

Insert the Memory Card into the MULTI CARD slot.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The Photo Capture screen appears.
3. Press the [OK] button.
 - ◆ It moves to Photo View mode.
4. Press the [W] button.
 - ◆ The Multi-play screen appears.
5. Move the [W/T, ◀/▶] button to select the photo file you want to print.
6. Press the [MENU] button. Move [W/T] button to select <DPOF> and press the [OK] button.
 - ◆ You can select <DPOF> only when you've selected Storage Type 'External'.
(Refer to page 32.)
7. Move the [W/T] button to select the number of copies you want to print and press the [OK] button.
8. Press the [MENU] button to finish setting.



Notes

- ✦ Refer to page 122 for further details about printing DPOF files.
- ✦ You can set copies for DPOF print up to 30.

Photo Mode : Selecting File Options

Setting Multi Selection

You can set the multi photo files to delete, copy or lock at one time.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The Photo Capture screen appears.
3. Press the [OK] button.
 - ◆ It moves to Photo View mode.
4. Press the [W] button.
 - ◆ The Multi-play screen appears.
5. Press the [MENU] button. Move [W/T] button to select <Multi Select> and press the [OK] button.
 - ◆ "Use VOL [+] button to add selection, or VOL [-] button to deselect" the message appears. Press [OK] button to close the confirm message.
6. Move the [W/T, ◀/▶] button to select desired setting, and press the VOL [+] or VOL [-] button.
 - ◆ VOL [+]: The selected video file has the mark <✓>.
 - ◆ VOL [-]: When the mark <✓> disappears, the selection is canceled.
7. Press the [MENU] button. Move [W/T] button to select <Delete>, <Copy To> or <Lock> and press the [OK] button.
8. Move the [W/T] button to select the followings and press the [OK] button.
 - ◆ **Selected:** The selected photo file is deleted, copied, or locked.
 - ◆ **All:** All photo files are deleted, copied, or locked.
 - ◆ **Cancel:** Cancel selecting photo files.

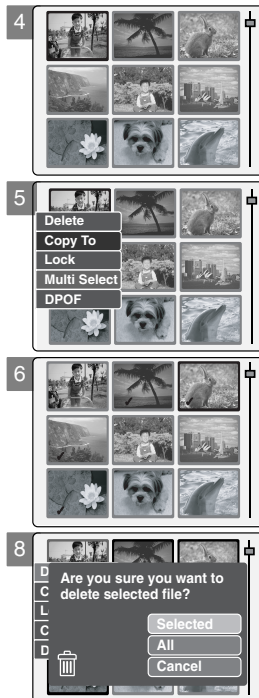


Photo Mode : Setting Various Functions

Setting the Photo file Size

You can set the photo files size. The number of stored files varies depending on the Memory Card capacity and photo files size.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.

3. Press the [MENU] button.

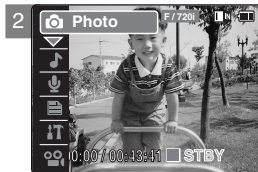
4. Move the [W/T] button to select <Size> and press the [►] button.

5. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ There are several photo file sizes, such as 2400X1800, 1600x1200, 1024x768 and 640x480.

6. Press the [MENU] button to finish setting.

- ◆ The selected photo file size is displayed on the LCD monitor.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The size of 2400X1800 is created by Linear Interpolation, so the quality of the image would be worse than 4MB pixel.

Photo Mode : Setting Various Functions

Setting the Flash

The Flash only works in Photo Mode and allows the user to take photographs in dark places such as during the night, shaded or dark areas and indoors.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.

3. Press the [MENU] button.

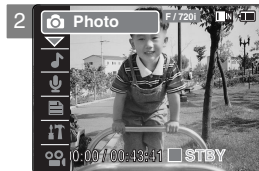
4. Move the [W/T] button to select <Flash> and press the [▶] button.

5. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ **Auto**: Set the flash automatically.
- ◆ **On**(): Turn on the flash.
- ◆ **Off**(): Turn off the flash.

6. Press the [MENU] button to finish setting.

- ◆ The icon of selected function is displayed.
- ◆ If you select <Auto>, no icon is displayed.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ If the battery is low and the battery charge icon blinks, flash will not operate and flash icon is set to off state.

ENGLISH

Photo Mode : Setting Various Functions

Setting the Focus

You can set the focus depending on the subject or the environment.
In most situations, you can record the best photo using AF(Auto Focus).

1. Move **[POWER/MODE Selector]** down to turn on the **CAM**.
 - ◆ The Video Record screen appears.
2. Move **[POWER/MODE Selector]** down again to select **Photo** mode and press the **[OK]** button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the **[OK]** button is not pressed.
 - ◆ The Photo Capture screen appears.
3. Press the **[MENU]** button.
4. Move the **[W/T]** button to select **<Focus>** and press the **[▶]** button.
5. Move the **[W/T]** button to select the desired setting and press the **[OK]** button.
 - ◆ **AF**: Set the focus automatically. When the CAM turns on, AF is selected in default.
 - ◆ **MF**($\frac{1}{F}$): Set the focus manually.
6. Press the **[MENU]** button to finish setting.
 - ◆ The icon of selected function is displayed.
 - ◆ If you select the AF, no icon is displayed.

Manual Focus

Adjust the focus using **MF [+] / [-]** button to zoom in or out manually.

- ◆ When a picture contains object that are both close and far away from the CAM.
- ◆ When a person is enveloped in fog or surrounded by snow.

Notes

- ✦ If you select **<◀>** in the menu, the previous menu appears.
- ✦ Changes in the set-up made in the Video mode are all retained in the Photo mode.
- ✦ The focus is set to AF mode automatically when the CAM is turned off.



Photo Mode : Setting Various Functions

Setting the White Balance

The White Balance may vary depending on the lighting conditions.

The White Balance is used to preserve natural colors under different lighting conditions.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.

3. Press the [MENU] button.

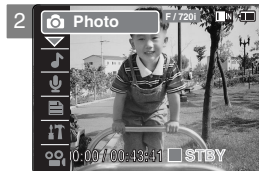
4. Move the [W/T] button to select <White Balance> and press the [▶] button.

5. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ **Auto:** Adjust the color depending on the condition automatically.
- ◆ **Hold** (📷): Record with first selected color without adjusting color.
- ◆ **Outdoor** (☀️): Record with the balanced light. (Natural light)
- ◆ **Indoor** (💡): Record with the balanced light. (Glow lamp, light in the studio or video light)

6. Press the [MENU] button to finish setting.

- ◆ The icon of selected function is displayed.
- ◆ If you select <Auto>, no icon is displayed.



Notes

- ◆ If you select <◀> in the menu, the previous menu appears.
- ◆ Changes in the set-up made in the Video mode are all retained in the Photo mode.

Photo Mode : Setting Various Functions

Setting the BLC (Backlight Compensation)

The Backlight Compensation function helps to make the subject brighter when the subject is in front of a window or the subject is too dark to distinguish. You can use this function when using the CAM in the bright backgrounds including snow scenes.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Photo Capture screen appears.

3. Press the [MENU] button.

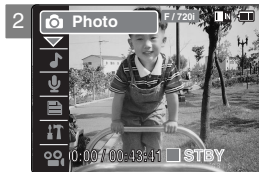
4. Move the [W/T] button to select <BLC> and press the [▶] button.

5. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ On(<BLC>): Set the BLC function.
- ◆ Off: Cancel the BLC function.

6. Press the [MENU] button to finish setting.

- ◆ <BLC> is displayed.
- ◆ If you select <Off>, <BLC> is not displayed.



Notes

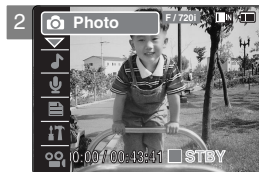
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Changes in the set-up made in the Video mode are all retained in the Photo mode.
- ✦ <BLC> is set to Off when the CAM is turned off.

Photo Mode : Setting Various Functions

Setting the Backlight Auto Control

This function enables to save power consumption by control the brightness of LCD monitor automatically in outdoor.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Photo* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The Photo Capture screen appears.
3. Press the [MENU] button.
4. Move the [W/T] button to select <B.L. Auto Ctl> and press the [▶] button.
5. Move the [W/T] button to select the desired setting and press the [OK] button.
 - ◆ On: Set the B.L. Auto Ctl function.
 - ◆ Off: Cancel the B.L. Auto Ctl function.
6. Press the [MENU] button to finish setting.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The captured photo file is not affected by Backlight Auto Control function.

3

MP3/Voice Recorder Mode/ Using File Browser

MP3 Mode

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Using File Browser

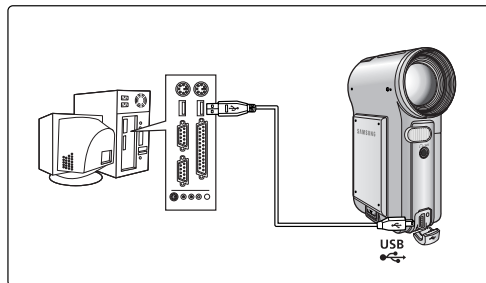
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MP3 Mode : Storing Music in the CAM

Copying Music files to the CAM

You can transfer music files from your PC to the internal memory, SD, MMC, Memory Stick or Memory Stick Pro. For copying music files, the CAM must be connected to your PC with the USB cable. You can also transfer music files from Memory card to CAM directly.

1. **Connect the CAM to a PC with the USB cable.**
(Refer to page 106)
 - ◆ Your computer recognizes this device and the symbol for removable drive will appear in 'My Computer'.
2. **Move [POWER/MODE Selector] down turn on the CAM.**
 - ◆ The USB Mode screen appears.
3. **Move the [W/T] button to select <Mass Storage> and press the [OK] button.**
4. **Double-click the new removable drive to open.**
5. **Select the MP3 folder and double-click to enter.**
6. **Copy the MP3 file you want from PC to the CAM.**
 - ◆ Refer to the folder structure on page 29 for copying MP3 files.



Disconnecting USB Connection

After completing the data transfer, you must disconnect the cable in the following way.

1. Select the removable disk icon and click the right mouse button to select 'Safely Remove Hardware'.
2. Select 'Stop' and disconnect the USB cable when the pop-up screen disappears.

Note

- ✦ The way of transferring, playing with the Memory Card is same as that of internal memory.

ENGLISH

MP3 Mode : Playing

Playing Music files

You can hear the music file in internal memory or external memory(Memory Card).

1. Connect the earphones to the CAM.

◆ You can also hear the music from the Built-in speaker without the earphones.

2. Move [POWER/MODE Selector] down to turn on the CAM.

◆ The Video Record screen appears.

3. Move [POWER/MODE Selector] down again to select **MP3** mode and press the [OK] button.

◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.

◆ The music list appears.

4. Move the [W/T] button to find the music you want to hear and press the [OK] button.

◆ The selected music is played.

5. Press the [OK] button again to stop hearing music.

◆ Each time you press the [OK] button, play or pause is selected repeatedly.

The use of [◀▶] button

✦ Press the [◀] button

Within 2 seconds after starting playback - Previous file plays.

2 seconds after starting playback - Current file starts again.

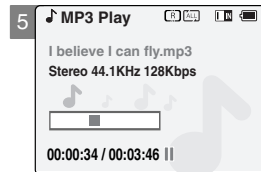
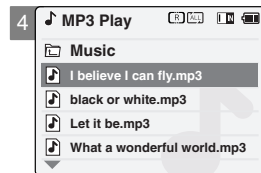
✦ Press the [▶] button

The next file appears.

Notes

✦ '----' is displayed depending on the title of MP3 file.

✦ In MP3 playback mode, a file name may not be displayed correctly.
In this case, rename the file name using English alphabets only.



MP3 Mode : Selecting Play Options

Setting Repeat Play

You can play the only one or all music repeatedly.

- 1. Connect the earphones to the CAM.**
 - ◆ You can also hear the music from the Built-in speaker without the earphones.
- 2. Move [POWER/MODE Selector] down to turn on the CAM.**
 - ◆ The Video Record screen appears.
- 3. Move [POWER/MODE Selector] down again to select *MP3* mode and press the [OK] button.**
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The music list appears.
- 4. Move the [W/T] button to select a MP3 file want to repeat.**
- 5. Press the [MENU] button. Move the [W/T] button to select <Repeat > and press the [OK] button.**
- 6. Move the [W/T] button to select desired setting and press the [OK] button.**
 - ◆ **No:** Cancel the Repeat Play function.
 - ◆ **One:** One file is repeated.
 - ◆ **All:** All files are repeated.
- 7. Press the [MENU] button to finish setting.**
 - ◆ The icon of the selected Repeat Play setting is displayed on the LCD monitor. If you select <No>, no icon is displayed.

Note

- ✦ If you select <◀> in the menu, the previous menu appears.

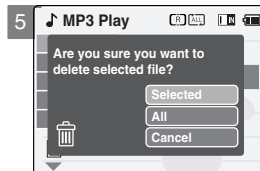
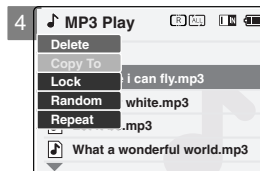
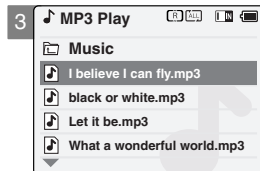


MP3 Mode : Selecting File Options

Deleting Music files

You can delete the music file you want.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select **MP3** mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The music list appears.
3. Move the [W/T] button to select a MP3 file you want to delete.
4. Press the [MENU] button. Move the [W/T] button to select <Delete> and press the [OK] button.
5. Move the [W/T] button to select the followings and press the [OK] button.
 - ◆ **Selected:** The selected music file is deleted.
 - ◆ **All:** All music files are deleted.
 - ◆ **Cancel:** Cancel deleting music files.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The locked file can not be deleted.

MP3 Mode : Selecting File Options

Locking Music files

You can lock the important music file not to be deleted.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select **MP3** mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The music list appears.
3. Move the [W/T] button to select a MP3 file you want to lock.
4. Press the [MENU] button.
Move the [W/T] button to select <Lock> and press the [OK] button.
5. Move the [W/T] button to select the followings and press the [OK] button.
 - ◆ **Selected:** The selected music file is locked.
 - ◆ **All:** All music files are locked.
 - ◆ **Cancel:** Cancel locking music files.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The <🔒> icon is displayed on the locked file.

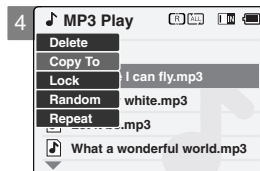
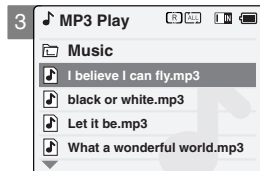


MP3 Mode : Selecting File Options

Copying Music files

You can copy the music file to the internal or external memory.
Insert the Memory Card into the MULTI CARD slot.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select **MP3** mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The music list appears.
3. Move the [W/T] button to select a MP3 file you want to copy.
4. Press the [MENU] button. Move the [W/T] button to select <Copy To> and press the [OK] button.
 - ◆ If you selected the Storage type 'External', the file is copied to 'Internal' and vice versa.
5. Move the [W/T] button to select the followings and press the [OK] button.
 - ◆ **Selected:** Copy the selected music file.
 - ◆ **All:** Copy all music files.
 - ◆ **Cancel:** Cancel copying music files.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ When copying, make sure to check the Storage Type. (Refer to page 32.)
- ✦ The Storage Type is set to <Internal> by default.

MP3 Mode : Selecting File Options

Setting Random Play

You can play the music files at random.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select **MP3** mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The music list appears.
3. Press the [MENU] button.
Move the [W/T] button to select <Random> and press the [OK] button.
4. Move the [W/T] button to select the desired setting, and press the [OK] button.
 - ◆ **Yes:** Set the Random Play Function.
 - ◆ **No:** Cancel the Random Play Function.



Voice Recorder Mode : Recording

Recording Voice

You can record voice using the built-in microphone in the CAM.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *Voice Recorder* mode and press the [OK] button.

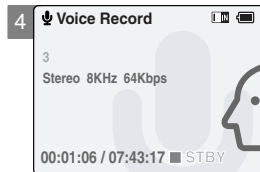
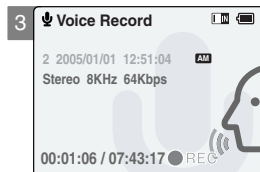
- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The Voice Record screen appears.

3. Press the [Record/Stop] button to record voice.

- ◆ The elapsed time and <● REC> is displayed. It starts recording.

4. Press the [Record/Stop] button to stop recording voice.

- ◆ <■ STBY> is displayed and it stops recording.

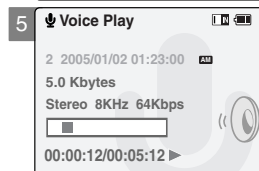
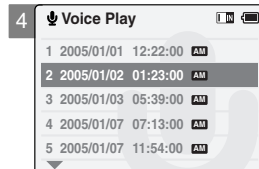
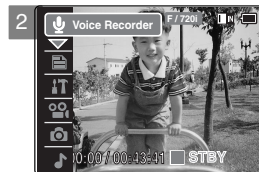


Voice Recorder Mode : Playing

Playing Voice files

You can hear the voice file using the built-in speaker or connecting earphones.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Voice Recorder* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The Voice Record screen appears.
3. Press the [OK] button.
 - ◆ The voice file list appears.
4. Move the [W/T] button to select a voice file you want to play.
5. Press the [OK] button to play the recorded voice.
 - ◆ Press the [OK] button to pause playing.



The button you use when playing the recorded voice file

[OK] button: Play or pause the voice file

[◀] button : Reverse searching / Move to previous file

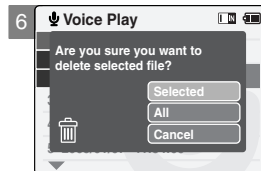
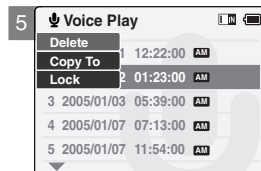
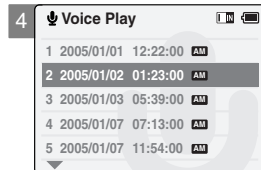
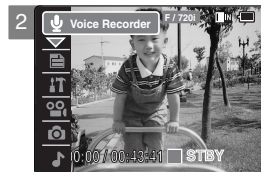
[▶] button : Forward searching / Move to next file

Voice Recorder Mode : Selecting File Options

Deleting Voice files

You can delete voice files you want.

1. Move **[POWER/MODE Selector]** down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move **[POWER/MODE Selector]** down again to select *Voice Recorder* mode and press the **[OK]** button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the **[OK]** button is not pressed.
 - ◆ The Voice Record screen appears.
3. Press the **[OK]** button.
 - ◆ The voice file list appears.
4. Move the **[W/T]** button to select a voice file you want to delete.
5. Press the **[MENU]** button.
 - Move the **[W/T]** button to select **<Delete>** and press the **[OK]** button.
6. Move the **[W/T]** button to select the followings and press the **[OK]** button.
 - ◆ **Selected:** The selected voice file is deleted.
 - ◆ **All:** All voice files are deleted.
 - ◆ **Cancel:** Cancel deleting voice files.



Notes

- ✦ If you select **<◀>** in the menu, the previous menu appears.
- ✦ The locked file can not be deleted.

Voice Recorder Mode : Selecting File Options

Locking Voice files

You can lock the important voice file not to be deleted.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *Voice Recorder* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The Voice Record screen appears.
3. Press the [OK] button.
 - ◆ The voice file list appears.
4. Move the [W/T] button to select a voice file you want to lock.
5. Press the [MENU] button.
 - Move the [W/T] button to select <Lock> and press the [OK] button.
6. Move the [W/T] button to select the followings and press the [OK] button.
 - ◆ **Selected:** The selected voice file is locked.
 - ◆ **All:** All voice files are locked.
 - ◆ **Cancel:** Cancel locking voice files.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The <🔒> icon is displayed on the locked file.

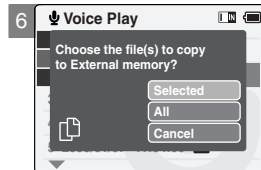
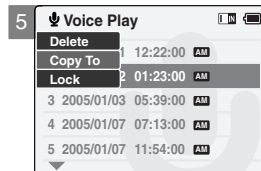
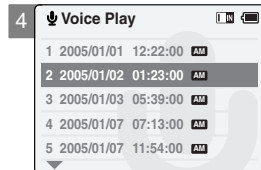
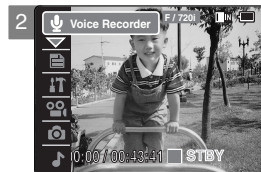


Voice Recorder Mode : Selecting File Options

Copying Voice files

You can copy the voice file to the internal or external memory.

1. Move **[POWER/MODE Selector]** down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move **[POWER/MODE Selector]** down again to select **Voice Recorder** mode and press the **[OK]** button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the **[OK]** button is not pressed.
 - ◆ The Voice Record screen appears.
3. Press the **[OK]** button.
 - ◆ The voice file list appears.
4. Move the **[W/T]** button to select a voice file you want to copy.
5. Press the **[MENU]** button.
Move the **[W/T]** button to select **<Copy To>** and press the **[OK]** button.
 - ◆ If you selected the Storage type 'External', the file is copied to 'Internal' and vice versa.
6. Move the **[W/T]** button to select the followings and press the **[OK]** button.
 - ◆ **Selected**: Copy the selected voice file.
 - ◆ **All**: Copy all voice files.
 - ◆ **Cancel**: Cancel copying voice files.



Note

- ✦ If you select **<◀>** in the menu, the previous menu appears.
- ✦ If the Memory Card is not inserted, you cannot select **<Copy To>**.

Using File Browser

Deleting Files or Folders

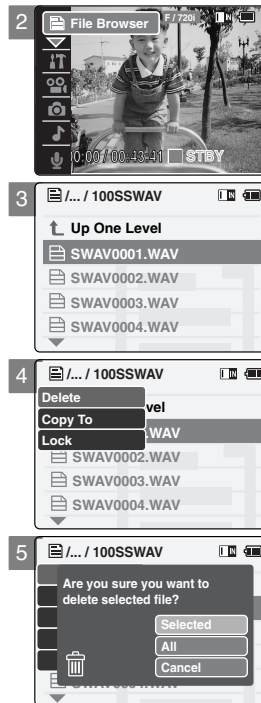
You can delete the file(AVI, MP3, JPG, WAV) or folders you recorded.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *File Browser* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The File Browser screen appears.
3. Move the [W/T] button to select the folder or the file you want to delete. Press the [OK] button.
 - ◆ Press the [MENU] button if you want to delete the selected folder.
 - ◆ Perform these steps repeatedly until the file you want to delete appears.
4. Press the [MENU] button.

Move the [W/T] button to select <Delete> and press the [OK] button.
5. Move the [W/T] button to select the setting you want. Press the [OK] button.
 - ◆ **Selected:** The selected file is deleted.
 - ◆ **All:** All files are deleted.
 - ◆ **Cancel:** Cancel deleting files.

Note

✦ If you select <◀> in the menu, the previous menu appears.

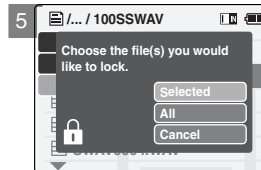
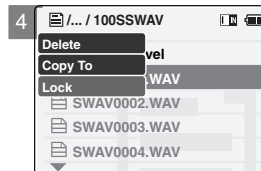
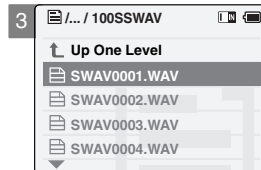
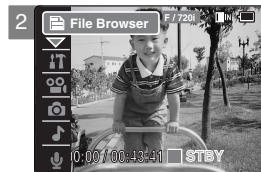


Using File Browser

Locking Files

You can lock the important files not to be deleted.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 ♦ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *File Browser* mode and press the [OK] button.
 ♦ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 ♦ The File Browser screen appears.
3. Move the [W/T] button to select the file you want to lock.
 Press the [OK] button.
 ♦ Perform these steps repeatedly until the file you want to lock appears.
4. Press the [MENU] button.
 Move the [W/T] button to select <Lock> and press the [OK] button.
5. Move the [W/T] button to select the followings. Press the [OK] button.
 ♦ **Selected:** The selected file is locked.
 ♦ **All:** All files are locked.
 ♦ **Cancel:** Cancel locking files.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ You can't lock folders.
- ✦ The <🔒> icon is displayed on the locked file.

Using File Browser

Copying Files or Folders

You can copy the file or folder to the internal or external memory.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *File Browser* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The File Browser screen appears.

3. Move the [W/T] button to select the file or the folder you want to copy. Press the [OK] button.

- ◆ Press the [MENU] button if you want to copy the selected folder.
- ◆ Perform these steps repeatedly until the file you want to copy appears.

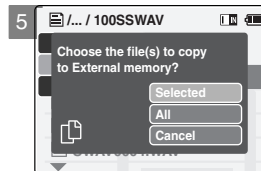
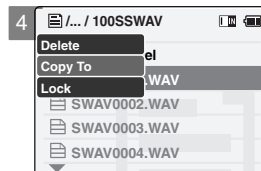
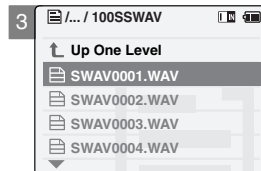
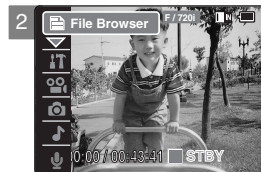
4. Press the [MENU] button.

Move the [W/T] button to select <Copy To> and press the [OK] button.

- ◆ If you selected the Storage type 'External', the file is copied to 'Internal' and vice versa.

5. Move the [W/T] button to select the followings. Press the [OK] button.

- ◆ **Selected:** Copy the selected file.
- ◆ **All:** Copy all files.
- ◆ **Cancel:** Cancel copying files.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ When copying, make sure to check the Storage Type. (Refer to page 32.)
- ✦ The Storage Type is set to <Internal> by default.

Using File Browser

Viewing File Information

You can see the file name, format, size and date.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *File Browser* mode and press the [OK] button.

- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The File Browser screen appears.

3. Move the [W/T] button to select the file you want to see.

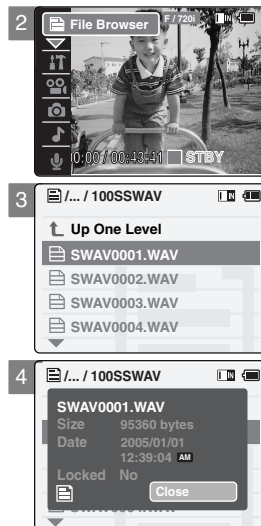
- ◆ Perform these steps repeatedly until the file you want to see its file information appears.

4. Press the [OK] button.

- ◆ The screen with file name, format, size, date and locked state appears.

5. Press the [OK] button to finish viewing file information.

- ◆ If you select <Close> in the screen, the screen disappears.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ You cannot view the folder information. You can view only the file information.

4

Setting the CAM

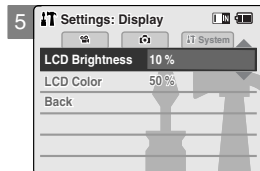
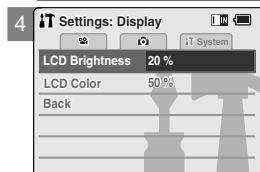
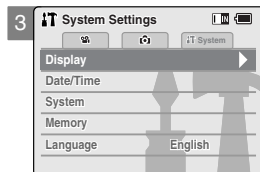
Adjusting the LCD Monitor	90
Adjusting the LCD Brightness	90
Adjusting the LCD Color	91
Adjusting Date/Time	92
Setting Time	92
Setting Date	93
Setting Date Format	94
Setting Time Format	95
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Setting the CAM : Adjusting the LCD Monitor

Adjusting the LCD Brightness

You can adjust the brightness of the LCD monitor to compensate for ambient lighting conditions.

1. Move [POWER/MODE Selector] down to turn on the CAM.
◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
◆ The System Settings menu appears.
3. Move the [W/T] button to select <Display> and press the [▶] button.
4. Move the [W/T] button to select <LCD Brightness> and press the [▶] button.
5. Move the [W/T] button to select the brightness you want and press the [OK] button.
◆ You can adjust value for the LCD brightness between 0~100%.
6. Press the [Record/Stop] button to finish setting.



Notes

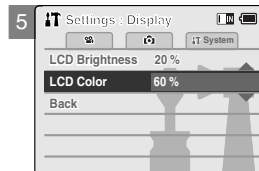
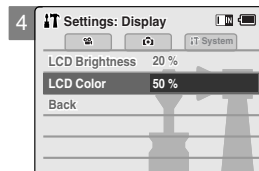
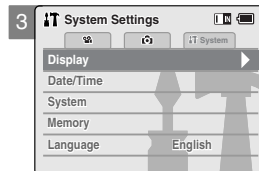
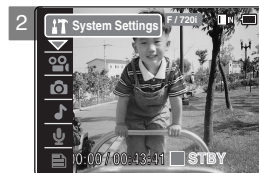
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ A brighter LCD Monitor setting consumes more battery power.
- ✦ If it is too bright, adjust the LCD brightness.

Setting the CAM : Adjusting the LCD Monitor

Adjusting the LCD Color

You can adjust the color of the LCD monitor depending on the situation.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 ♦ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 ♦ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 ♦ The System Settings menu appears.
3. Move the [W/T] button to select <Display> and press the [▶] button.
4. Move the [W/T] button to select <LCD Color> and press the [▶] button.
5. Move the [W/T] button to select the color you want and press the [OK] button.
 ♦ You can adjust value for the LCD color between 0~100%.
6. Press the [Record/Stop] button to finish setting.



Note

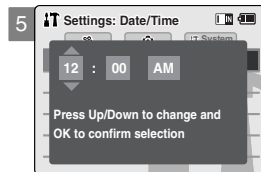
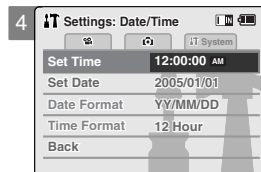
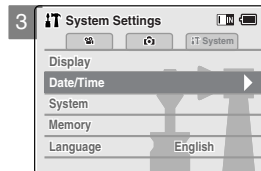
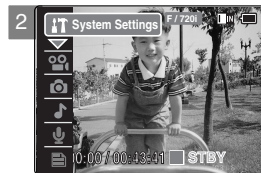
- ♦ If you select <◀> in the menu, the previous menu appears.

Setting the CAM : Adjusting Date/Time

Setting Time

The built-in clock creates the time stamp. You can adjust the time you use.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <Date /Time> and press the [▶] button.
4. Move the [W/T] button to select <Set Time> and press the [OK] button.
5. Move the [W/T] button to set time and press the [OK] button.
 - ◆ Move the [W/T] button to change the setting and press the [▶] button to move to the next setting. Press the [OK] button to confirm selection.
6. Press the [Record/Stop] button to finish setting.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Date and Time are recorded information. They are not displayed on the LCD monitor.

Setting the CAM : Adjusting Date/Time

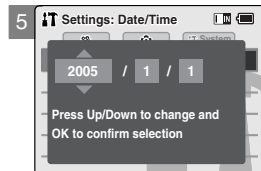
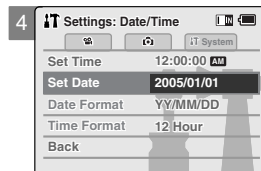
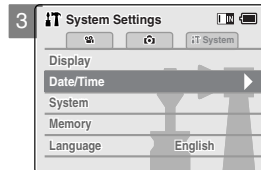
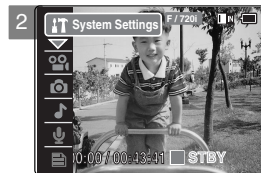
Setting Date

The built-in calendar creates the date stamp. You can adjust the date you use.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <Date /Time> and press the [▶] button.
4. Move the [W/T] button to select <Set Date> and press the [OK] button.
5. Move the [W/T] button to set date and press the [OK] button.
 - ◆ Move the [W/T] button to change the setting and press the [▶] button to move to the next setting. Press the [OK] button to confirm selection.
6. Press the [Record/Stop] button to finish setting.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Date and Time are recorded information. They are not displayed on the LCD monitor.
- ✦ You can set Year up to 2037.

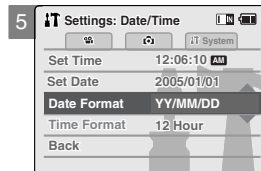
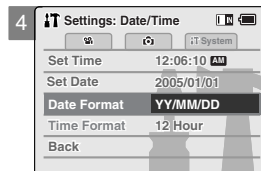
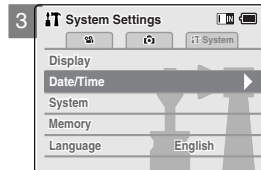
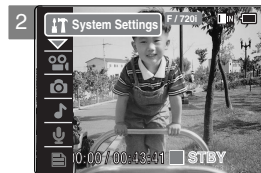


Setting the CAM : Adjusting Date/Time

Setting Date Format

You can select the date format to display.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 ♦ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 ♦ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 ♦ The System Settings menu appears.
3. Move the [W/T] button to select <Date /Time> and press the [▶] button.
4. Move the [W/T] button to select <Date Format> and press the [▶] button.
5. Move the [W/T] button to set the desired format and press the [OK] button.
 ♦ YY/MM/DD: The date is displayed in order as Year/Month/Date.
 ♦ DD/MM/YY: The date is displayed in order as Date/Month/Year.
 ♦ MM/DD/YY: The date is displayed in order as Month/Date/Year.
6. Press the [Record/Stop] button to finish setting.



Note

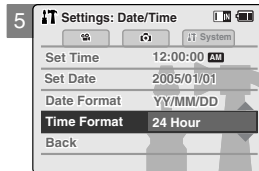
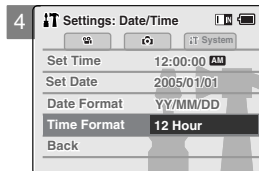
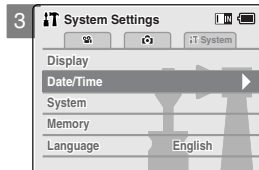
- ♦ If you select << in the menu, the previous menu appears.

Setting the CAM : Adjusting Date/Time

Setting Time Format

You can select the time format to display.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <Date /Time> and press the [▶] button.
4. Move the [W/T] button to select <Time Format> and press the [▶] button.
5. Move the [W/T] button to set the desired format and press the [OK] button.
 - ◆ **12 Hour**: The time is displayed as the unit of 12 hours.
 - ◆ **24 Hour**: The time is displayed as the unit of 24 hours.
6. Press the [Record/Stop] button to finish setting.



Note

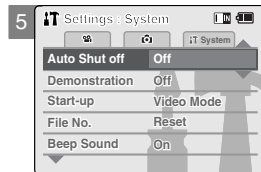
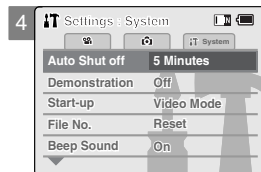
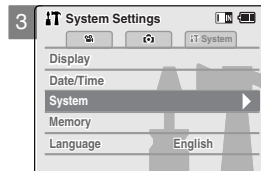
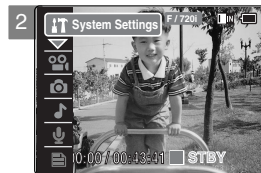
- ✦ If you select <◀> in the menu, the previous menu appears.

Setting the CAM : Setting the System

Setting the Auto Shut off

To save energy or battery, you can set the Auto Shut off function.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 ♦ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 ♦ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 ♦ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <Auto Shut off> and press the [▶] button.
5. Move the [W/T] button to set the desired setting and press the [OK] button.
 ♦ **5 Minutes:** The CAM turns off after 5 minutes.
 ♦ **Off:** Cancel the Auto Shut off function.
6. Press the [Record/Stop] button to finish setting.



Notes

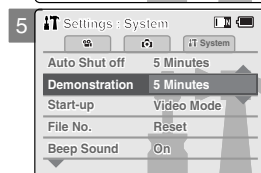
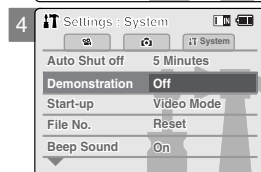
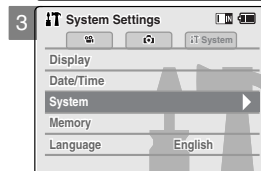
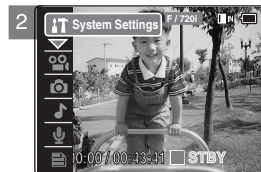
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ The <Auto Shut off> function cannot be operated if you connect the Power Adapter to the CAM. It can be only operated when you insert battery pack into the CAM.

Setting the CAM : Setting the System

Setting the Demonstration Function

Demonstration function will allow you to view all the functions that the CAM supports. Demonstration will run for up to 5 minutes.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <Demonstration> and press the [▶] button.
5. Move the [W/T] button to set the desired setting and press the [OK] button.
 - ◆ **Off:** Cancel the Demonstration function.
 - ◆ **5 Minutes:** Start the Demonstration function in 5 minutes.
 - ◆ **Play Now:** Start the Demonstration function now.
6. Press the [Record/Stop] button to finish setting.



Notes

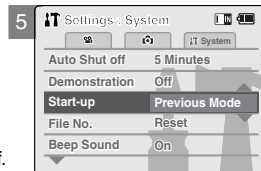
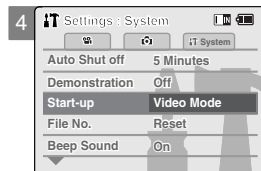
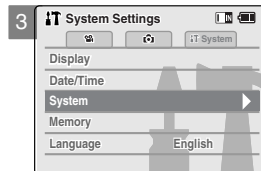
- ◆ If you select <◀> in the menu, the previous menu appears.
- ◆ If you set the Demonstration function, it operates only in Video Record mode.

Setting the CAM : Setting the System

Setting Start-up Mode

You can select the starting mode displayed when you turn the CAM on.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <Start-up> and press the [▶] button.
5. Move the [W/T] button to set the desired setting and press the [OK] button.
 - ◆ **Video Mode:** The CAM starts up in the Video Mode.
 - ◆ **Previous Mode:** The CAM starts up in the mode you used last.
6. Press the [Record/Stop] button to finish setting.



Notes

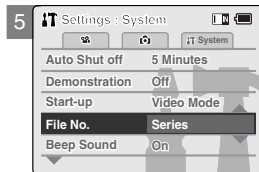
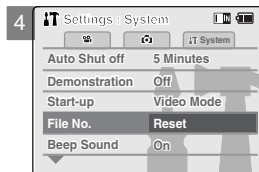
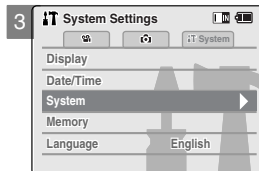
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Make sure that the start-up mode is set to the selected mode when turning on the CAM again after turnoff.

Setting the CAM : Setting the System

Setting the File No. Function

You can set the file numbers so that they reset each time Memory Card is formatted, or so that they count up continuously.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <File No.> and press the [▶] button.
5. Move the [W/T] button to select the desired setting and press the [OK] button.
 - ◆ **Reset:** When the Memory Card is formatted, the file number resets to its default value. (100-0001)
 - ◆ **Series:** Numbering is continuous between the Memory Cards, so that the first file number assigned on a new Memory Card is 1 more than the last file number assigned on the previous Memory Card.
6. Press the [Record/stop] button to finish setting.



Notes

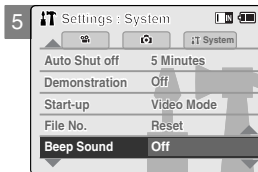
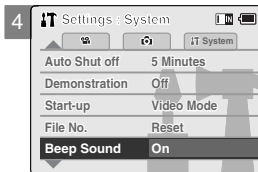
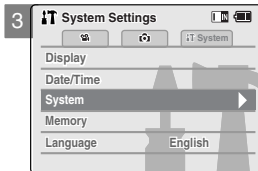
- ◆ If you select <◀> in the menu, the previous menu appears.
- ◆ When you set file number to 'Series', each file is assigned a different number avoiding duplication of numbers. It is convenient when you want to manage your files on a PC.

Setting the CAM : Setting the System

Setting the Beep Sound

You can set the beep sound on/off. When on, a beep will sound every time a button is pressed.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <Beep Sound> and press the [▶] button.
5. Move the [W/T] button to select the desired sound and press the [OK] button.
 - ◆ **On:** Turn the beep sound on.
 - ◆ **Off:** Turn the beep sound off.
6. Press the [Record/stop] button to finish setting.



Notes

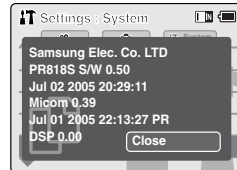
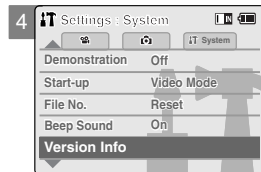
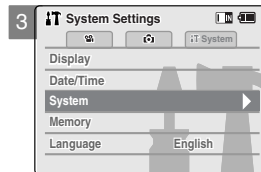
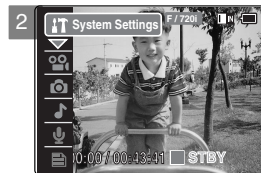
- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ When the earphones or Audio/Video cable is connected to the CAM, the beep sound function does not operate.

Setting the CAM : Setting the System

Viewing Version Information

You can see the information of the version.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <System> and press the [▶] button.
4. Move the [W/T] button to select <Version Info> and press the [OK] button.
 - ◆ The version of the CAM is displayed.
5. Press the [Record/stop] button to finish viewing version information.



Note

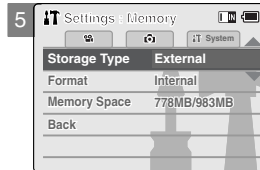
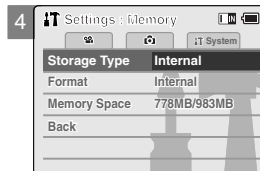
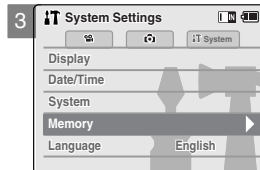
- ✦ If you select <◀> in the menu, the previous menu appears.

Setting the CAM : Setting Memory

Selecting the Storage Type

Select the storage type(internal or external memory) before recording or taking pictures.

1. Move **[POWER/MODE Selector]** down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move **[POWER/MODE Selector]** down again to select *System Settings* mode and press the **[OK]** button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the **[OK]** button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the **[W/T]** button to select **<Memory>** and press the **[▶]** button.
 - ◆ If you didn't insert Memory Card, you cannot select 'External'.
4. Move the **[W/T]** button to select **<Storage Type>** and press the **[▶]** button.
5. Move the **[W/T]** button to select the desired setting and press the **[OK]** button.
 - ◆ **Internal:** The video, photo, mp3 file or voice file is stored in internal memory.
 - ◆ **External:** The video, photo, mp3 file or voice file is stored in external memory Card (SD, MMC, Memory stick or Memory stick pro).



Notes

- ✦ If you select **<◀>** in the menu, the previous menu appears.
- ✦ 'Internal' is selected by default.
- ✦ If you insert the Memory Card when the CAM on, the pop-up screen about the memory type selection appears automatically.
- ✦ If you selected the Storage type 'External', the file is copied to 'Internal' and vice versa.
- ✦ The maximum recording time and capacity and the number of images is subject to change depending on the media. (Refer to pages 30~31.)

Setting the CAM : Setting Memory

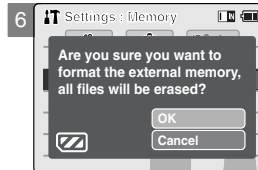
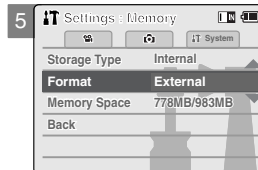
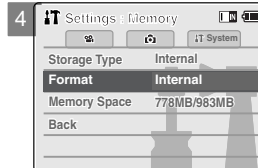
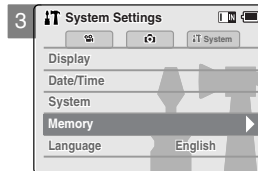
Formatting the Memory

You can format the internal memory and the external memory to erase all files.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <Memory> and press the [▶] button.
4. Move the [W/T] button to select <Format> and press the [▶] button.
 - ◆ If you didn't insert Memory Card, you cannot select 'External'.
5. Move the [W/T] button to select the desired setting and press the [OK] button.
 - ◆ **Internal:** Format the internal memory. If you select 'Internal', the message is displayed to confirm.
 - ◆ **External:** Format the external memory. If you select 'External', the message is displayed to confirm.
6. Press the [OK] button to format.
 - ◆ Select <Cancel> to cancel formatting.
7. Press the [Record/Stop] button to finish setting.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ No guarantee can be provided to the memory card not formatted on this CAM.
Make sure to format the memory card on the CAM.
- ✦ The former information can not be restored after formatting.

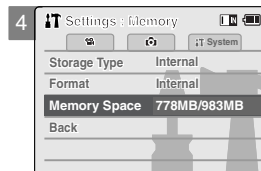
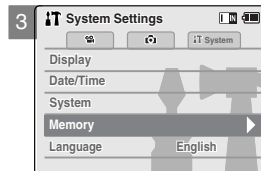


Setting the CAM : Setting Memory

Viewing Memory Space

You can view usable memory space and total memory space of the CAM.

1. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.
 - ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
 - ◆ The System Settings menu appears.
3. Move the [W/T] button to select <Memory> and press the [▶] button.
4. Move the [W/T] button to select <Memory Space>.
 - ◆ Usable memory space and total memory space are displayed.
5. Press the [Record/stop] button to finish viewing.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ Memory Space takes the form of 0000MB/0000MB. (SC-M2200S(B) only)

Setting the CAM : Setting Language

Selecting Language

You can select the desired language to display the menu screen and the messages.

1. Move [POWER/MODE Selector] down to turn on the CAM.

- ◆ The Video Record screen appears.

2. Move [POWER/MODE Selector] down again to select *System Settings* mode and press the [OK] button.

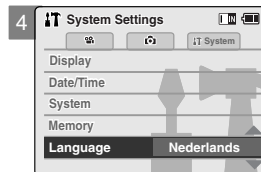
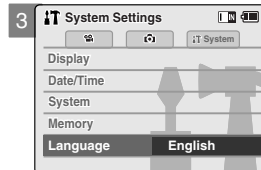
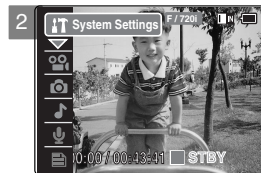
- ◆ The system is automatically converted into the selected mode in two seconds even when the [OK] button is not pressed.
- ◆ The System Settings menu appears.

3. Move the [W/T] button to select <Language> and press the [▶] button.

4. Move the [W/T] button to select the desired setting and press the [OK] button.

- ◆ 한국어 / 中文 / Iran / Arab / Magyar / ไทย / Українська / Svenska / English / Español / Français / Português / Deutsch / Italiano / Nederlands / Polski / Русский

5. Press the [Record/Stop] button to finish setting.



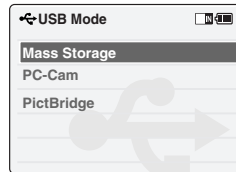
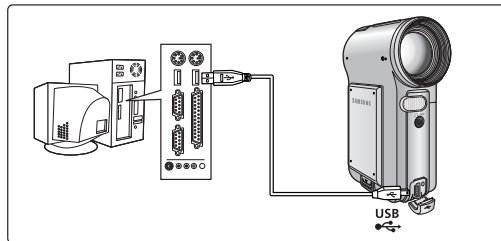
Note

- ◆ If you select <◀> in the menu, the previous menu appears.

Setting the CAM : Using USB Mode

Storing Files to the External Memory

1. Connect the CAM to the PC with the USB cable.
2. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ USB mode screen appears automatically.
3. Move the [W/T] button to select <Mass Storage> and press the [OK] button.
 - ◆ Your PC doesn't recognise the USB device automatically.
You may install the USB Driver manually on Windows 98SE operating system.
4. Disconnect the USB cable if you finish storing.



Notes

- ✦ If you disconnect the USB cable from the PC or the CAM during the data transfer, the data transfer will stop and the data may be damaged.
- ✦ If you connect the USB cable to a PC using a USB HUB or with other device at the same time, it might cause conflict and may not work properly. If this occurs, remove all other devices and try the connection again.
- ✦ It takes about 30 minutes if you download or upload the file of 1GB by connecting the USB cable.

Setting the CAM : Using USB Mode

USB Speed depending on the System

High Speed USB is not guaranteed except for Microsoft(Windows) or Apple(Mac OS X) or supplied Driver.

- ✦ Windows 98SE/ME: Full Speed USB
- ✦ Windows 2000: Over Service Pack 4 - High Speed USB
- ✦ Windows XP: Over Service Pack 1 - High Speed USB
- ✦ Mac OS X: Over 10.3 - High Speed USB

System Environment

	Windows Environment		Macintosh Environment	
	Minimum	Recommended	Minimum	Recommended
CPU	Pentium III, 600MHz	Pentium 4, 2GHz	G3 500MHz	G4 Processor
OS	Windows 98SE/ME	Windows 2000/XP	Mac OS 10.2	Mac OS 10.3
Memory	128MB	512MB or above	128MB	512MB or above
Free space on the hard disk	200MB(For applications only. Apart from this, 1GB or more free space	2GB or above	200MB(For applications only. Apart from this, 1GB or more free space	2GB or above
Display Resolution	800x600 dots 16-bit color	1024x768 dots 24-bit color	800x600 dots 16-bit color	1024x768 dots 24-bit color
USB	USB 1.1	USB 2.0 High Speed	USB 1.1	USB 2.0 High Speed

Notes

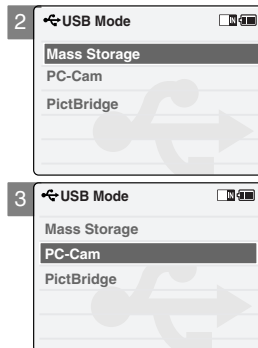
- ✦ Not all PCs configured with the above environment are guaranteed to operate properly.
- ✦ PCs used via a USB hub or with a USB card are out of the scope of guarantee.
- ✦ If your OS is Windows 2000/XP, log in as the [Administrator(administrator of the PC)] (or a user with the equivalent privileges) to install the OS.
- ✦ If the capacity of PC is low, the video file may not be played normally or the file is often stopped.
- ✦ If the capacity of PC is low, it may take long time to edit the video file.

Setting the CAM : Using USB Mode

Using PC Cam

You can use this the CAM as a PC camera for video chatting, video conference and other PC camera applications.

1. **Connect the CAM to the PC with the USB cable.**
2. **Move [POWER/MODE Selector] down to turn on the CAM.**
 - ◆ USB mode screen appears automatically.
3. **Move the [W/T] button to select <PC-Cam> and press the [OK] button.**
 - ◆ The CAM can be used as a PC Camera for programmes such as Windows Messenger.



Notes

- ✦ The CAM can be used as a PC Camera for programmes such as Windows Messenger.
The use of the PC Cam varies depending on the Software. Refer to the documentation of the respective software products.
- ✦ PC-Cam function is operated as 'Full Speed' in the capacity of Windows ME or over.

Setting the CAM : Using USB Mode

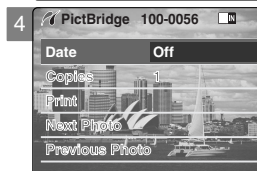
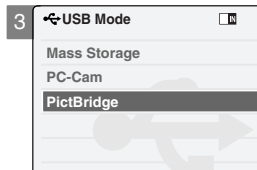
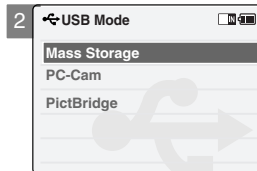
Connecting the CAM to a Printer

By connecting the CAM to printers with PictBridge support (sold separately), you can send images from the internal memory or external memory (SD, MMC, Memory Stick or Memory Stick Pro) directly to the printer with a few simple operations.

1. Connect the CAM to the printer with PictBridge support with the USB cable.
2. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ USB mode screen appears automatically.
3. Move the [W/T] button to select <PictBridge> and press the [OK] button.
4. Move the [W/T] button to select <Date> and press the [►] button.
5. Move the [W/T] button to select <On> or <Off> and press the [OK] button.
6. Move the [W/T] button to select <Copies> and press the [►] button.
7. Move the [W/T] button to select desired number and press the [OK] button.
 - ◆ You can select the number of copy from 1 to 99.
8. Move the [W/T] button to select <Print> and press the [OK] button.

Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ If you want to select the next or previous photo, select <Next> or <Previous> using the [W/T] button and press the [OK] button.
- ✦ Refer to the User's Manual of the printer for more detailed guide on the printing procedures.



5

Miscellaneous Information

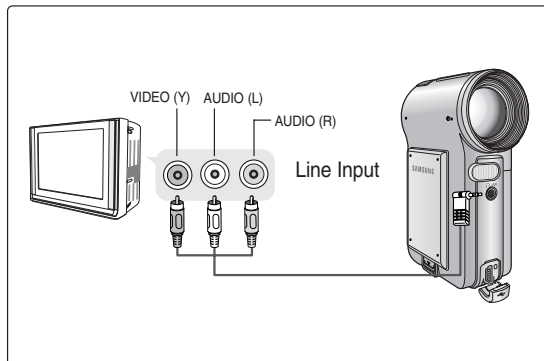
Connecting the CAM with other Devices	111
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Miscellaneous Information : Connecting the CAM with other Devices

Connecting the CAM to TV

You can connect the CAM to a TV set directly to play video files on TV monitor.

1. Connect the Audio/Video cable to the Earphones and AV jack of the CAM.
2. Connect the Audio/Video cable to the external input terminal of your TV set by matching the colors of the terminals.
3. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
4. Press the [OK] button to play the video file in Video Record mode.
5. Move [W/T, ◀/▶] button to find the video file you want to play.
6. Press the [OK] button to play the video file.



Notes

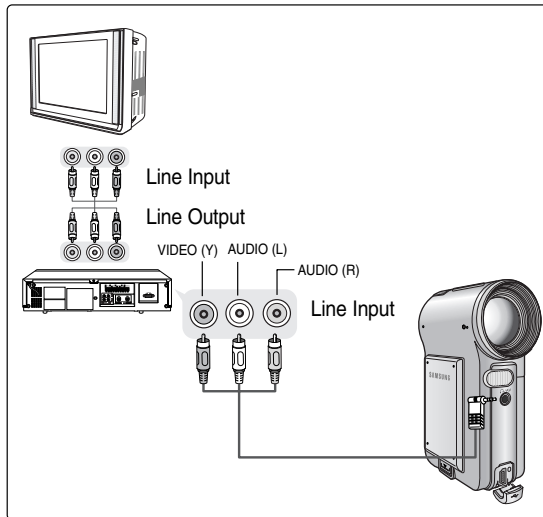
- ✦ You can stop and play video files using the same button as used for playing video files on the LCD monitor of the CAM. (Refer to pages 38 to 39.)
- ✦ If you connect a Mono AV cable to the CAM, the video file cannot be played.
- ✦ You can playback the video files and also view the photo files on TV screen.

Miscellaneous Information : Connecting the CAM with other Devices

Connecting the CAM to VCR

You can connect the CAM to VCR to copy the recorded files to the video tape.

1. Connect the Audio/Video cable to the Earphones and AV jack of the CAM.
2. Connect the Audio/Video cable to the external input terminal of your VCR set by matching the colors of the terminals.
3. Connect the Audio/Video cable to the Video line Output and TV line Input.
4. Select the 'Input' on the TV, VCR or the remote control of TV.



Note

- ✦ If TV set has no Line Input, you cannot view the output screen of the CAM.

Miscellaneous Information : Connecting the CAM with other Devices

Copying Video files to a VCR Tape

You can copy your recorded files to a regular blank video tape. Connect the CAM to a VCR using the Audio/Video cable before recording.

1. Insert the blank video tape to the VCR and select 'Line Input'.
2. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record Screen appears.
3. Press the [OK] button in the *Video Record* mode and move to Video Play mode.
4. Press the [W] button to move to the Multi-play screen.
5. Move the [W/T, ◀/▶] button to select the video file you want to copy and press the [OK] button.
6. Press the [Record/Stop] button on the VCR to start recording.
7. Press the [OK] button on the CAM to finish copying.

Notes

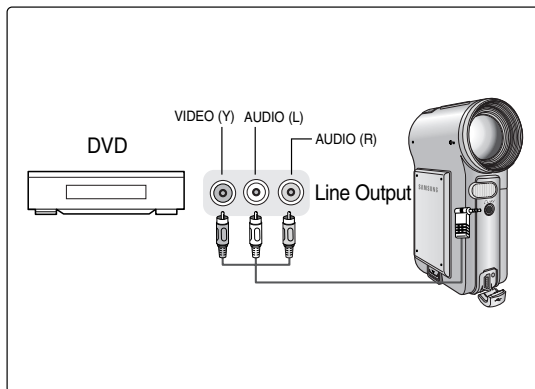
- ✦ Refer to operating instructions of your TV or VCR for detailed information on connecting external devices.
- ✦ You can stop and play video files using the same button as used for playing video files on the LCD monitor of the CAM. (Refer to pages 38 to 39.)
- ✦ If you operate the buttons of the menu when copying, it is copied also. Be careful not to operate the buttons.
- ✦ If you press the [DISPLAY] button, you can copy without OSD indicators.

Miscellaneous Information : Connecting the CAM to other Devices

Recording unscramble contents from other digital devices

You can connect other external digital devices to CAM to record unscrambled contents.

1. Connect the Audio/Video cable to the Earphone and AV jack of the CAM.
2. Connect the Audio/Video cable to the external output terminal of your digital devices (DVD Player, DVC, etc.) by matching the cable to the colors of the terminals.
3. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ The Video Record screen appears.
4. Press the [MENU] button.
Move the [W/T] button to select <Record Mode> and press the [▶] button.
5. Move the [W/T] button to select the desired record mode and press the [OK] button.
6. Move the [W/T] button to select <Line In/Out> and press the [▶] button.
7. Move the [W/T] button to select <In> and press the [OK] button.
8. Play back the other digital devices.
9. Press the [Record/Stop] button of the CAM to start recording.
10. To stop recording, press the [Record/Stop] button again.



Note

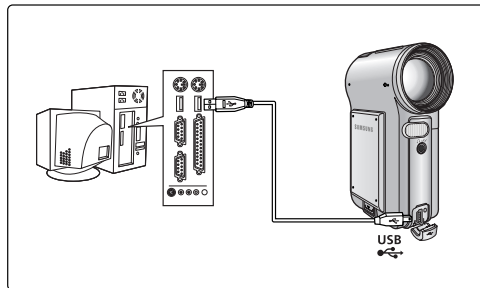
- ✦ The quality of an input signal recorded through the Line In terminal cannot be guaranteed unless it comes from digital devices (DVD Player, DVC, etc.).

Miscellaneous Information : Connecting the CAM with other Devices

Connecting the CAM to a PC using the USB cable

You can connect the CAM to a PC that supports USB connections.
Use the provided USB cable for connection to a PC.

1. **Connect the provided USB cable to USB Port of the CAM.**
2. **Move [POWER/MODE Selector] down to turn on the CAM.**
3. **Connect the other side of the USB cable to the USB port of your PC.**



Note

- ✦ If the CAM does not recognise the USB device when the USB cable is connected to USB Port on the front panel of the PC, connect the USB cable to USB Port on the rear panel of the PC.

Miscellaneous Information : Installing Programmes

Installing DV Media Pro 1.0

You have to install DV Media Pro 1.0 for playback CAM recorded video files or the transferred data by USB cable on your PC.

■ Installing Acrobat Reader

Click 'Acrobat Reader' on the Setup screen.

- Acrobat Reader programme should be installed to view DV Media Pro User's Manual.
- The DV Media Pro User's Manual is included on the accompanying CD in Adobe's Portable Document Format (PDF).
(The Acrobat Reader is a freeware product of Adobe Systems. Inc.)

Windows

1. Turn on your PC.

- ◆ Quit the applications programme you work.

2. Insert the programme CD into the CD-ROM drive.

- ◆ The Setup screen appears automatically.
- ◆ If not, press the <Start> button on the left bottom of the PC screen, and select <Run>. If the window of <Run> appears, enter 'D:\autorun.exe' (in case the CD-ROM driver is set to 'D:Drive') and press the [Enter] key.

3. Click 'DV Driver' on the Setup screen.

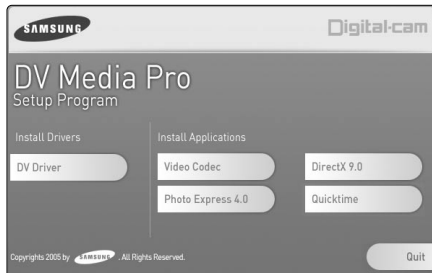
- ◆ The corresponding driver to a PC is installed automatically.
 - Driver Type
 - USB removable Disk Driver (Windows 98SE only)
 - USB PC-CAMERA Driver
 - USB Streaming Driver (USB Interface for Data Transfer)

4. Press <Confirm> to finish installing the programme.

5. Click 'Video Codec' to install on the Setup screen.

6. Click 'DirectX 9.0' to install on the Setup screen.

- ◆ When the installation is finished, the <Restart> appears.
If you press [Finish], the PC is restarted.



Notes

- ✦ You have to install 'DV Driver', 'Video Codec' and 'DirectX 9.0' to run the programme, DV Media Pro 1.0 properly.
- ✦ Please refer to the User's Manual inside the CD ROM drive (D:\help) folder for more detailed guide on the installation procedures.
- ✦ Use DV Media Pro 1.0 REV4.0 or higher in this product.

Miscellaneous Information : Installing Programmes

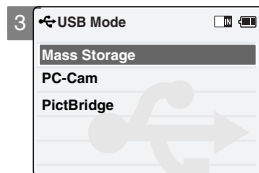
USB Interface for Data Transfer

Connect the CAM and PC with the provided USB cable. You can record the Photo files and Video files in real-time. USB transferring function can be used when DV Driver, Video Codec, DirectX 9.0 programmes are already installed in the PC.

1. Turn on your PC and insert the programme CD into the CD-ROM drive.

- ◆ Quit the applications programme you work.

2. Connect the provided USB cable to the USB port of the CAM.



3. Move the [W/T] button to select <Mass Storage> and press the [OK] button.

4. Install and run the Ulead VIDEO STUDIO programme provided along with the system.

The user of WINDOWS ME or XP can use the USB Interface for data transfer with the Windows Movie Maker programme.

- ◆ (C:\program files\Movie maker\moviemk.exe)

Miscellaneous Information : Connecting the CAM with other Devices

Disconnecting USB Connection

After completing the data transfer, you must disconnect the cable in the following way.

1. Select the removable disk icon and click the right mouse button to select 'Safely Remove Hardware'.
2. Select 'Stop' and disconnect the USB cable when the pop-up screen disappears.

Notes

- ✦ If you disconnect the USB cable from the PC or the CAM during the data transfer, the data transfer will stop and the data may be damaged.
- ✦ If you connect the USB cable to a PC using a USB HUB or with other device at the same time, it might cause conflict and may not work properly. If this occurs, remove all other devices and try the connection again.
- ✦ The CAM may operate abnormally in the recommended system environment depending on the assembling of PC. For example, the video file is played abnormally.
- ✦ Once you select Mass Storage, PC-Cam or PictBridge, you cannot select the modes. Disconnect the USB cable or turn on the CAM again to select the modes.
- ✦ If you disconnect the USB cable, the message 'Now refresh file list' appears for 1 second.
- ✦ All operation mentioned on the page 107 may not guaranteed in the system environment.

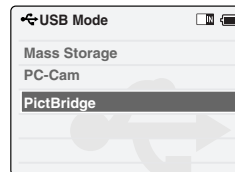
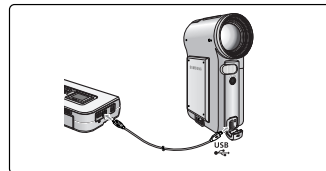
Miscellaneous Information : Printing Photos

Printing with PictBridge Function

With the PictBridge Support, you can control the printer directly through the CAM in order to print out stored pictures.

For direct printing of your stored pictures using the PictBridge function, you must connect the CAM to a PictBridge printer using a USB cable.

1. Connect the CAM to the PictBridge printer with the USB cable.
2. Move [POWER/MODE Selector] down to turn on the CAM.
 - ◆ USB mode screen appears automatically.
3. Move the [W/T] button to select <PictBridge> and press the [OK] button.
4. Move the [W/T] button switch to select <Copies> and press the [OK] button.
5. Move the [W/T] button switch to select desired number and press the [OK] button.
 - ◆ You can select the number of copies from 1 to 99.
6. Move the [W/T] button switch to select <Print> and press the [OK] button.



Notes

- ✦ If you select <◀> in the menu, the previous menu appears.
- ✦ If you want to select the next or previous photo, select <Next> or <Previous> using [W/T] button and press the [OK] button.
- ✦ For further details about printing photos, refer to the User's manual of the printer.
- ✦ Printing may not be performed depending on types of printers.
In this case, download JPEG file to the PC directly and print it.

Miscellaneous Information : Printing Photos

Printing Photos with DPOF Files

DPOF (Digital Printing Order Format) defines the print information for the specific photos and number of each photo on the Memory Card. You can easily make prints on a DPOF compatible printer or order copies.

Printing DPOF files of the Memory Card

1. Set the print information for the photo you want to print. (Refer to page 64)
2. Insert the Memory Card into the photo printer.
3. Follow the steps of the printer to print out photos.

Note

- ✦ For further details about printing photos, refer to the User's manual of the printer.

Maintenance : Cleaning and Maintaining the CAM

After using the CAM

- ✦ **For the safekeeping of the CAM, follow these steps.**
 - ✓ Turn the CAM off.
 - ✓ Remove the Battery Pack (refer to page 19).
 - ✓ Remove the Memory Card (refer to page 33).
- ✦ **To prevent any damage to the LCD monitor, do not apply excessive force on its moving parts.**
- ✦ **Do not drop or in anyway shock the CAM.**
- ✦ **For prolonged use of the CAM, avoid using it in places subject to excessive humidity or dust.**
- ✦ **Do not leave the CAM in places subject to:**
 - ✓ Excessive humidity, steam, soot or dust.
 - ✓ Excessive shock or vibration.
 - ✓ Extremely high (over 50°C or 122°F) or extremely low (under 0°C or 32°F) temperatures.
 - ✓ Strong electromagnetic fields.
 - ✓ Direct sunlight or in a closed car on a hot day.
- ✦ **For the safe use of the battery pack, follow these.**
 - ✓ To conserve battery power, be sure to turn off the CAM power when not in use.
 - ✓ Battery consumption may vary depending on the condition of use. Recording with many starts and stops, frequent zooming, and recording in low temperatures will shorten actual recording times.
 - ✓ Dispose of used battery packs promptly. Do not dispose of them in fire.
 - ✓ The battery pack will become warm during charging and use. This is not a malfunction.
 - ✓ The battery pack has a limited service life. If the period of use becomes noticeably shorter with a normal charge, the battery pack is at the end of its service life. Replace it with a new battery pack.
- ✦ **For the safe use of the Memory Card, follow these.**
 - ✓ The Memory Card should be stored away from heaters and other heat sources. Avoid storing Memory Cards under direct sunlight and avoid electromagnetic fields.
 - ✓ Do not power off any devices while transferring data, as this may destroy the data.
 - ✓ Back up your image data often to a hard disk or other permanent storage media.
 - ✓ Format the Memory Card periodically.
 - ✓ When formatting the Memory Card, format in the CAM.

Maintenance : Cleaning and Maintaining the CAM

Cleaning the Body

✦ To Clean the Exterior of the CAM

- ✓ To clean the exterior, use a soft dry cloth. Wipe the body gently.
Do not apply excessive force when cleaning, gently rub the surface.
- ✓ The LCD monitor surface should not be pressed. Use a soft dry cloth to clean the surface.
- ✓ To clean the lens, use an optional air blower to blow out dirt and other small objects. Do not wipe the lens with cloth or your fingers. If necessary, use lens cleaning paper.
- ✓ Do not use thinner, alcohol or benzene for cleaning. Otherwise, the finish may be damaged.
- ✓ Cleaning should be done only after the battery pack has been removed, and other power sources have been disconnected.

Note

- ✦ If the lens look dimmer, turn off the CAM and leave it for about 1 hour.

Using the Built-in Rechargeable Battery

The CAM incorporates a rechargeable lithium cell that maintains the date and other settings even when the AC Power Adapter and the battery are removed. The rechargeable lithium cell is automatically recharged when the CAM is used.

Charging the Built-in Rechargeable Battery

- ✦ If The CAM is not used at all, the cell runs down in 5 days. In this case, connect the AC Power Adapter to the CAM and turn on the power switch. Then leave it for 24 hours.
After that, set the date and other settings again.

Maintenance : Cleaning and Maintaining the CAM

Regarding the Battery

- Battery pack performance decreases when the surrounding temperature is 10°C (50°F) or below, and shortens the battery life. In that case, do one of the following so that the durability of the battery life can be extended for a longer period of time.
 - Put the battery pack in a pocket to warm it up, and insert it in your Camcorder immediately prior to use.
 - Use a large capacity battery pack (Optional).
- Be sure to set the switch to OFF when not recording or playing back. The battery power is also consumed in standby, play back and pause mode.
- Have your battery packs ready for two or three times the expected recording time, and make trial recordings before make the actual recording.
- Do not expose the battery pack to water.
The battery pack is not water resistant.
- Keep the battery out of reach of children. If it is swallowed, seek medical assistance immediately.
- Wipe the battery with a clean dry cloth to ensure proper contact.
- Do not pick up the battery using metal tools as this may cause a short circuit.
- Do not short the battery or dispose of the battery in fire. Do not disassemble the battery. The battery could explode or catch fire.
- Use only recommended batteries and accessories. Use of batteries not expressly recommended for this equipment may cause an explosion or leakage, resulting in fire, injury or damage to the surroundings.
- Install the battery according to the instructions. Improperly installed batteries can cause damage to the camcorder.
- When you do not use for a long time, remove the battery pack. Otherwise, the battery may leak. To avoid damage to the product, be sure to remove the battery when no charge remains.

Maintenance : Cleaning and Maintaining the CAM

Using the CAM Abroad

- ✦ Each country or region has its own electric and color systems.
- ✦ Before using the CAM abroad, check the following items:

Power Sources

- ✦ You can use the CAM in any country or area with the supplied AC Power Adapter where the power input range is 100V ~ 240V, 50/60Hz.
- ✦ Use a commercially available AC plug adapter if necessary, depending on the design of the local wall outlets.

Color System

- ✦ You can view your video files using the built-in LCD monitor.
However, to view your recordings on a television set or to copy it to a video cassette recorder (VCR), the television set or the VCR must comply with NTSC-compatible and have the appropriate Audio / Video ports. Otherwise, you may need to use a separate Video Format Transcoder (PAL-NTSC format Converter).

PAL-Compatible Countries / Regions

Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.

NTSC-Compatible Countries / Regions

Bahamas, Canada, Central America, Japan, Mexico, Philippines, Korea, Taiwan, United States of America, etc.

Troubleshooting

Self Diagnosis Display

Display	Informs that...	Action
Not enough free space	Not enough free space for saving files .	Check the space of internal memory or the external memory.
Corrupted file	The file is corrupted.	Delete the corrupted file.
Paper error	The paper is insufficient.	Check the paper in the printer. If there is no paper, insert the paper.
Printer error	The paper is caught in the printer.	Check that paper is caught in the printer. Pull out the caught paper.
Ink error	Ink is low.	Check if the ink or toner is low.
Wrong error	The file is wrong.	Check that the file is JPEG.
USB transfer error	The error is occurred while transferring data.	Disconnect the USB cable and connect it again.
Sleeping now...	Power saving mode works.	Press any button to return to previous menu.
Low battery	Battery is low.	Charge the battery pack or connect the AC Power Adapter.
Holding the key	The HOLD switch is locked.	Unlock the HOLD switch and operate the CAM.
Card error	The Memory Card is corrupted.	Format the Memory Card or replace it with new one.
Not formatted	Format the memory card.	Format the Memory Card.
Write error	Failed to write.	Check the memory space or format the memory.
Read error	Failed to read.	Delete the file.
Not supported format	The format is not supported.	The AVI or JPEG file that is not supported. Check the supported file. on the page 29.
Write protected	Memory Card is protected to write.	Unlock the Memory Card. (except MMC)
MPEG decoding error	The video file is corrupted.	Delete the corrupted file.

✦ If these instructions do not solve your problem, contact your nearest Samsung dealer or authorized service center/personnel.

Symptom	Possible Causes	Measure
No power is supplied	The power is not connected properly The battery is dead The battery is too cold	Connect the AC Power Adapter properly, page 23 Replace the dead battery pack Warm up the battery or move to warmer place
Date/Time is wrong	The Date/Time is not set	Set the Date/Time, pages 92-93
Focus does not adjust automatically	Focus is set to manual mode Recording was done in a dark place Lens is covered with condensation	Set focus to AUTO Use strobe or lit the place Clear the lens and check the focus
The Memory Card will not load properly	Memory Card is in wrong position Something fills in the MULTICARD slot	Insert the Memory Card properly, page 33 Clear the MULTICARD slot

Troubleshooting

Symptom	Possible Causes	Measure
Color balance of picture is not natural	White balance adjustment is required	Set proper white balance, page 69
Digital zoom does not work	Digital special effect is applied	Turn off the digital special effects, page 55
Files stored in the Memory Card cannot be deleted	Memory Card is protected File is locked	Remove the protection tab of Memory Card (except MMC) Remove the lock on the file, page 86
Images on the LCD monitor appear dark	Ambient is too bright Ambient temperature is too low	Adjust the brightness and angle of LCD Low temperatures might produce a dark LCD display This is not a malfunction
Rear of the LCD monitor is hot	Prolonged use of LCD monitor	Close the LCD monitor to turn it off, or turn your device off to cool down
Play, rewind and fast forwarding do not work	The Photo Mode is selected	Select 'Video Mode' and select 'Play'
Memory Card cannot be played back (Photo mode)	The Video Mode is selected	Select 'Photo Mode' and select 'View'
No picture is taken when is fully pressed	Not enough free memory space is remained Memory card is formatted by different devices	Delete files from the Memory Card Format the Memory Card on the CAM
Built-in Light will fire	Light is forced to cancel Light is not available for recording	Select different Flash mode, page 67
Cannot Record a video	The 'Photo Mode' is selected	Select 'Video Mode'
LCD monitor turns off	To save power consumption, the LCD monitor and CAM's power turns off if there is no button operation for a certain period of time (depending on operation mode), which is not a malfunctioning	Operating any button will turn the CAM on Pressing the button once again will operate its function

Using the Menu

Video

1. Record

2. Play

Delete

Selected
All
Cancel

Copy To

Selected
All
Cancel

Lock

Selected
All
Cancel

Multi Select

Close

PB Option

Selected
All
Cancel

3. Settings

Size

720
352

Quality

Super Fine
Fine
Normal

Record Mode

TV
PC

Line In/Out

Out
In

Focus

AF
MF

EIS

On
Off

White Balance

Auto
Hold
Outdoor
Indoor

Program AE

Auto
Sports
Spotlight
Sand/Snow
HS Shutter

BLC

Off
On

Effect

Off
Art
Mosaic
Sepia
Negative
Mirror
B&W

Digital Zoom

Off
On

B.L. Auto Ctl

On
Off

Photo

1. Capture

2. View

Delete

Selected
All
Cancel

Copy To

Selected
All
Cancel

Lock

Selected
All
Cancel

Multi Select

Close

DPOF

3. Settings

Size

2400X1800
1600X1200
1024X768
640X480

Flash

Auto
On
Off

Focus

AF
MF

White Balance

Auto
Hold
Outdoor
Indoor

BLC

Off
On

B.L. Auto Ctl

On
Off

MP3

1. Play

Delete

Selected
All
Cancel

Copy To

Selected
All
Cancel

Lock

Selected
All
Cancel

Random

Yes
No

Repeat

No
One
All

Using the Menu



Voice Recorder

1. Record

2. Play

Delete

Selected
All
Cancel

Copy To

Selected
All
Cancel

Lock

Selected
All
Cancel



File Browser

1. Delete

Selected
All
Cancel

3. Copy To

Selected
All
Cancel

2. Lock

Selected
All
Cancel



System Settings

1. Display

LCD Brightness

0%
:
100%

LCD Color

0%
:
100%

Back

2. Date/Time

Set Time

Set Date

Date Format

YY/MM/DD
DD/MM/YY
MM/DD/YY

Time Format

12 Hour
24 Hour

Back

3. System

Auto Shut off

5 Minutes
Off

Demonstration

Off
5 Minutes
Play Now

Start-up

Video Mode
Previous Mode



USB Mode

1. Mass Storage

2. PC-Cam

3. PictBridge

Date

Off
On

Copies

Print

Next Photo

Previous Photo

- The USB mode appears automatically when the USB cable is connected to the CAM.
- Memory Space takes the form of 0000MB/0000MB. (SC-M2200S(B) only)

File No.

Reset
Series

Beep Sound

On
Off

Version Info

Close

Back

4. Memory

Storage Type

Internal
External

Format

Internal
External

Memory Space

000MB/000MB

Back

5. Language

한국어 / 中文 / Iran / Arab
/ Magyar / 中文 / Українська
/ Svenska / English /
Español / Français /
Português / Deutsch /
Italiano / Nederlands /
Polski / Русский

Specifications

Model Name		SC-M2050S(B)/M2100S(B)/M2200S(B)
The CAM System		
Video Recording System		MPEG4 AVI Format
Photo System		JPEG (DPOF, Exif 2.2)
MP3		Stereo Playing
Voice		WAVE file record/play (8KHz Sampling, 16 bit, Stereo)
Memory		Internal memory/Memory Stick/Memory Stick Pro/SD/MMC
Recording/Playing time		Refer to page 30
CCD Pixel		1/3.6 inch CCD, 2110K
Zoom Ratio		x10(Optical), x100(Digital)
Focal Length		f=4.1~41mm, F1.8~2.4
Minimum Illumination		7 Lux
LCD Monitor		2.0" Trans Reflective, 210K
Connectors		
USB		Mini-B type (USB 2.0 High Speed)
The CAM Connector		Special 22Pin Connector
Common Connector	Ear Phone	Ø3.5 Stereo
	AV Input/Output	Video (1.0Vp_p), Audio (-7.5dBm 47KΩ, Input:mono/Output:stereo)
DC Power In Connector		Special 22Pin Connector
General		
Operating Temperature		0°C~40°C
Operating Humidity		10%~80%
Power Source		3.8V (Li-Polymer Battery pack), 4.8V (AC Adapter)
Power Consumption		3.7W (LCD ON)/3.1W(LCD OFF)
Dimension(WxHxD)		69.0mm x 103.5mm x 37.6mm
Weight		213(Including the Lithium Polymer Battery Pack)
Built-in Microphone		Omni-directional Stereo condenser microphone

Specifications

AC Adapter	
Power Requirement	AC 100~240V, 50/60Hz
DC Output	DC 4.8V, 1.0A
Operating Temperature	0°C~40°C(32°F~104°F)
Dimensions	70mm x 30mm x 42mm
Weight	104g (Including DC cable)

These technical specifications and design may be changed without notice.

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Warranty (SEA users only)

SAMSUNG LIMITED WARRANTY

SAMSUNG Electronics America Inc. (SEA), warrants that this product is free from defective material and workmanship. SEA further warrants that if product fails to operate properly within the specified warranty period and the failure is due to improper workmanship or defective material, SEA will repair or replace the product at its option. All warranty repairs must be performed by a SEA authorized service center. The name and address of the location nearest you can be obtained by calling toll free: 1-800 SAMSUNG (1-800-726-7864).

Labor

90 days carry-in

Parts

1 year

On carry-in models, transportation to and from the service center is the customer's responsibility.

The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase.

It must be presented to the authorized service center.

EXCLUSIONS (WHAT IS NOT COVERED)

This warranty does not cover damage due to accident, fire, flood and/or other acts of God; misuse, incorrect line voltage, improper installation, improper or unauthorized repairs, commercial use, or damage that occurs in shipping. Exterior and interior finish, lamps, and glass are not covered under this warranty.

Customer adjustments which are explained in the instruction manual are not covered under the terms of this warranty.

This warranty will automatically be voided for any unit found with a missing or altered serial number. This warranty is valid only on products purchased in the United States and Puerto Rico.

Some States do not allow the exclusions or limitations of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

ENGLISH

THE CAM IS MANUFACTURED BY:



SERVICE DIVISION
400 Valley Road, Suite 201, Mt. Arlington N.J. 07856
Tel: 1-800-SAMSUNG
(1-800-726-7864)

***Samsung Electronics' Internet Home Page**
<http://www.samsung.com>

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