NOTICE: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Information

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph.

The equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.

The user should not modify or change this equipment without written approval form Sampo corporation. Modification could void authority to use this equipment.

Content

VIVICAM 2800 Camera p.7

Package Content.....p.8

Camera Specification.....p.8

Camera Architecture.....p.9

System Requirement.....p.11

Camera Startup and Status Display.....p.12

How to start-up camera.....p.12

Connect camera to AC voltage.....p.12

Status Display.....p.13

Picture Count.....p.13

Flash.....p.14

Macro.....p.15

Quality.. .....p.16

Battery Status.....p.17

Resolution.....p.18

Self Timer.....p.18

CAM Mode p.19

How to preview picture.....p.19

How to take picture.....p.20

Exposure Adjustment.....p.21

CAM Menu.....p.22

Self Timer.....p.23

Picture Type.....p.24

Picture Resolution.....p.25
Image Quality.....p.26
Picture Orientation.....p.27
Shutter Speed.....p.28
Light Metering.....p.29
Color Balance.....p.30
Date Stamp.....p.31
Stamp Position.....p.32
Stamp Formats.....p.33
Date Setup.....p.34
File Formats.....p.35
Folder Control.....p.36
Reset.....p.37
PLAY Mode.....p.38
How to preview picture.....p.38
How to erase picture.....p.38
How to do slide show.....p.38
Display Mode.....p.39
PLAY MENU.....p.40
Erase.....p.41
Display Style.....p.42
Attach Voice.....p.43
Mark.....p.44
Slide Show.....p.45
Slide Show Period.....p.46

Folder Control.....p.47
LCD Brightness.....p.48
Firmware Update.....p.49
About.....p.50
How to output video images.....p.51
Twain Driver p.52
Twain Driver Installation.....p.52
How to connect with PC by serial cable.....p.52
How to transfer pictures to PC by Twain.....p.52
Twain Driver Introduction.....p.53
USB Driver p.58
USB Driver Installation.....p.58
How to connect with PC by USB cable.....p.58
General Notice.....p.59
Capture Notice p.60
Usage Environment.....p.61
Trouble Shooting.....p.62

■ VIVICAM 2800 Camera

Thanks for adopt the new product--Vivitar VIVICAM 2800 digital camera. This brief camera has versatile functions and it has the following advantages:

- ◆ It is portable and easy to take pictures anywhere.
- ◆ It has simple operating console and LCD monitor.
- ◆ Built-in flash with redeye-reduction function.
- ◆ CF card is adopted to give more portability
- ◆ It supports USB communication.
- ◆ It can output video to any video display system.
- ◆ It can preview your picture in real time and review your picture.
- ◆ It supports two image formats- CIFF,EXIF.
- ◆ It has software that can transfer images to PC with ease.
- ◆ It has record function. You can record voice when you capture picture or attach voice upon pictures.
- ◆ It supports single-capture and 9-picture burst capture mode.
- ◆ It has two resolutions- Large(1024x768),Small(640x480).
- ◆ It has slide show function. You can slide show all pictures or select pictures to slide show.
- ◆ It has picture erase-protect function

■ Package Content

◆VIVICAM 2800 digital camera

◆User's guide

◆Four AA batteries and AC adapter

◆Setup disks

◆Video output cable

◆Serial cable

◆Compact Flash card

◆USB cable

■ Camera Specification

Resolution--Large-1024x768	Small-640x480
CCD Resolution-10 bit	Storage Media-ATA CF Card
Shutter Speed-2s-1/8000s	File Formats-CIFF, EXIF
Flash Range-50cm to 3m	Focus-6.5mm
Battery-Four AA batteries	Capture Distance-20cm to infinite
Video Output-NTSC or PAL	IRIS-F/2.8,F/5.6,F/11

■ Package Content

◆VIVICAM 2800 digital camera

◆User's guide

◆Four AA batteries and AC adapter

◆Setup disks

◆Video output cable

◆Serial cable

◆Compact Flash card

◆USB cable

■ Camera Specification

Resolution--Large-1024x768 Small-640x480

CCD Resolution-10 bit

Storage Media-ATA CF Card

Shutter Speed-2s-1/8000s

File Formats-CIFF, EXIF

Flash Range-50cm to 3m

Focus-6.5mm

Battery-Four AA batteries

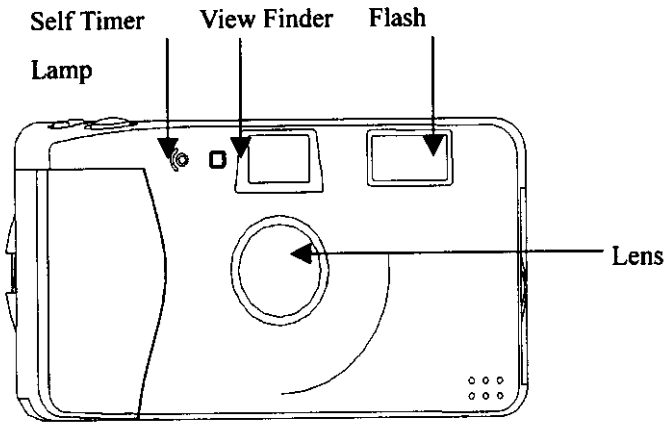
Capture Distance-20cm to infinite

Video Output-NTSC or PAL

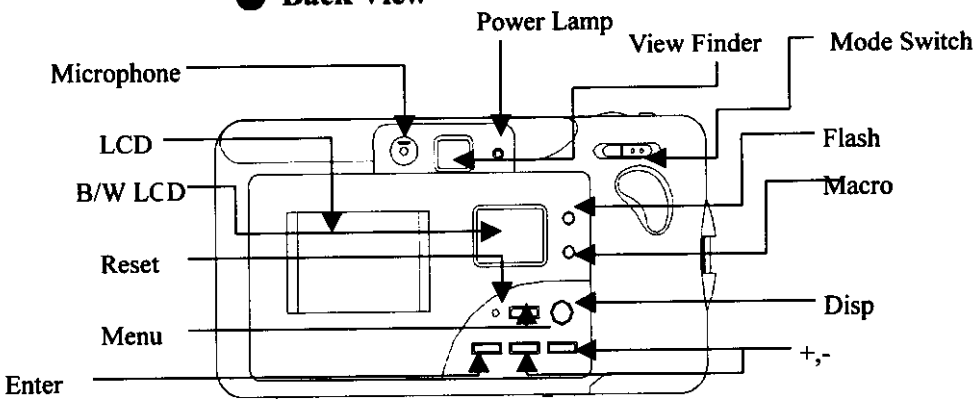
IRIS-F/2.8,F/5.6,F/11

■ Camera Architecture

● Front View

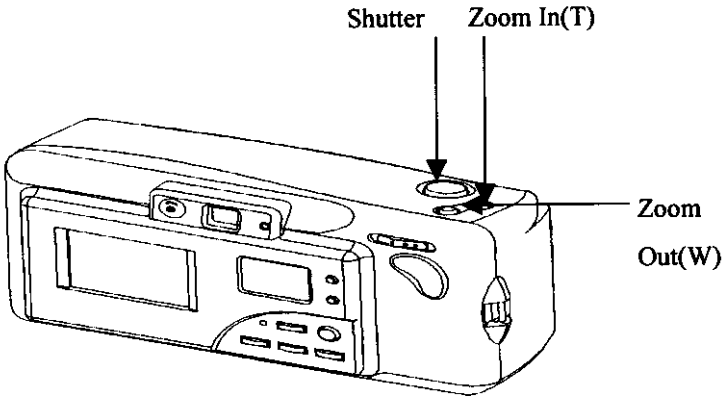


● Back View

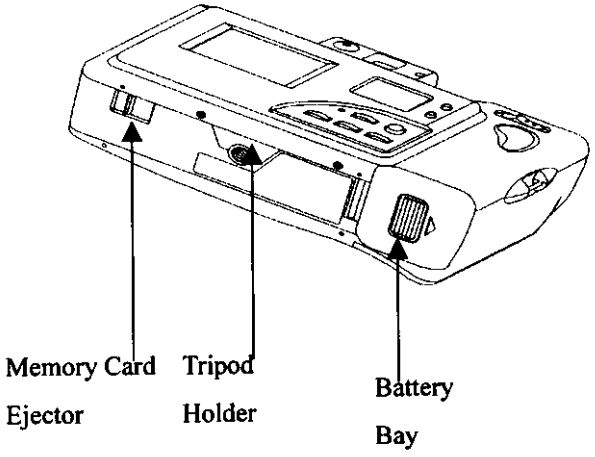


Caution: You must use shoulder belt to stick reset key.

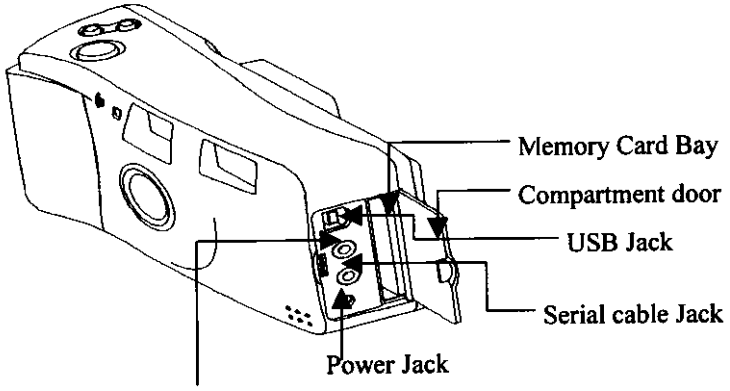
● Top View



● Bottom View



● Side View



■ System Requirement

●PC : 80486 above

●Windows 95 or Windows 98

●Windows NT 4.0 above

●8 MB above RAM

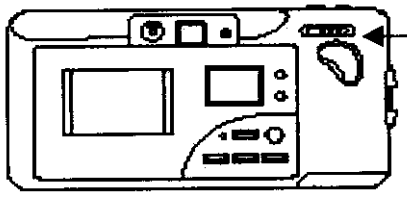
●10 MB above Hard disk space

●VGA Monitor (SVGA is better)

■ Camera Startup and Status Display

■ How to startup camera

If you want to startup camera



1. Put batteries into battery bay or connect AC voltage.

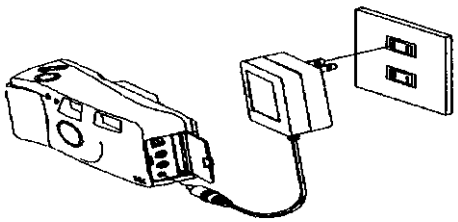
2. Slide mode switch to CAM or PLAY position.

3. If slide to CAM, you have to press Disp key to start LCD. If power has connected but camera do not start, press shutter.

4. If slide mode switch to **OFF**, camera will shut off.

5. When camera is off, confirm camera's power is off.

■ Connect camera to AC voltage



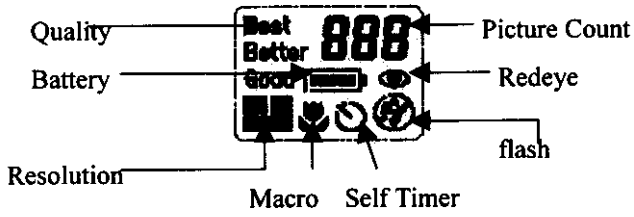
You can use AC voltage as camera's power source. Plug one terminal of AC adapter into outlet, then plug another terminal into camera's power jack.

Caution: 1. VIVICAM 2800 adopt 6V AC adapter.

2. If camera is idle for one minute, camera will shut off automatically.

■ Status Display

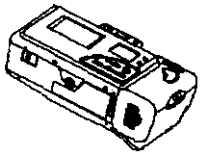
Camera's status is displayed on B/W LCD. you can view current status and settings.



888 Picture Count

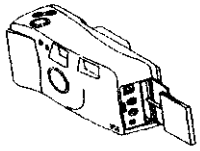
The upper-right digits shown on B/W LCD was **Picture Count**. In CAM mode, it was picture count you can capture. In PLAY mode, it means the picture count in memory card. If memory card is not inserted, LCD will display 「**NO CARD**」. If memory card is full, LCD will display 「**CARD FULL**」, you have to replace a new one.

If you want to remove memory card



1. Open side compartment door of camera.
2. Push the memory card ejector..
3. Take memory card off slightly.

If you want to insert memory card



1. Open side compartment door of camera.
2. Hold memory card and target it right.
3. Insert card into memory card bay.

FLASH

VIVICAM 2800 has redeye-reduction flash which ranges from 50cms to 3m. VIVICAM 2800 has four flash modes.

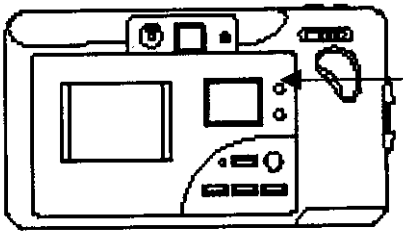
Auto-Flash: When you set auto-flash, camera will use flash by itself. If light source is too weak, camera will start flash automatically.

Red-Eye: VIVICAM 2800 has redeye reduction flash. It will flash one more time before capturing in order to diminish red-eye . The remaining operation is totally the same with Flash mode.

Flash: Flash will be used each time when you take picture.

Flash-Off: Flash will be shut off. It is default. ◦

If you want to change flash mode

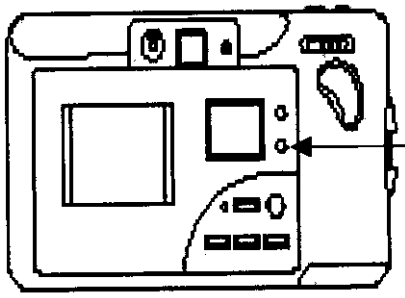


1. Start camera in CAM mode.
2. Press Flash key to switch flash mode.

MACRO

VIVICAM 2800 provides **Macro** function. It will adjust camera's focus to 20cms. It will be convenient when you take picture of near object.

If you want to use Macro



1. Start camera in PLAY mode.

2. Press Macro Key to start or close Macro function.

If you want to close Macro function, you have to press Macro key again. When camera is off, Macro is also closed.

Quality

You can set picture quality to **Good**、**Better**、**Best.** Quality setting stands for compression level of picture. The better quality picture has, the more space will be occupied.

Quality setting will use following symbols on camera's B/W LCD.

Best: When resolution is high, and quality setting is **Best**, a 4 MB memory card can store 12 pictures.

Better: When resolution is high, and quality setting is **Better**, a 4 MB memory card can store 24 pictures.

Good: When resolution is high, and quality setting is **Good**, a 4 MB memory card can store 46 pictures.

If you want to change picture quality setting, please refer to 「**CAM MENU**」「**Image Quality**」。

Battery

VIVICAM 2800 can use 4 AA battery as camera's power source.

Camera's battery power will eliminated by time elapsed, and its power can be understood on camera's B/W LCD.

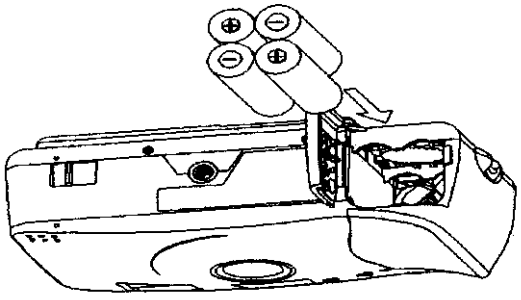
When three indication is full, it means battery power is full, you do not need to worry it.

When two of three indication is full, it means batteries has been used, but it still can work.

When one of three indication is full, it means battery power is low, LCD can start only in PLAY mode, though camera still can work.

When three indications are empty, it means battery power is used up, please replace them.

How to place batteries



1. Put thumb upon the battery door.
2. Slide off battery door.
3. Place batteries into battery bay then close bay door.

Resolution

VIVICAM 2800 provides two resolution standards to choose: **Large**, its resolution is 1024*768,and **Small**, its resolution is 640*480。If you choose large resolution, picture size will be larger, and it will occupy more memory card space.

Resolution setting will use following symbols on B/W LCD.

Large: The pictures' resolution are 1024*768,It is default.

Small: The pictures' resolution are 640*480.

If you want to change resolution setting, please refer to 「**CAM MENU**」「**Picture Resolution**」.

Self-Timer

When you are capturing, you can use **self timer** in order to obtain more time to prepare capture. When self timer is started, camera will take picture after 10 seconds while you press shutter key. When finished, self timer will be disabled.

If you want to set self timer, please refer to 「**CAM MENU**」「**Self Timer**」.

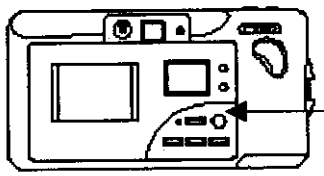
CAM Mode

If you slide mode switch to **CAM**, camera will have following functions:

1. Preview picture on LCD.
2. Take picture.
3. Adjust exposure.

How to preview picture

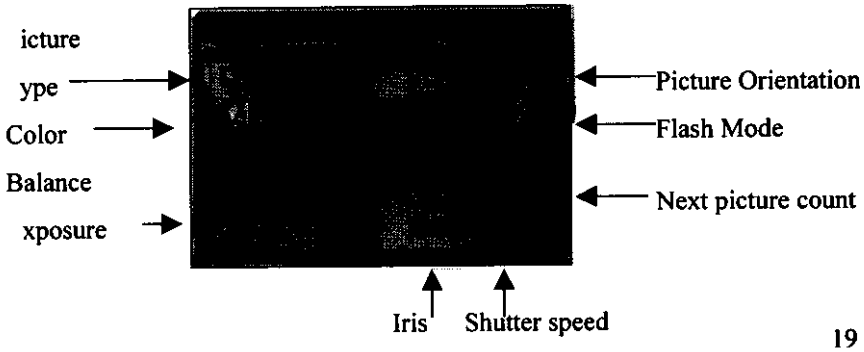
If you want to preview picture



1. Slide mode switch to **CAM**
2. Press Disp key to activate LCD.
3. You can preview images from LCD.

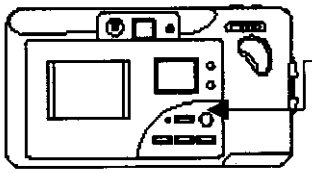
4. You can press Disp key to swap LCD to: LCD-with information, LCD-no information, LCD-off.
5. You can press T or W key to adjust image size. ◦

In Preview mode, picture information are displayed below.



■ How to take picture

● If you want to take picture



1. Insert memory card.
2. Start camera in CAM mode.
3. Press Disp key to activate LCD.
4. Put the object in the center of View Finder.
5. Press Shutter key.

Caution: Because VIVICAM 2800 adopts two-step shutter, you have to press shutter key full-down so that it will photo. While in capturing, camera's power lamp will blink, but you do not need to hold shutter key tightly. You have to wait until power lamp terminated blinking so that you can take next picture. If you press shutter with half-down, the picture count column of camera's B/W LCD will be the focus after auto-focus process. And if you press T or W key to zoom in or zoom out image, The digits of this column will be the zoom factor without dot sign. If a green dot appear on bottom of LCD when you press shutter, it reveals focus and exposure has already fixed, you can press shutter key to take picture now.

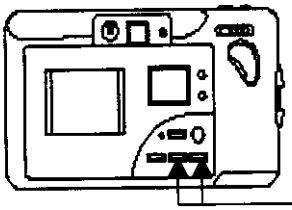
■ EXPOSURE ADJUSTMENT

Camera's exposure can be adjusted at anytime. Exposure ranges from –3.0 to +3.0. You can adjust 0.5 each time.

If your picture is too dark, you can press + key to increase exposure

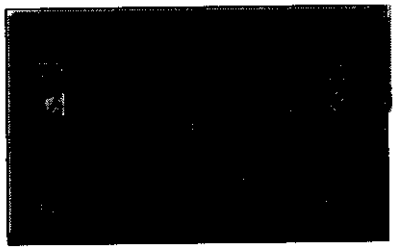
If your picture is too bright, you can press – key to decrease exposure.

● If you want to adjust exposure



1. Start camera in CAM mode.
2. Press Disp key to activate LCD.
3. You can press +,- key to change exposure.

When you press +,- keys in CAM mode, LCD will display

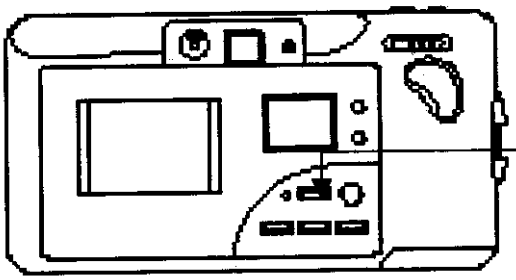


Exposure indication table will show on LCD. While you press +,- key to adjust exposure, current exposure will display in **Picture Count** column on B/W LCD, but dot sign ignored.

CAM MENU

In CAM mode, you can not only preview picture、take picture、adjust exposure, but also you can set many preview functions and parameters.

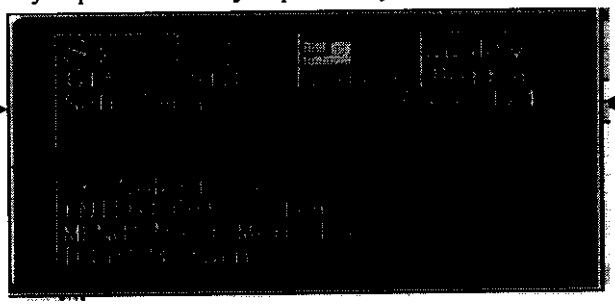
How to invoke CAM menu



1. Start camera in CAM mode.
2. Press MENU key, then CAM menu will display on LCD.

In CAM mode, there are four menu levels. Each level has four items at most. You can press menu key to switch levels or press Disp key to return picture preview.

If you press Menu key in preview, you will enter first level.



You can press +,- key to select item, or press Menu key to switch level. CAM menu is described below.

◆ Self Timer

In first item of first level

You can set self timer here.

If you press Enter key, LCD will display

You can press +,- key to switch self timer. If self timer is on, the symbol will display on camera's B/W LCD.

It means self timer has been activated. When you are taking picture, it will start capturing after 10 seconds you pressed shutter key.

◆ Picture Type

In second item of first level

You can set picture type here.

If you press Enter key, LCD will display

You can press +,- key to select picture type.

If you choose **still**, it was single capture. It is default.

If you choose **Still with Voice**, it stands for single capturing with voice attached. If you take picture in this type, you can press shutter key and hold shutter key tightly, voice will be recorded form voice recording hole. The maximum recording time is 20 seconds. If you release shutter key before 20 seconds expired, camera will start capturing.

If you choose **Burst**, it stands for take 9 pictures successfully .If you press shutter, camera will take nine pictures successfully.

Caution: If you want to play the sound attached upon the picture, you must connect camera with PC by USB.

◆ Picture Resolution

In third item of first level

You can set picture resolution here.

If you press Enter key, LCD will display

You can press +,- key to select resolution.

If you choose **Large 1024x768**, camera's B/W LCD will have a symbol like

If you choose **Small 640x480**, camera's B/W LCD will have a symbol like

◆ Image Quality

In fourth item of first level

You can select picture quality here.

If you press Enter key, LCD will display

You can press +,- key to select picture quality.

If you choose 「**Best**」, quality column of B/W LCD will display **Best.**

If you choose 「**Better**」, quality column of B/W LCD will display **Better.**

If you choose 「**Good**」, quality column of B/W LCD will display **Good.**

◆ Picture Orientation

In first item of second level

You can select picture orientation here.

If you press Enter key, LCD will display

If you choose **Landscape**, the picture we took will be Landscape oriented. It is default.

If you choose **Portrait**, the picture we took will be Portrait oriented.

◆ Shutter Speed

In second item of second level

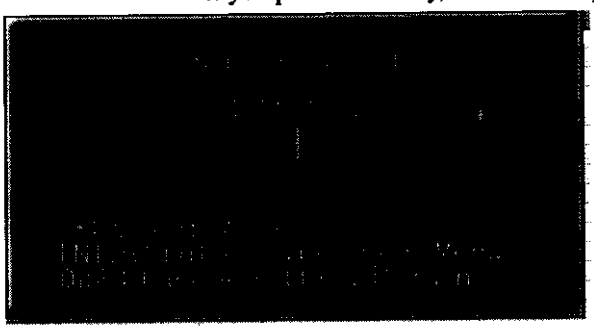
You can setup shutter speed here.

If you press Enter key, LCD will display

If you choose **Auto**, camera's shutter speed will be adjusted by itself.

If you choose **Manual,** you can set shutter speed yourself.

If you press Enter key, LCD will display



You can press +,- key to adjust shutter speed. If done, press Enter key to set it.

◆ Light Metering

In third item of second level

You can select the way to capture spots.

If you press Enter key, LCD will display

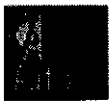
You can press +,- key to select.

If you choose **Multi**, it will take multiple spot. It is default.

If you choose **Center**, it will take only center spot.

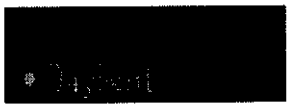
◆ Color Balance, CB

In fourth item of second level



You can select the way to do color balance.

If you press Enter key, LCD will display



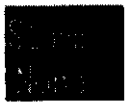
You can press +,- key to select.

If you select **Auto**, camera will do color balance automatically.

If you select **Daylight**, camera will take daylight to do color balance.

◆ Date Stamp

In first item of third level



You can select whether to stamp date on picture or not.

If you press Enter key, LCD will display

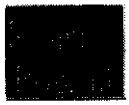
You can press +,- key to select.

If you select **Date Stamp**, the picture we take will have date stamped upon it.

If you select **None**, the picture we take will not have date stamped upon it.

◆ Stamp Position

In second item of third level



You can set the position where date stamped upon picture.

If you press Enter key, LCD will display

You can press +,- key to select.

If you select **Up Left**, The picture we take will have date stamped upon upper-left corner.

If you select **Up Right**, The picture we take will have date stamped upon upper-right corner.

If you select **Down Left**, The picture we take will have date stamped upon lower-left corner.

If you select **Down Right**, The picture we take will have date stamped upon lower-right corner.

◆ Stamp Formats

In third item of third level

You can setup the format of date stamped upon picture.

If you press Enter key, LCD will display

You can press Enter key to select.

If you select **Date and Time**, date and time will all be the date stamped upon picture.

If you select **Date**, Only date will be the date stamped upon picture.

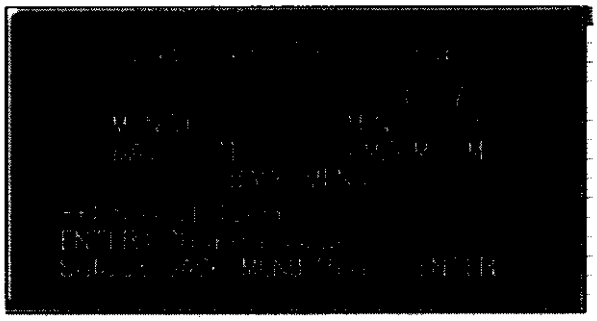
If you select **Time**, Only time will be the date stamped upon picture.

◆ Date Setup

In fourth item of third level

You can setup camera's date here.

If you press Enter key, LCD will display



You can press +,- key or T,W key to select the item and press Enter key to change it.

If done, select 「**BACK MENU**」, then press Enter key to update the revision.

◆ File Formats

In first item of fourth level

You can set file format of picture.

If you press Enter key, LCD will display

VIVICAM 2800 provides two file formats-**CIFF** or **EXIF**. You can press +,- key to select pictures are CIFF file format or EXIF file format.

◆ Folder Control

In second item of fourth level

If you select **CIFF**, this item does not work.

If you select **EXIF**, you can setup camera's folder.

If you press Enter key, LCD will display

You can press +,- key to select item.

If you select **Create New**, LCD will display

You can press +,- key to set folder name you want to create. If done, press Enter key to create it.

If you select **Change**, LCD will display

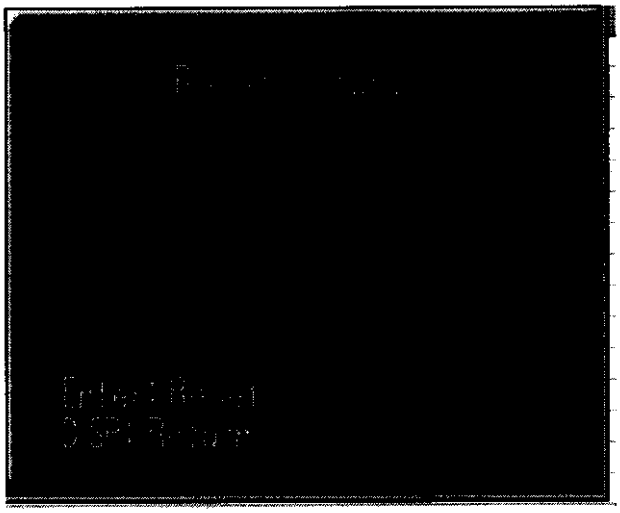
A check sign ahead of folder reveals current folder. You can press +,- key to swap current folder.

◆ Reset

In third item of fourth level

You can reset all the settings of camera here. It functions the same with stick the reset hole.

If you press Enter key, LCD will display



If you press Enter key, Camera's settings will all be reset to default.

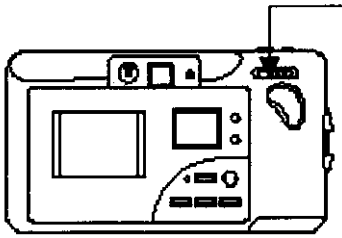
If you press Disp key, it will return to previous menu.

PLAY Mode

If you slide mode switch to **PLAY**, camera can execute the following functions:

1. Review pictures.
2. Erase pictures
3. Do picture slide show.
4. Do multiple thumbnails or list review.

How to review picture



1. Slide to **PLAY** mode.
2. You can review pictures form LCD.
3. You can press +,- key to review pictures backward/forward.
4. You can press Disp key to switch different display styles to-LCD-with image information、LCD-no information、LCD-Multiple display or list review. You can also press **T** or **W** key to zoom in or zoom out picture.

How to erase pictures

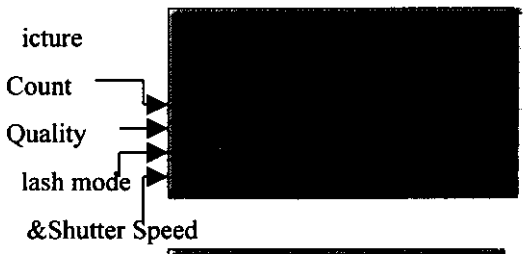
You can erase pictures in PLAY mode. Please refer to 「**PLAY MENU**」「**Erase**」.

How to do slide show

You can do slide show of pictures. Please refer to 「**PLAY MENU**」「**Slide Show**」.

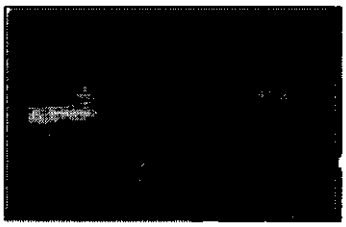
■ Display Mode

In PLAY mode, there are many display modes to select. You can view multiple pictures or list review. Please refer to 「**PLAY MENU**」「**Display Style**」.



Left graph is general review screen with image information..

In general review screen, you can press Disp key to switch display mode. Left graph is 4-picture display Left graph is 9-picture display.

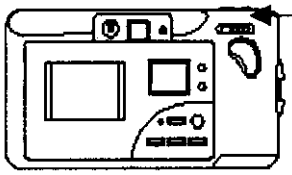


Left graph is list review. It only displays information of pictures.

PLAY MENU

In **PLAY** mode. You can not only review pictures, but you can set many review functions and parameters.

How to invoke PLAY menu

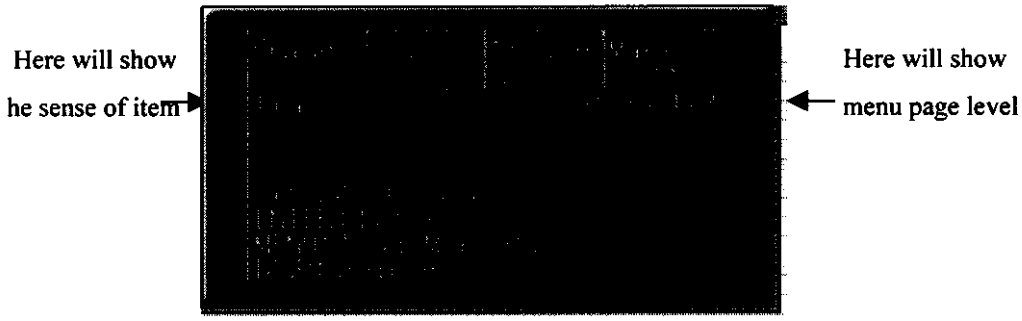


1. Start camera in **PLAY** mode.

2. Press MENU key and PLAY menu will display on LCD.

In PLAY mode, there are four menu levels. Each level has four items at most. You can press menu key to switch levels or press Disp key to return picture review.

If you press Menu key in review, you will enter first level.



You can press +,- key to select item, or press Menu key to switch level. PLAY menu is described below.

◆ Erase

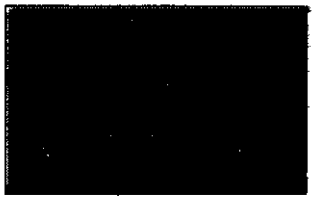
In first item of first level

You can erase pictures here.

If you press Enter key, LCD will display

You can press +,- key to select.

If you select **Erase One Picture**, LCD will display

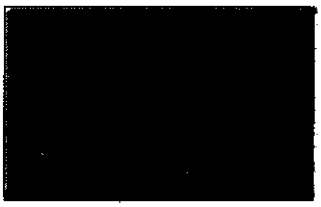


You can press +,- key to select pictures you want to erase. If select done, press Enter key to erase.

If you select **Erase All Pictures**, LCD will display

If you press Enter key, all pictures will be erased.

If you select **Card Format**, LCD will display



If you press Enter key, CF card will be formatted.

◆ Display Style

In second item of first level

You can set display styles here. When you are reviewing pictures, you can press Disp key to switch.

If you press Enter key, LCD will display:

You can press +,- key to select.

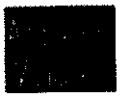
If you select **4 Windows**, it means display style is 4-picture windows.

If you select **9 Windows**, it means display style is 9-picture windows.

If you select **List Window**, it means display style is list review.

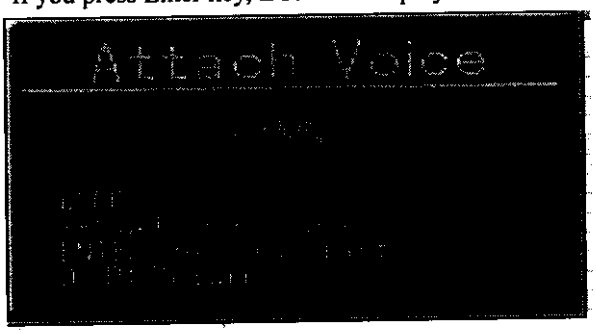
◆ Attach Voice

In third item of first level



You can record voice after capturing.

If you press Enter key, LCD will display



Please press +,- key to select the picture you want to record

If the selection is done, hold Enter key tightly, you can start to record voice.

Each picture have maximum 20 seconds to attach. If you release Enter key before 20 seconds expired, Recording will be terminated.

The picture with voice attached will have a symbol on upper-right corner of LCD.

Caution: If you want to play the sound attached upon the picture, you must connect camera with PC by USB

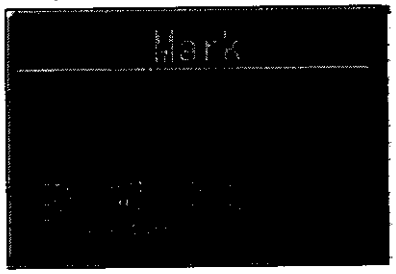
◆ Mark

In fourth item of first level

You can mark picture as「 **Erase-Protect** 」or「 **Slide Show** 」.

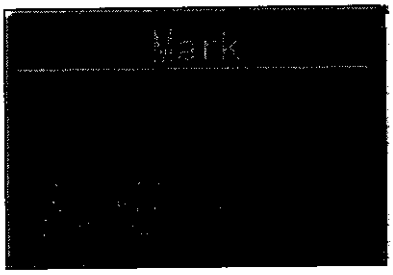
If you press Enter key, LCD will display

If you select **Erase Protect**, LCD will display



You can press +,- key to set or unset pictures for erase-protect. Pictures with erase-protect will have an additional symbol:

If you select **Slide Show**, LCD will display



You can press +,- key to select or unselect pictures for slide show. Pictures which will do slide show will have an addition symbol:

◆ Slide Show

In first item of second level

You can slide show your pictures here.

If you press Enter key. LCD will display 面

If you select **All Pictures**, All pictures will slide show.

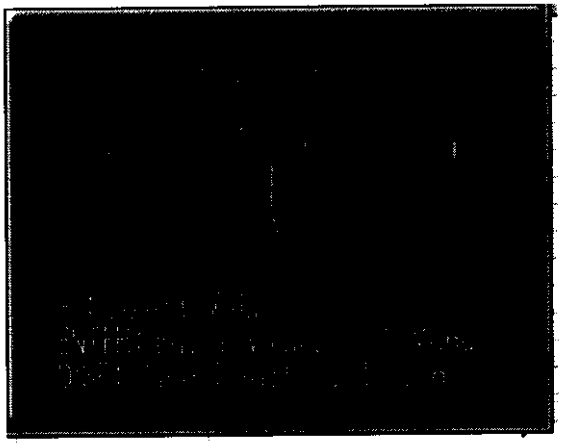
If you select **Marked Pictures**, The pictures marked to do slide show will be used to slide show.

◆ Slide Show Period

In second item of second level

When you are doing slide show ,the time gap between each picture are slide show period. You can set slide show period here.

If you press Enter key, LCD will display



You can press +,- key to increase or decrease slide show period.

If done, press Enter key to update it.

Press Disp key will return to Review screen.

◆ Folder Control

In third item of second level

If you select **CIFF**, this item does not work.

If you select **EXIF**, you can setup camera's folder.

If you press Enter key, LCD will display:

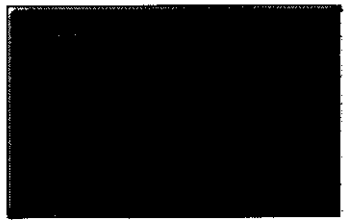
If you select **Create New**, LCD will display

You can press +,- key to set the folder you want to create and press Enter key to create it.

If you select **Erase**, LCD will display

You can press +,- key to select folder you want to erase then press Enter key to erase it.

If you select **Change**, LCD will display



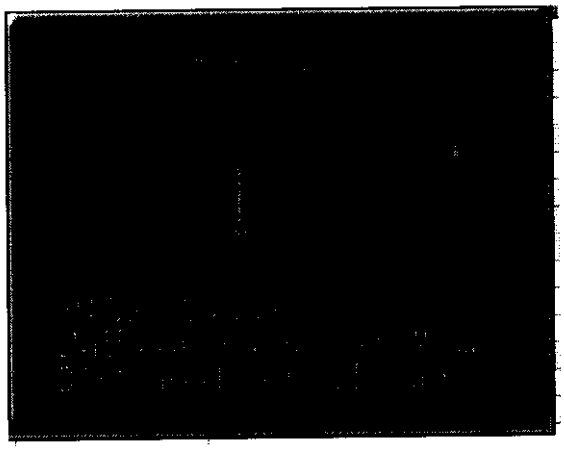
A check sign ahead of folder reveals current folder. You can press +,- key to change it.

◆ LCD Brightness

In fourth item of second level

You can set LCD brightness here.

If you press Enter key, LCD will display



You can press +,- key to set LCD brightness.

If done, press Enter key to update it.

If you do not want to change it, press Disp key to leave.

◆ Firmware Update

In first item of third level

You can update camera's firmware here.

If you press Enter key, LCD will display

If you press T and W key simultaneously, camera will start to update firmware.

If you press Disp key, it will return to previous menu.

◆ About

In second item of third level

You can view firmware information here.

If you press Enter key, LCD will display

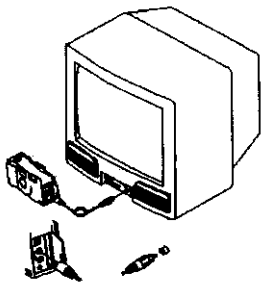
You can behold camera's firmware information and associated data.

If you press Disp key, it will return previous image.

How to output video images

VIVICAM 2800 has strong video output function. You can upload image of camera's LCD to other monitors which can accept video signal like TV. No matter camera is in CAM or PLAY mode, you can upload the pictures to monitors to share the joy with other friends by means of the function.

If you want to output video image



1. Please turn off monitor and camera.
2. Plug video output cable into camera's video output jack.
3. Plug another terminal into monitor.
4. Start camera and monitor, and start camera's LCD.
5. Set monitor to proper channel and settings.
6. You can view camera's image in monitor.
7. When you see picture on monitor, the resolution is 320*240 only.

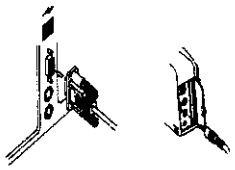
Twain Driver

Twain Driver Installation

If you want to install Twain driver, insert setup disk into disk driver, execute setup.exe and follow the instruction.

How to connect with PC by serial cable

You have to connect with PC by serial cable first.



Like left graph, Plug serial cable's terminal into PC's COM port then plug another terminal in camera then start camera.

How to transfer images to PC by twain

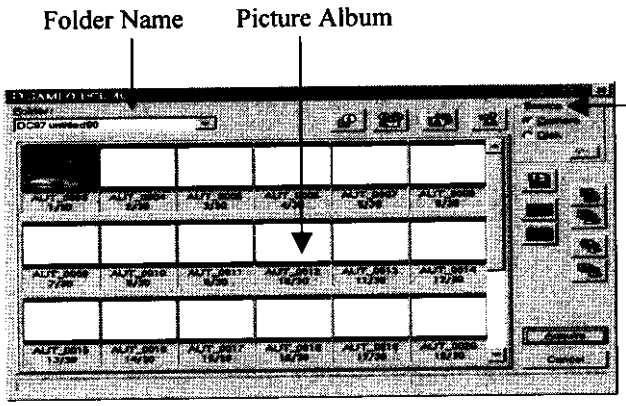
1. Connect with PC by serial cable and start in PLAY mode
2. Open Image application software like Ulead, Photoshop.
3. Under FILE menu item, select 「**Select Source**」。
4. Dialog box of select source appears.
5. Select 「**VIVICAM 2800**」 to be source.
6. Under FILE menu item, select 「**Acquire Image**」。

The dialog box below will appear

If you press **View Pictures in the Camera**, you will negotiate with camera by serial cable.

If you press **View Pictures From PC**, You will negotiate with camera by USB cable.

Twain Driver Introduction



it is main window of twain driver. The major functions are:

1. Show thumbnails.

2. Erase pictures..

3. Transfer pictures.

4. Show image information.

5. Do slide show.

6. Store pictures to PC's folder.

7. Remote control, including live preview, remote shooting

8. Configuration.

Operation and function of twain driver will listed below:

Select All: It will select all pictures in album.

Unselect All: It will unselect all pictures in album.

● **Source:** If you select **Camera**, PC will catch pictures through serial cable. If you select **Disk**,則 PC will catch pictures through USB cable.

If you want to select picture, click the picture. If you want to select multiple pictures, use Shift or Ctrl key to click.

● How to display thumbnails

If you press this button, all the thumbnails in album will be displayed like top graph.

● How to transfer pictures to PC

If you want to transfer pictures to PC, first select pictures you want to transfer then press

● How to erase pictures

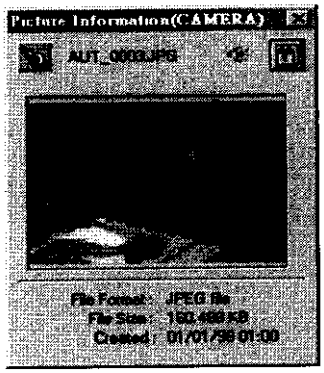
You can erase pictures on camera.

If you press the button, selected pictures will be deleted.

If you press this button, all pictures will be deleted.

● Show image information

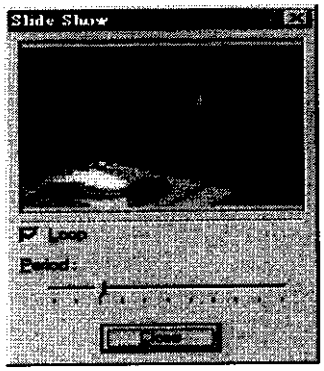
If you press



The information of pictures you selected will be shown like right graph.

● How to slide show

You can select pictures you want to slide show then press



You can slide show the pictures you selected like right graph.

In right graph, loop means circulating slide show forever and period indicates you can set slide show period here.

If you want to stop, press **Close**.

● How to save Pictures to PC

You can save pictures on memory card to PC's folder.

If you press

It means selected pictures will be saved to PC's folder.

If you press

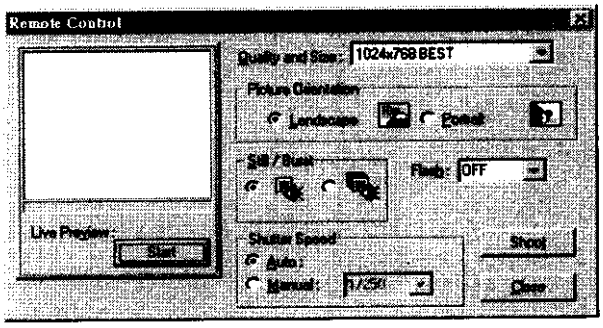
It means all pictures will be saved to PC's folder.

You can select which folder pictures will be saved in.

● Remote Control

If you press

The windows will appear



It is the **Remote Control** window. **Remote Control** indicates to control camera from PC side.

In remote control, you can set following items:

1. **Quality and Size**: Set quality and resolution
2. **Picture Orientation**: Set picture orientation
3. **Still/Burst**: Set picture type.
4. **Flash**: Set flash mode.
5. **Shutter Speed**: Set shutter speed.

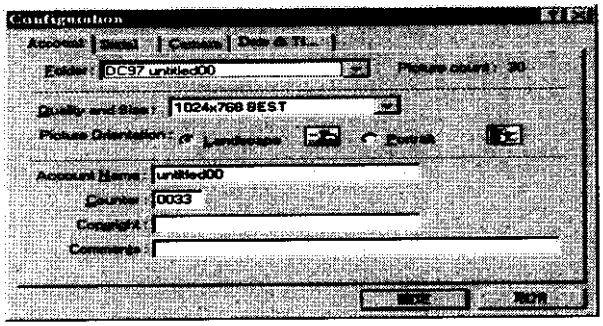
And the functions you can execute are:

1. **Live Preview**: If you press **Start** button of **Live Preview**, image captured by camera's lens will be displayed on the frame of **Live Preview**, and about every five seconds the image will be refreshed. The frame functions like camera's LCD.
2. **Shoot**: If you press **Shoot** key, camera will take picture, and the result will be shown on the frame of **Live Preview**.

● Configuration

If you press

The window will appear



It is **Configuration** window of twain driver. There are four menu tabs.

1. Account: You can set some parameters like:

Folder、Picture Count、Quality and Size、Picture Orientation、Account Name、Counter、Copyright、Comment.

2. Serial: You can set serial communication parameter including COM Port, Baud Rate.

3. Camera: This menu tab mainly set camera's menu items. For example, **Picture type(Still/burst), Shutter, Flash, Slide Show Period, LCD Brightness, System Update(Firmware Update), Display Style(LCD), Camera auto shut off time.**

4. Date & Time: You can set camera's date and time by yourself. You can also press「**Use PC Date & Time**」so that you can use PC's date and time as camera's.

■ USB Driver

■ USB Driver Installation

Please follow the instructions to install USB driver.

1.connect camera with PC by USB cable.

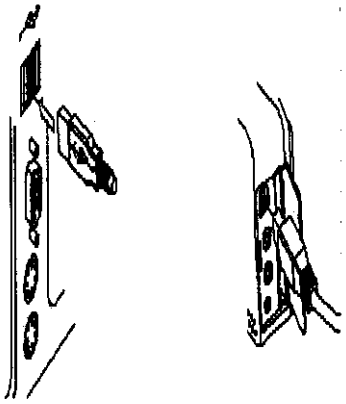
2.In windows 95/98 ,Plug-in-and-play will auto-detect USB and a dialog box of 「**Unknown Device**」 will appear.

3.Insert USB setup disk into disk driver.

4.Select 「**Install from disk**」, and install USB driver from your USB driver disk.

5.Restart Windows 95/98 to complete installation.

■ How to connect with PC by USB cable



Start camera in Play mode.

Like left graph, connect USB cable to PC, then like right graph, connect another terminal of USB cable to camera's USB jack.

USB will regards your camera as a hard disk drive.

Caution: PC's main board must support USB, and USB driver is only available in Windows 95 OSR 2.1 above.

General Notice

1. Please do not displace or repair the camera by yourself, or you will be dangerous for damaged by electric power.
2. Please keep the camera dry because moisture will cause fire and electric damage. Please avoid of using camera under the environment of rain、snow、bathroom and so on.
3. If there are strange savory or moist inside of camera, please turn off camera and remove power source, and deliver it for repair, or it will cause fire or electric damages.
4. While camera is in use and ,please turn off the power, remove power source, or it will cause fire of electric damages.

Physical damage or improper operation of camera will cause images data of storage media being erased. Please transfer images date to PC to ensure the storage of image data.

■ Capture Notice

● How to handle flash to get good picture

1. You had better use Auto-Flash to let camera detect environment by itself to achieve best capture condition.
2. In the situations of flash inhibited, we can use No-Flash.
3. The range of flash is within 0.5 to 3 m, but 1.5 is the best distance.
4. When use Macro to capture. please do not set the flash direct toward eye or it will harm your eyes.
5. Please Avoid of taking pictures toward light source to ensure image is clear.
6. In Near-distance capturing(about 15 cm~20cm),please select No-Flash or it will be over-exposure. If the light source is not enough, enhance it with other light source.

●While you are capturing

1. Look at view finder, aim the object you want to take, try to look straight at the object.
2. Do not let tour hand block the camera lens. When the lens are dirty, please use soft and clean cloth to clean it.
3. When you are satisfied with scene, you can press shutter, processing image compression , and store them to memory card.
4. While pressing down shutter key, please do not shake camera or it will make image fuzzy.

Usage Environment

The acceptable temperature of the camera is **0-40 • C(=32-104 F).**

The acceptable moisture of the camera is **45 • -85 • .**

Please do not use the camera in the situations below:

The place where sun directly illuminated
high-moisture or seriously dusted
Air-conditioned warmer or in vicinity of hot object
Enclosed space or under sun.
The place where is strongly vibrating.

Cautions: 1. **When you are under low temperature, bring the camera indoors. If the environment suddenly has temperature change, camera's inner or outer will cause ice-frozen**

2. **In order to prevent ice-frozen, please put camera in plastic bag in advance. Until the temperature is near the environment temperature, you can take the camera out. If ice-frozen is happened, please take the batteries from camera and open the battery bay door until ice is melted.**

Trouble Shooting

Trouble	Reason	Solution
Camera does not power on when power connected	Battery Installation is wrong	Re-install batteries
	Batteries are used up	Replace batteries
	AC adapter is not adequate	Use proper AC adapter
Can not transfer picture to PC	Baud rate is not right	Change baud rate
	Camera does not power on	Power on camera
	Connection is not correct	Ensure connection
Memory card does not work	Memory card not formatted	Format memory card on PC first
	Memory card does not suit	Replace memory card
	Memory card damaged	Replace memory card
Can not output video image	TV's specification is wrong	Change another TV
	Connection with TV is improper	Check connection With TV
	Channel improper	Change proper channel
	Camera mode is not correct	Check camera's LCD is started
Picture is too dark	Flash does not work	Set flash to Auto-Flash
	Object is too far from flash	Adjust object distance with camera
	Object is in front of light	Adjust capture position
Picture is too bright	Flash works	Set flash to No-Flash
	Object is too near from flash	Adjust object distance with camera
Picture is fuzzy	Exposure is not correct	Adjust exposure
	Object distance is not proper	Adjust macro position ot shutter speed
	Lens is dirty	Clean lens

Picture can not be erased	Camera mode is wrong	Set camera is correct mode
	Memory card damaged	Replace memory card
Camera does not work	Battery low or no battery	Replace batteries
	AC adapter is not adequate	Please adopt proper AC adapter
	Battery installation is wrong	Re-install batteries
Shutter does not work	Camera is not in CAM mode	Switch to CAM mode
	Camera is processing image	Wait processing is done.
	Memory card full	Replace or clean memory card