

DIGITAL VOICE CAMERA (DVC-100)



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# Tha Beforens Kee Spe

# Voicecam<sup>™</sup> Operation Guide

Thank you for purchasing VoiceCam<sup>™</sup>. Before using your new VoiceCam<sup>™</sup>, read this manual carefully to ensure that you know how to operate it safely and correctly. Keep this manual in an easily accessible location for further reference. Specifications and design are subject to change without any advanced notice.

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- Window is a registered trademark of Microsoft Corporation in the United States and/or other countries.

Their respective holders hold all other registered names and trademarks described in this book.



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# PREGULONS

#### **General Precautions**



Do not leave the VoiceCam™ in hot or humid locations such as inside of a closed automobile under direct sunlight or on the beach in the summer.



Avoid from strong vibrations or shocks.



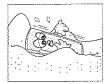
Do not attempt to disassemble, repair, or modify the device in any way.



Do not place the device t on the top of or near electric appliances such as TVs or refrigerators, etc.



Do not keep the device in the places exposed to excessive moisture or dust.



Avoid from sand or dirt. These can cause irreparable damage.



Do not drop the device on the solid surface or in the water.

Do not disconnect USB cable during data uploading.

Keep the View Finder, Lens, LCD Display, and the Dust Cover of the Speaker clean.

# BEFORE YOU USE

#### List Of Packed Materials

If any of the following items is missing or damaged, please contact your supplier. Each box contains:











VoiceCam™

Earphone



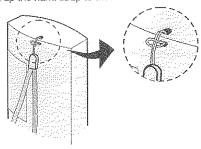






CD Rom (Software for PC installation)

Tight up the hand strap to the device as below.

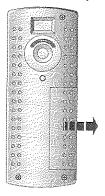


# BEFORE YOU USE

#### Battery

Installing the batteries.

- 1. Make sure that the device is power off.
- 2.Slide the battery cover outward to open it.
- 3.Place an "AAA" size battery in the lower position then place another on the top.
- 4. Make sure that the polarity of each battery is correctly aligned as indicated, and then slide the battery cover until locked.

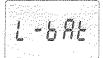




Replacing the Batteries

When the battery level indicator starts blinking on the LCD panel, replace the batteries as soon as possible.

When the batteries are exhausted, the signal of "L-bAt" (Low battery) is shown on the LCD panel.



# BEFORE YOU USE

#### **System Requirements**

- PC : IBM PC/AT compatibles
- Operating System : Microsoft Windows 95, Windows 98 or Windows 2000.
- ◆ CPU: 200 MHz MMX<sup>™</sup> Pentlum<sup>®</sup> or higher recommended.
- ◆ RAM: 32MB (64MB recommended)
- Hard disk characteristics: Ultra ATA/33 or later version recommended
- · Hard disk space required for installation: App.10MB
- . Video card: 800 x 600 resolution or higher, capable of displaying 65,536 colors
- . Sound card: Sound Blaster compatible.
- . CD-ROM driver.

Do not quarantee optimum operation on all computers.

#### Features

- . Digital Voice Recorder with built-in Digital Still Camera.
- + Fast data (Voice & Image) uploading to PC via USB Port in app. 2 minutes.
- + 12Mbps uploading speed to PC.
- . Built-in 16MB flash memory.
- Up to 396 voice messages (4 folders and 99 messages per each folder) can be stored.
- Max. 127 frames at QVGA (320 X 240) resolution and 44 frames at VGA (640 X 480) resolution.
- Up to 260 minutes of continuous voice recording at 8KHz sampling frequency
- · Functions of Digital Voice Recorder: Record, Stop, Play/Pause, Fast Forward, Rewind, Erase, Hold, Uploading to PC, E-filing, E-mailing, etc.
- Functions of Digital Still Camera: Photographing, Uploading, E-filing, E-mailing, etc.
- . VOR (Voice On Recording) Function.
- . Easy to turn on/off beep sound off.
- The device is designed to erase each or whole voice and image files after/before uploading.
- . Built-in speaker and microphone.
- \* Easy to check operation conditions through built-in LCD display.
- Automatic power off to avoid unnecessary battery consumption.
- \* Able to capture up to A4 sized documents.
- Lightweight compact and slim design fits perfectly in the palm of your hand and weighs only 65g.

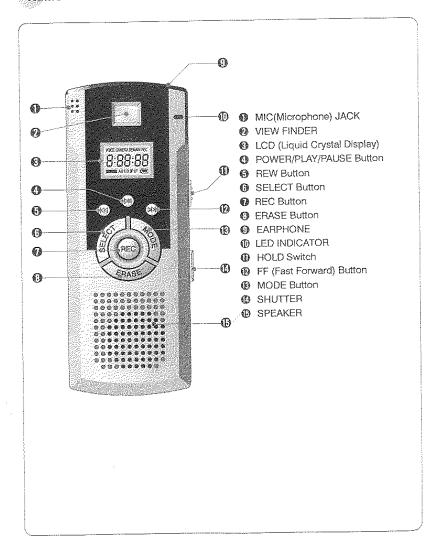
# ISTEROTE YOURUSE

#### VoiceCam™ Product Overview

FUNCTIONS	Voice Recorder Section		Camera Section		
	Stand-by	Play	Stand-by	Play	Remark
POWER	0	0	0	X	
PLAY	0	0	X	Х	
PAUSE	Х	0	X	Х	-
REW	0	0	0	Х	O : Functioning X : Not Functioning
FF	0	0	0	Х	
SELECT	0	Х	0	Х	
MODE	0	Х	0	Х	
REC	0	Х	X	X	
ERASE	0	0	0	χ	
HOLD	0	0	0	Х	
SHUTTER	X	Х	0	0	
EARPHONE	0	0	Χ	Х	

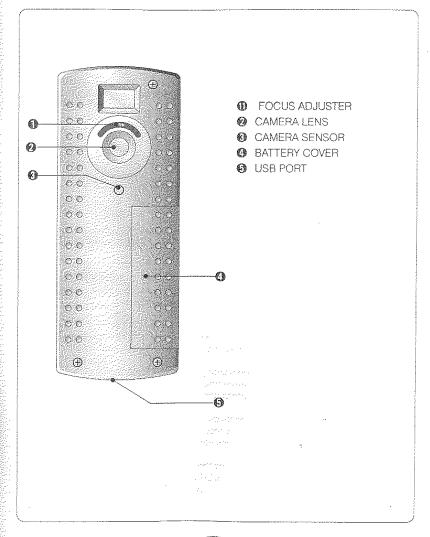
# TELEFORIE YOU USE

#### Names of Parts



# PRECAUTIONS BEFORE YOU USE

#### Names of Parts



# PRECAUTIONS BEFORE YOU USE

#### **LCD** Displays

VALE 09

1) In VOICE mode

LO 00

2) In CAMERA mode

VOICE REPORT

3) REMAIN: Shows remaining time to record.



4) REC: Displays while recording in the VOICE mode.



5) FOLDER A/B/C/D: Indicates which folder you are on.



6) GL (Gain Low = dictation mode): In the VOICE mode, GL is recommended to select for recording voice messages at quiet places like meetings, classes, etc.



7) GH (Gain High = conference mode): In the VOICE mode, GH is recommended to select for recording voice messages at noisy places like exhibitions, shows, etc.



HI (High resolution): In the CAMERA mode, pictures can be taken at higher resolution of 640 X 480 pixels.

Total 44 frames can be taken in this mode.



9) LO (Low resolution): In the CAMERA mode, pictures can be taken with low resolution of 320 x 240 pixels.

Total 127 frames can be taken in this mode.



Number 10) USB: Indicates the device is being connected to the computer via USB cable

# OPERATION IN VOICE MODE

### HOW TO RECORD VOICE MESSAGE

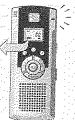
First, make sure that the batteries are correctly installed. Push the POWER/PLAY/PAUSE button for about 2 seconds. The LCD is automatically turned on with short beep sound.

The device is automatically set to the VOICE mode when you turn it on. (When the CAMERA mode is on, the signal of "CAMERA" is blinking on the LCD panel.)



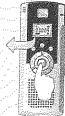
When ready to record, it indicates as below. (The device is automatically set to the "folder A" when you turn it, you can select one of 4 folders for recording.)





Push the REC button to starts recording. While recording, the recording time is shown on the LCD panel as below.





Push the POWER/PLAY/PAUSE button or (the REC button) to finish recording.





Note: Concerning the VOR (Voice On Recording) mode, please refer to the following page.

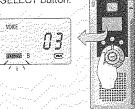
### HOW TO PLAY OR PAUSE RECORDED MESSAGE

Turn the device on.

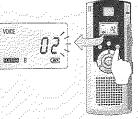
Make sure that the device is in the VOICE mode.



Search for the right folder that you would like to listen by pushing the SELECT button.



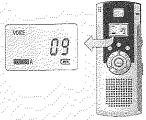
Move to the right file by pushing the FF or the REW button.



Push the POWER/PLAY/PAUSE button to play the recorded message.



When it is finished, it automatically returns to the STAND-BY mode.



On playing, push the POWER/PLAY/ PAUSE button to pause playing. To resume playing,



pur product package.

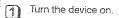
Note: A high quality earphone is included in your product package.

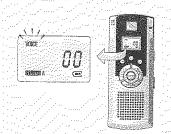
To listen to the recorded message clearly, you can use the packed earphone connecting to the earphone jack.

### OPERATION IN VOICE MODE

### HOW TO SELECT FOLDER A/B/C/D

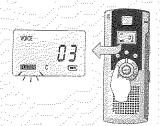
In the VOICE mode, four separate folders named A, B, C, D are available. Up to 99 message can be stored in each folder.



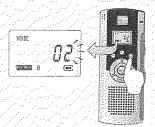


In the STAND-BY mode, push the SELECT button to select folders. The folders move in sequence of A->B->C->D.

For instance, if you would like to record message in FOLDER C, push the SELECT button until the signal of C appears on the LCD panel. Then, push the REC button to record.



Whenever it moves to each folder, the number of recorded files indicates on the LCD panel.



Note: In the PLAY mode, the SELECT button is used for the volume up and down.

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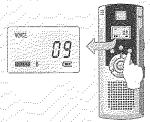
#### **HOW TO ADJUST VOLUME LEVEL**

Turn the device on.

Search for the right folder by pushing the SELECT button.



Move to the right file by pushing the FF or the REW button.



Push the POWER/PLAY/PUASE button to play.



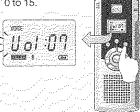
Make sure that the device is in the PLAY mode.



5 On playing, push the SELECT button.



Push the REW button to volume down and the FF button to volume up.
You can adjust volume level from 0 to 15.



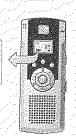
Note: You can adjust the volume level only in the PLAY mode not in the STAND-BY mode.

# OPERATION IN VOICE WORE

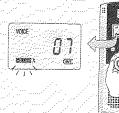
# HOW TO SEARCH FOR RECORDED MESSAGE FILE

In the VOICE mode, you can search for each message file by pushing the FF button or the REW button.

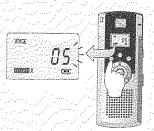
Turn the device on.



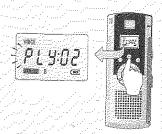
Move to the right folder by pushing the SELECT button.



Search for the right file by pushing the FF button or the REW button.



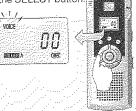
Push the POWER/PLAY/PAUSE button to play message.



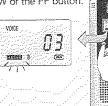
Note: In case of no recorded file in the folders, either of the REW button or the FF button does not function.

#### HOW TO ERASE MESSAGE FILE

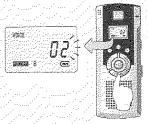
Turn the device on Move to the right folder by pushing the SELECT button.



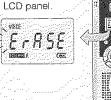
Search for the right file that you would like to erase by pushing the REW or the FF button.



Push the ERASE button



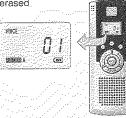
The voice message in the file is playing with the signal of "ERASE" blinking on the



Push the ERASE button again in 10 seconds.



The voice message in the file is erased



Note: The files can be erased in the PLAY mode or in the STAND-BY mode If you push the ERASE button to erase file, you must push the button again in 10 seconds. Otherwise, it automatically returns to the STAND-BY mode. The numbers of file are automatically readjusted in numerical order after erasing file

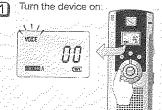
# OPERATION IN VOICE MODE

#### **HOW TO CHANGE MODE**

GL (Gain Low = dictation mode) : In the VOICE mode, it is recommended to select

for recording voice messages at quite places like meetings, etc.

GH (Gain High = conference mode): In the VOICE mode, it is recommended to select for recording voice messages at noisy places like exhibitions, shows, etc.

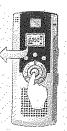


Push the SELECT button to move to the right folder that you would like to



Push the REC button.



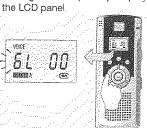


Push the SELECT button to move to

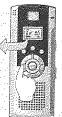
the GL mode. The device is automatically set to the GH mode











Note: Only in the recording mode, you can change to the GL (or GH) mode

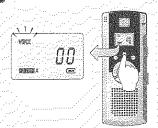
# OPERATION IN CAMERA MODE

#### HOW TO SELECT RESOLUTION MODE

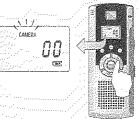
HI (High resolution): The pictures can be taken with high resolution at 640 X 480 pixels. Total 44 frames are available in this mode.

LO (Low resolution): The pictures can be taken with low resolution at 320 X 240 pixels. Total 127 frames are available in this mode.

Turn the device on.

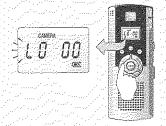


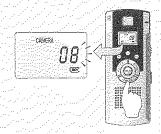
Push the MODE button to select the CAMERA mode.



Push the SELECT button to select the LO mode. It is automatically set to the HI mode.





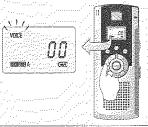


Note: Because the amount of image data taken is not fixed and varies depending on how many voice messages are recorded as well as which mode you have selected, the actual number of available shots may slightly differ from the number displayed.

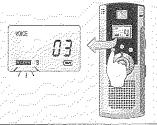
# OPERATION IN CAMERA MODE

#### HOW TO ERASE IMAGE FILE

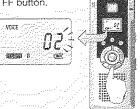
Turn the device on.



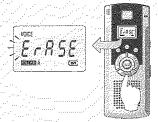
Push the MODE button to select the CAMERA mode.



Move to the right file that you would like to erase by pushing the REW or FF button.



Push the "ERASE" button



The signal of "ERASE" is blinking on the LCD panel.



To confirm erasing, push the ERASE button again. To cancel erasing, you can push other buttons or wait for 10 seconds, then it returns to the STAND-BY mode.



Note: 1. The numbers of file is readjusted in numerical order.

- 2. Once the file is erased on the device, it does not return again.
- 3. You can erase the entire folder on the software program.

  On the device, you can only erase each file.

### 

#### **FOCUS ADJUSTER**

0.5ft: In the CAMERA mode, it is appropriate to take short distanced subject, such as document, etc. Infinity(OO): In the CAMERA mode, it is appropriate to take long distanced subject farther than 1.5M.



#### HOLD FUNCTION

This button is to hold all of function keys. You can see the signal of "HOLD" on the LCD panel all the time when HOLD is on.
This function prevents accidental operation while carrying the unit in a pocket or briefcase.



# **VOR (VOICE ON RECORDING) MODE**

When you turn on the device, it is automatically set to the VOR mode on. You can select the VOR mode off on the PC Software.

#### In the VOR mode on,

It begins recording once the microphone senses voice signals..

During recording, it is automatically convert into the STAND-BY mode, if any external voice is not recognized for 1 second.

In the STAND-BY mode, it is automatically power off, if any external voice is not recognized for 30 minutes.

The duration of the STAND-BY mode can be easily adjusted up to 30 minutes on the software provided.

#### To turn the VOR mode off,

During recording, the device continues recording even while any external voice is recognized until the batteries are exhausted or the memory is full. To turn the VOR mode off, see the "OPERATION OF THE VOICECAM ON PC".

### OTHERS

#### Low Battery Indicator

When the batteries ate exhausted, the signal of "L-bAt" (Low Battery) is shown on the LCD panel.

Then, you should replace the batteries as soon as possible.



#### Full Memory Message

When the memory is full, the signal of "FULL" is shown on the LCD panel.

Either of photographing or recording is not available any more.



### VoiceCam™DVC-100-



# OPERATION OF THE VOICECAM ON PC

#### PREFACE

The software provided allows you to upload images and voice messages to your PC. This enables you to efficiently treat voice and image files all together including the upload of data and the transmission of them via PC or the Internet.

This section describes how to install the software CD for the VoiceCam providing a simple explanation of how to use the software.

Please note that this is written on the assumption that you already have a basic understanding of how to use your PC and Windows.

For basic information on using your PC and Windows, refer to the respective manuals supplied with your PC.

Installing "the Software for the VoiceCam" on your PC allows you to carry out the following:

- . Upload data on the VoiceCam to your PC and view image files and play voice files.
- · Save files on your PC with individual file name.
- \* Print the images on a printer connected to your PC.

#### HOW TO INSTALL THE SOFTWARE

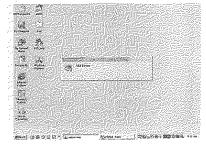
#### For installing, the following materials are required.

- 1, VoiceCam
- 2. USB cable
- 3. CD ROM (the software provided for PC installation)

#### To setup the hardware driver:

To operate the device on your PC, you should setup the hardware drive and install the interface program in your PC as follows.

- 1. Connect the device to your PC via USB cable
- 2. Insert the software CD into your CD-ROM or DVD-ROM drive.
- 3. The following message is shown on the screen.





The following message appears on the screen.
 "You complete set-up the hardware drive for the VoiceCam".

### To install the interface program,

- 1. Click on the icon named SETUP EXE in the CD ROM.
- 2. The following message is shown on the screen.



3. Click-on "Next".



4. Click-on "Next".

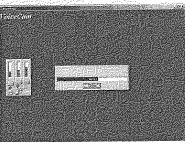


# EGOMERSIEV NI NORYKYEGO

5. Click-on "Next".



6. Wait until it finishes.



7. Click-on "Finish".

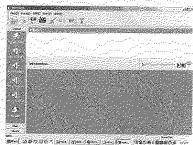


After completing installation of PC interface program.
You can see an icon named VoiceCam on the screen.

**Note:** If you have trouble in installing, make sure that your PC meets the minimum system requirements listed earlier.

#### HOW TO UPLOAD DATA TO PC VIA USB CABLE

1. Double-click the VoiceCam . icon on your PC screen.



- 2. Connect the device to your PC via USB cable:
- 3. Click the icon-Toolbar. or click "UPLOAD ALL" of the Edit in the MENU bar







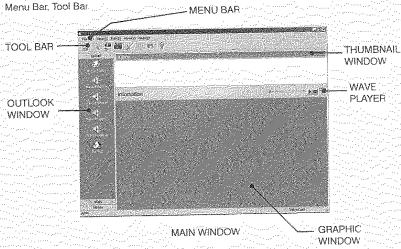
- 5. While uploading, the signal of "UPLOADING" is blinking on the Window.
- 6. Wait until the message of "Upload Complete!" Appears

Note: While USB cable is connected to the device, any functions of each button are not available. Do not disconnect USB cable during uploading data

# OPERATION IN VOICE MODE

#### HOW TO DATA FILES ON PC

To make uploaded files run on your PC, you should understand the window system of the VoiceCam. Double-clilk the icon of the VoiceCam on your PC screen, the Main Window appears. You can use this program just like the Outlook Express. The Main Windwow is composed of Outlook Window. Thumbnail Window, Wave Player, Graphic Window.



#### To view image file,

- 1. Click "Image Folder" in the Outlook Window.
- 2. The image files taken display in the Thumbnail Window.
- 3. Click the right file that you would like to view in the Thumbhail Window.
- 4. You can see the real sized image in the Graphic Window

Note: The available functions with image file are Copy, Cut, Remove, Paste, Rename, Send to Mail, Photo Rotate (Left, Right, Reverse), Info. Etc.

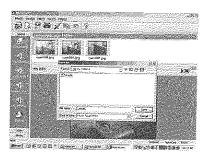
#### To play voice file,

- 1. Click on the right folder among the Wave Folder A/B/C/D/ in the Outlook Window.
- 2. Whenever you click each folder, the recorded files (cam000.wav....) are shown in the Thumbnail Window.
- 3. Double-click the right file that your would like to listen.

Note: The available functions with wave file are Copy, Cut, Remove, Paste, Rename.

### HOW TO SAVE FILE IN YOUR PC

- Click the right folder among Image Folder and Wave Folder A/B/C/D in the Outlook Window.
- 2. Click the right file in the Thumbnall Window,
- 3. Click on the "Save As" of the File in the MENU bar.
- 4. After selecting the directory that you would like to save in, click "Save".



#### HOW TO PRINT IMAGE FILE

#### To print image file,

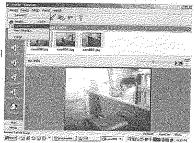
- Click the image folder in the Outlook Window,
- 2. Click the right image in the Thumbnail Window.
- 3. Click on the "Print" of the File in the MENU bar.



#### HOW TO PREVIEW PRINT IMAGE

To preview image that you would like to print,

- Click the image folder in the Outlook Window.
- 2. Click the right image in the Thumbnail Window.
- 3. Click on the "Print Preview" of the File in the MENU bar.



# OPERATION IN VOICE MODE

### HOW TO SEND MAIL, RENAME FILE, AND EDIT FILE INFORMATION

#### To send files by e-mail.

- Click the image folder in the Outlook Window.
- 2. Click the right image in the Thumbnail Window.

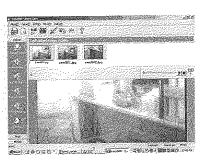


3. Click the "Send to Mail" of the Edit in the MENU bar.



#### To rename file,

- Click the image folder in the Outlook Window.
- 2. Click the right image in the Thumbnail Window.
- 3. Click the "Rename" of the Edit in the MENU bar.



4. Rename the file.

#### To edit file information,

- Click the image folder in the Outlook Window.
- 2. Click the right image in the Thumbnail Window.
- 3. Click the "Info" of the Edit in the MENU bar.
- 4. Write in file information, and click-on "OK".

5. It changes as below.







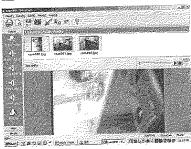
# OPERATION IN VOICE MODE

### HOW TO ROTATE PHOTO

- Click the image folder in the Outlook Window.
- 2. Click the right image in the Thumbnail Window.
- 3. Click the "Rotate Photo" of the Edit in the MENU bar.
- 4. Select one direction among three of them "Left, Right, Reverse".



5. It changes as below.



# HOW TO ADJUST VOLUME LEVEL

#### To adjust the volume level,

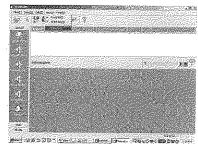
- Click the right voice folder in the Outlook Window.
- 2. Double-click the right voice file in the Thumbnail Window.
- While playing, you can adjust the volume in the Volume Adjuster.



#### OPTION

#### To turn the beep sound off.

 Click the "OPTION" of the View in the MENU bar



2. Click the "Beep Sound" off.

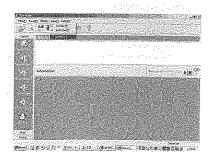


3. Click the "Apply" and "OK".

4. Click-on the in the Tool bar to apply the beep sound off in the device. Note: The device is automatically set to the "Beep Sound" on.

#### To turn the VOR mode off.

Click the "OPTION" of the View in the MENU bar.



OPERATION THE VOICECAM™ ON PC

2, Click the "VOR(Voice On Recording)".



3. Click "Apply" and " OK".

4. Click-on the



in the Tool bar to apply the VOR mode off in the device.

Note: The device is automatically set to the "VOR" mode on.

#### To turn "Remove file with VoiceCam" off,

When you remove files on the software, the files in the device are removed at the same time.

1. Click on the "Option" of the View in the MENU bar.



2. Click the "Remove file with VoiceCam"



# OPERATION THE VOICECAM™ ON PC

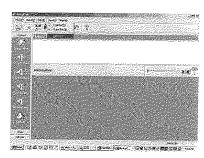
3. Click the "Apply" and "OK".

4. Click-on the in the Tool bar to apply the VOR mode off in the device. **Note:** The device is automatically set to the "Remove file with VoiceCam" on.

#### To readjust the "Maximum pause time in VOR mode".

In case of selecting the VOR mode on, it is automatically power-off after 30 minutes in the STAND-BY mode with no external voice recognized.

Click on the "Option" of the View in the MENU bar.



 Insert the number of time that you would like the device to be on the STAND-BY mode in case of the VOR mode on.

You can select 1~30 minutes.



# OPERATION OF THE VOICECAM™ ON PC

3. Click the "Apply and "OK".



4. Click the

in the Tool bar to apply the VOR mode off in the device.

**Note:** The device is automatically set to 30 minutes in Maximum pause time in VOR mode.

#### HELD

For more information, look up the "HELP" in the MENU bar.

Help Topics.

Show Help Topic Window.

About VoiceCam

Product Information

# 

#### TROUBLESHOOTING

- 1. Unable to turn the power on.
- -. Check if batteries are not exhausted.
- -. Check if batteries are correctly installed.
- -. Check if the HOLD button keeps "off".
- -. Check if the device is properly working. If you are still unable to power on, ask the service center near by you or the store where you purchased it.
- 2. Unable to turn the power off,
- -. Check if the HOLD button keeps "off". If you are still unable to turn power off, ask the service center near by you or the store where you purchased it.
- 3. Unable to record or photograph.
- -. Check if there is extra memory for functioning.
- -. Check if the HOLD button keeps "off".
- -. Check if the device is set to the right mode. (VOICE/CAMERA)
- -. Check if the MODE button is properly working.
- 4. Unable to adjust volume level.
- -. Check if the device if in the PLAY mode.
- -. Check if the HOLD button keeps "off".
- -. Check if both of the REW button and the FF button are properly working.
- 5. Unable to install the software CD.
- -. Check if the software CD is correctly inserted in the CD or DVD driver.
- 6. Unable to upload data to PC.
- -. Check if the USB cable is connected between your PC and the device.
- -. Check if your PC is properly working.
- -. Check if the USB cable is well established.

#### Carriage Carriage

#### SPECIFICATIONS

Classification	Articles	Description			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Dimension	110mm(H)X45mm(W)X21mm(D)			
	Weight	80g (including 2 ) pcs of batter or equivalent			
		Type	Alkaline		
	Battery & Life Time	Size	LR03(AAA size)		
And state of the s		Quantity	2 pcs		
		Voltage 1.5V			
		Play	6 hours		
		Record	6 hours		
		Photographing	4 hours (Continuous operation)		
	USB Uploading Speed	12Mbps Max.	12Mbps Max.		
	External(PC) Interface	USB port cable	.,.		
	USB Cable Length	1M			
	Recording Media	Built-in Flash M	emory 16MB		
		Power	DC 3V		
	Power	Photographing	500mW		
GENERAL		Play (Voice)	382mW		
SPEC.		REC. (Voice)	387mW 2.5 i W		
		OFF (Voice)	2.31 44		
	Gain Control	Automatic	Automatic		
	Electronic Exposure	Interlace			
	Scan Mode		FLASH memory 16MB		
	Memory Size	Message number, Playing & Recording time counter, Recordable remaining time, Operating mode, Image counter, Remaining Battery level.			
	LCD DISPLAY	0 ~ 40℃			
	Operating temperature -10 ~ 80°C				
	Storage temperature	GL ( Gain Low = dicatation) mode GH (Gain High = conference mode			
1,0105	Voice Recording mode	DSPG TrueSpe	ech <sup>IM</sup>		
VOICE RECORDER	Compression method Compression Rate	8.5Kbps			