

**KAISHOT**

**IDF-PVR(Series) | User Manual**



- Please note that the manufacturer does not hold responsibility for troubles caused by the use of imitation parts.
- Please read "Safety Instruction" (page 1-3) carefully before use in order to prevent personal injuries or damages to the product.
- The content of manual can be changed without any notice.

The actual product may look different from the picture in the User Manual.

## Safety Instruction

**This instruction is intended to protect user's safety and prevent any damages to the product. Please read this instruction before use and follow the instruction carefully.**

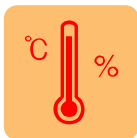
**Warning**

Failure to comply may cause serious injuries or death



**Do not dry this product with electronic heat source such as radiator, microwave, or stove when it gets wet.**

It may lead to explosion, change of shape, or out of order of the product, and the battery or product changes its color. In this case, product may not eligible for free services.



**Do not use this product in hot and humid conditions out of the operational range specified. (Recommended operational temperature: -10 ~ 60 humidity: 20~85%RH )**

When the product is used out of recommended operational environment, it may lead to explosion or out of order of the product.

Please do not expose the battery under the direct sunlight in a closed area such as a car. It may explode, change the shape of the product, or become out of order.



**When battery replacement is required, be sure that the parts replaced are the ones specified by the manufacturer, and not used for other purposes.**

When the battery of different brand is used, durability of the product may be reduced, or even may possibly lead to explosion. The product will not qualify for free service under such case. It is strongly recommended to use the battery referred by the manufacturer.



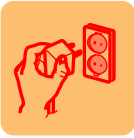
**Keep the product out of children's reach.**

It is harmful for the health of children when they play with damaged battery or put it into the mouth. They may be exposed to harmful chemical solutions, electromagnetic wave, and/or electric shock.



**Do not disassemble, modify, or strike the product.**

It may cause the fire.



**Press the power cord firmly when you plug it in to the outlet, and use the cord head when you unplug it in order to prevent damage to the cord.**

When the contact is not tight or a part of the cord is cut, it could lead to fire and/or heat over-generation.

Please do not break the power cord and do not use them when the power outlet is loose. When the product is wet and/or your hands are wet, do not touch the outlet and the power cord.



**Do not use liquid or aerosol cleaner or chemical solutions such as alcohol, benzene, or thinner to clean the product.**

It could cause fire and damage to the product. Please use dampened soft cloth for cleaning the product.



**Failure to comply may lead to risk of injuries or loss of assets.**



Do not place magnetic materials such as credit card, passbook, or transit passes near the product. You may lose the information contained on them. Data stored in the product may be damaged or lost.



When you do not use the product, disconnect the power source from the product and place on safe surface. The product will be damaged if the product is stricken, beaten, or shaken hard.



Do not paint the product.

It may damage the screen and be a cause of malfunction. In case the debris from the paint causes allergic reaction, stop using the product and see the doctor.



Place the battery in a room temperature when it is not used for long period of time after charged. When you need to use it again after long idle period, it is recommended to use it after recharging it fully. Even after the long idle period, the battery capacity may reduce gradually. When the duration of operation becomes substantially short, it is required to replace with a new battery.



**Please keep the backup record for your original data.**

Data stored in the product may be damaged or lost while upgrading or repairing the product, or due to human errors.

Please be advised that manufacturer and resellers will not be responsible for the damage to or loss of data.



Please do not connect this product to the other equipment or application with a method other than indicated in the User Manual. Some products may be affected by the electromagnetic wave from this product.

**[Certification]**



방송통신위원회

This product is suitable for use in household environment (Class B).  
Product can be used in all areas.



## Before You Use

Cautions	Details
<b>Connect all the peripherals to the unit prior to the operation.</b>	Connecting or removing the peripherals during the operation may cause the damages or troubles.
<b>Check the icon status.</b>	If the wireless module, camera, GPS, or Micro SC Card has to connect to the unit while the power is on, it takes some time to be recognized. Use the function after checking the status of the icon. You will see the error message when the function is not ready to perform yet.
<b>Refer to the appropriate section of the User Manual to change the Micro SD Card and follow the instruction.</b>	When it is not handled accordingly, it may damage the Micro SD Card, or cause critical system errors.
<b>Do NOT open the side cover.</b>	It may damage Micro SD Card. Also, it may disturb a normal recording function, thus recording may not be stored properly.
<b>The maximum amount of time you can record per file is limited.</b>	The maximum amount of time for ONE file can record is up to 2GBytes. Recording will automatically stop when it reaches to maximum recording capacity (up to 3 hours, depending on your settings).
<b>Apply LCD Saving Mode On.</b>	We recommend that you apply LCD Saving Mode On to reduce the heat generation and battery consumption as little as possible. It is set as three (3) minutes by default.
<b>Do NOT separate the battery from the unit during operation.</b>	If battery is separated from the unit during operation, not through the proper steps indicated in the User Manual, it forcefully turns the system off, thus causing troubles in the system. If battery is separated in the middle of the recording operation, it may not store the date recorded.
<b>Please check the battery capacity.</b>	If remaining battery life is not sufficient, it may forcefully turn the system off.

## Contents

Safety Instruction .....	01~03
Before You Use .....	04
Contents .....	05
Kaishot Introduction .....	06
Kaishot Series Introduction .....	07
Components .....	08
The Name of Each Part .....	09
Connecting/Disconnecting Camera .....	10
Use of Battery .....	11~12
Micro SD Card Management .....	13~14
Outputting Video to the External Monitor .....	15
Kaishot Preview .....	16~19
Recording Functions .....	20~23
Playback Functions .....	24~31
Transmission (Real-time) Functions .....	32~35
Checking Messages .....	36~40
GPS settings Functions .....	41~43
Setup .....	44~51
Program Upgrade .....	52~56
Troubleshooting .....	57
Product Specifications .....	58~60

## KAISHOT Introduction

**KAISHOT** is a portable Micro Audio/Video Recorder (mobile Personal Video Recorder) which is used to record and store video and audio information, provide locational information, and transmit such information to control tower through wireless network, thus allowing real-time, on-site monitoring of the field operations.

### [KAISHOT Features]

**KAISHOT** is a digital audio/video portable product for recording and real time transmission with high resolution (H.264) and smaller size. Its main use is for security, military, police, sports and other various activities.

**KAISHOT** is a system that can store, review, and transmit the meta data all at once.

**KAISHOT** is designed to be protected from water, vibration, or any external shocks. Accessories such as belt clip, wire, and pin can be used for more convenient attachment of the product to the user.

## Kaishot Series Introduction

Series	Features
<p><b>IDF-PVR01 Series</b></p>  <p>Camera Connector</p>	<ul style="list-style-type: none"> <li>*Camera Connector Connected with Hybrid camera or Bullet camera</li> <li>* Hybrid Camera can use Wireless Communication Module/GPS/Camera together. Option Item : Wireless Communication Module and GPS</li> </ul>
<p><b>IDF-PVR02 Series</b></p>  <p>Camera Connector</p> <p>Connector for Communication Module</p>	<p>Camera Connector Connected with external equipment such as Bullet camera and GPS module</p> <p>Communication Module Can connect with Wireless Communication Module</p> <ul style="list-style-type: none"> <li>* Option for each</li> </ul>



## Components



Camera(Optional)

Recorder camera  
Camera(optional): Bullet  
Camera(1.5m Turn Core)



User Manual



Battery Pack



Micro SD Card



CD (Manual/Software)



Micro SD Card Reader



AC adapter/Power Cord  
(1.5m cable)



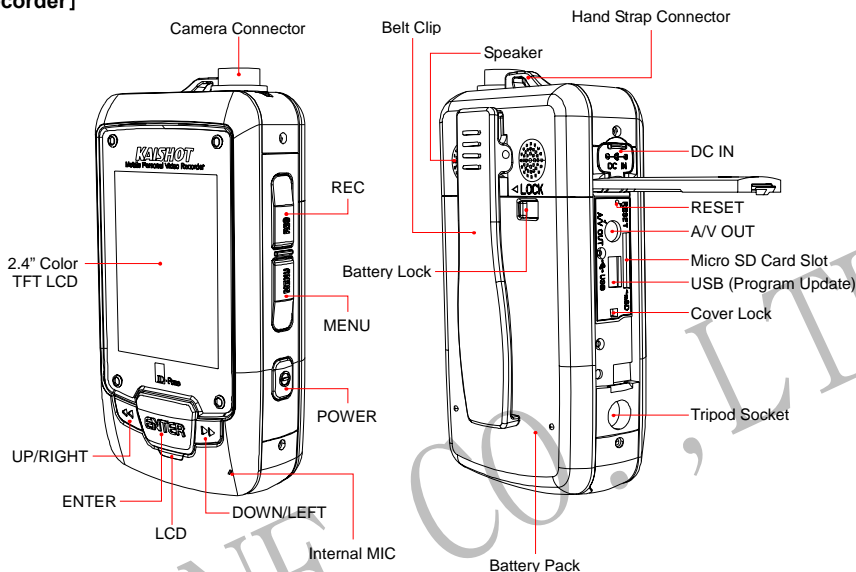
AV Cable  
(1.5m Turn Core)



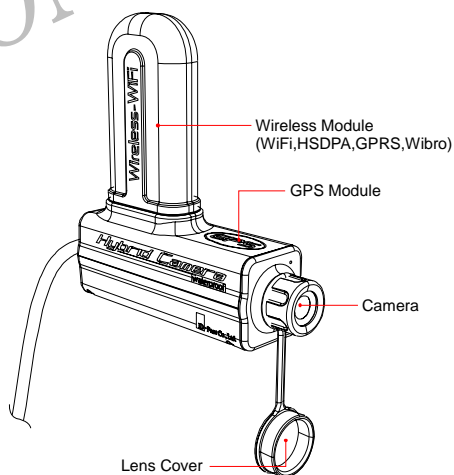
USB data transfer Cable  
((optional):1.5m Turn Core)

## The Name of Each Part

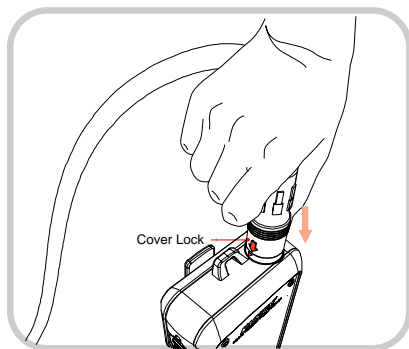
### [Recorder]



### [Hybrid Camera]

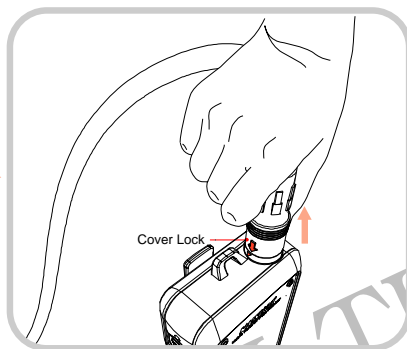


## Connecting/Disconnecting Camera



### [Connecting]

Line up the arrow as the picture above and push the cable down. It will lock automatically and will secure the connection.

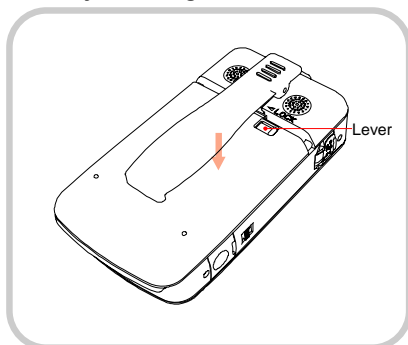


### [Disconnecting]

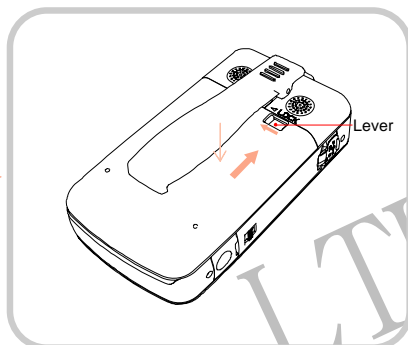
Hold the connector's lock position and pull it up to unlock the connection. Camera will be separated from the recorder.

## Use of Battery

### [ Battery Mounting ]

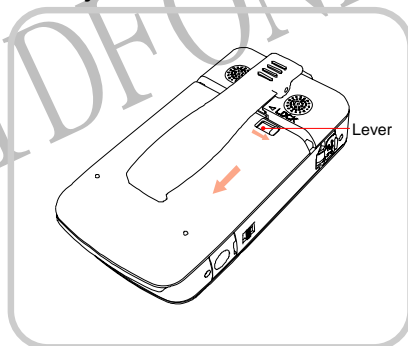


Align the battery with the power connector, and load the battery as shown on the figure.

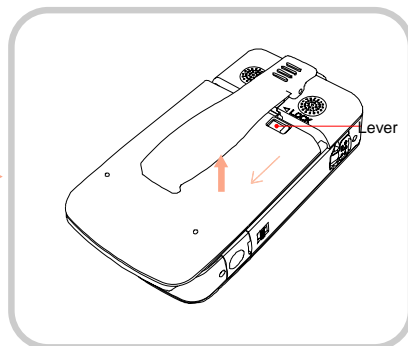


Push the battery up, and then slide the Lock to the left to engage the lock as shown.

### [ Battery Removal ]

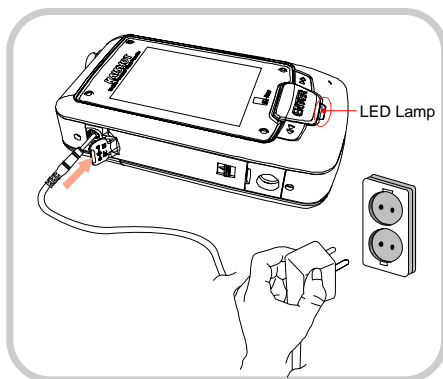


Slide the Lock to the right to release the lock, and pull the battery down a little as shown.



Lift the battery to separate it from the body component.

### [ Charging the Battery ]



Connect AC Adapter to the KAISHOT and insert power cord to the power outlet. When battery is fully charged, there will be green light lit on LED indicator.

### (LED Lamp Indication)

Status	LED Color
Recording / Transmission	Blue
Receiving Messages	Blink Red
Charging	Solid Red
Charging Complete	Green

### (Charging Time) - When system is turned off

	Small Cap. (2,100mAh)	Large Cap. (4,200mAh)
Time	4~5 hours	7~8 hours

### [ Battery Operation Time ]

	Small Cap. (2,100mAh)	Large Cap. (2,100mAh)
Continuous Recording	1hour 40 minutes	3 hours
Continuous Transmission	1hour 10-20 minutes	2 hours 30-40 minutes

### [ Notes on Battery ]

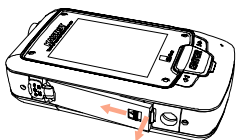
- The figures above are measured in the laboratory setting under the actual conditions. The actual figures in the use of different conditions may vary.
- The battery is a consumable. Duration of operation of battery will decrease over time.
- When the duration of operation of battery is reduced to half from the first time of use, it is required to replace with a new battery.  
(The warranty period of a new battery is six months after its purchase.)
- The battery is discharged even if you do not use it.

## Micro SD Card Management

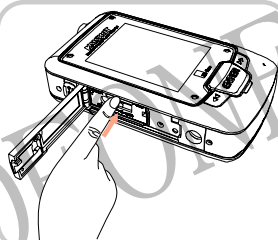
### ※ Caution

You must turn OFF the power before you insert or remove the Micro SD Card, or the stored information may be damaged or lost. If you have to remove the Micro SD Card when the power is ON, you should remove the SD Card through the Main Menu. (SEE the following page for related instruction.)

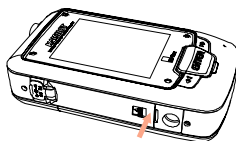
#### [Inserting SD Card]



Slide the side lock to the left and open the side cover as shown.

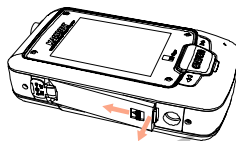


Push the SD Card into the slot until you hear click

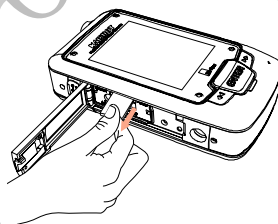


Close the cover..

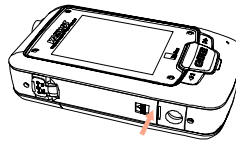
#### [Removing SD Card]



Slide the side lock to the left and open the side cover as shown

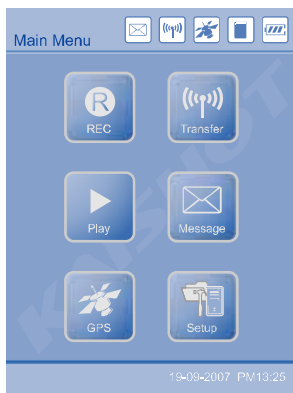


Slightly push the SD Card in until it clicks, then the SD Card will eject out of the slot



Close the cover..

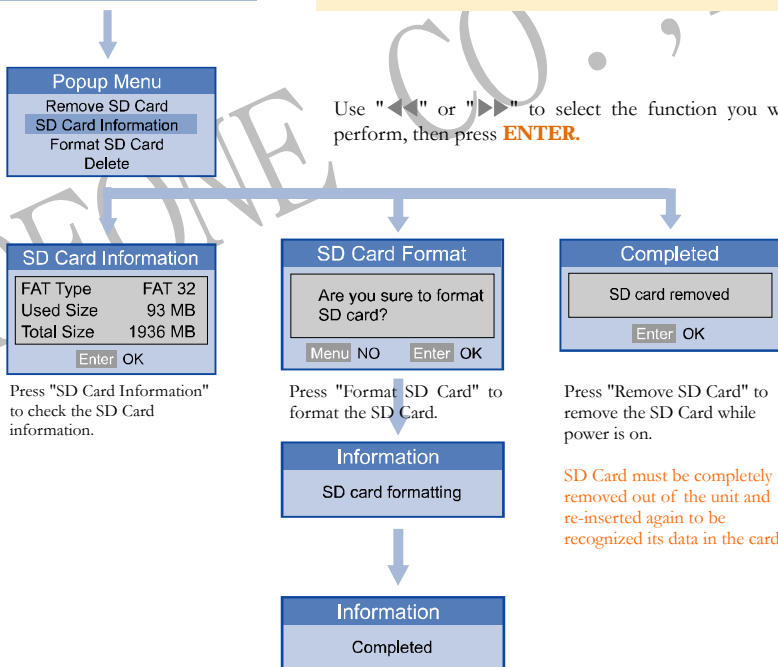
## [Managing the SD Card through Main Menu]



Press the **MENU** button in the Main Menu for 2-3 seconds.

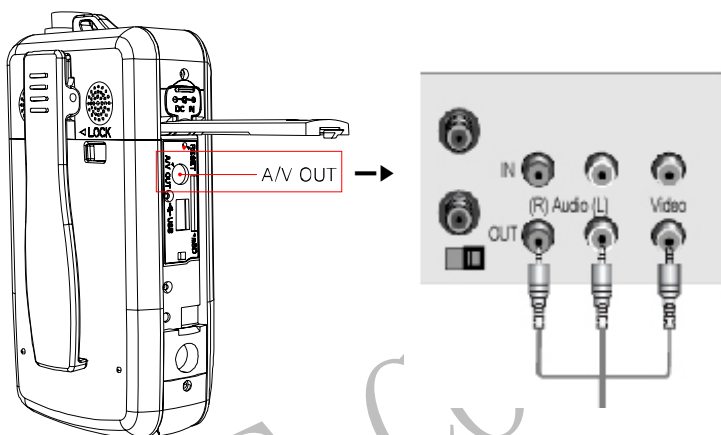
- \* You can also remove the SD Card while recording, transferring, or playing the data through this method.
- \* If you want to delete the file separately:
  - Refer to "Playback" for deleting recording files
  - Refer to "Messages" for deleting messages.

Note: You will return to the Main Menu if you press **MENU** button again shortly. If you press **ENTER** once you finish the final function, it will return to the previous screen you were running.



## Outputting Video to the External Monitor

You can play the files recorded by KAISHOT on TV or other external monitors.



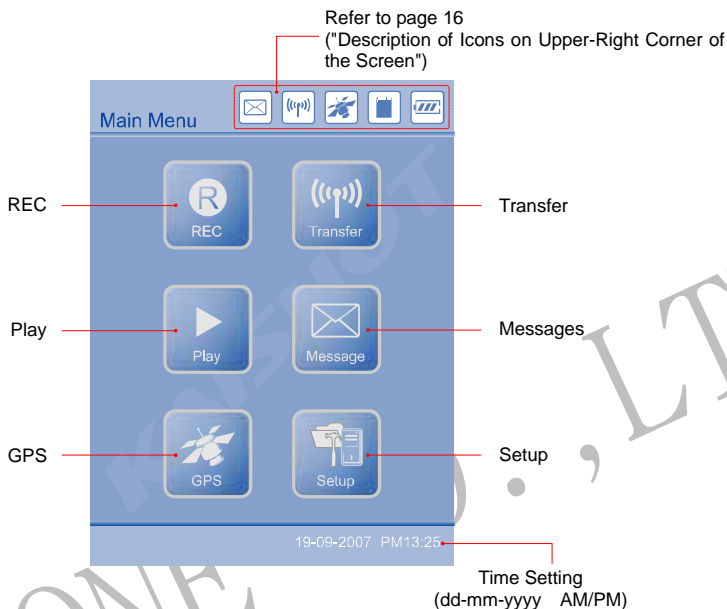
Turn off the power supply before connecting the recorder to the external devices.  
Open the side cover and connect the supplied AV cable with external monitor's AV cable.

(Caution: It may not work properly if you use a cable from different source.)



## KAISHOT Preview

### [Main Menu]


















### [Function Buttons]

①	- Power ON/OFF
MENU	- Press short: move to the previous or next menu - Press long (2-3 seconds): move back to the Main Menu
REC	- Press long (2-3 seconds): start recording - Also functions to stop recording, real-time transmission, and playback.
ENTER	- Operates selected functions. - Press short while recording or playback: moves to check messages (does not stop recording or playback) - Press long (2-3 seconds) while recording or playback: pauses recording or playback, or resumes recording or playback. - Press short while checking messages: moves back to the previous menu
▶▶	- Fast-forward or move to the right
◀◀	- Rewind or move to the left

※ Please be advised that each function button performs differently in different use.

**[Description of Icons on Upper-Right Corner of the Screen]**

	New message or image file is received
	There is no message or image file, or no file is received
	Wireless module such as WiFi is connected
	Wireless module such as WiFi is NOT connected
	Wireless module such as WiFi is turned OFF
	GPS is connected
	GPS is NOT connected
	GPS is not activated (GPS OFF)
	SD card is inserted
	SD card is NOT inserted
	Battery Charge Level Indication (  →  →  →  )

## [KAISHOT Main Function]

Main Function	How to Use
Power	“①” Press long (2-3 seconds) to turn power ON/OFF
Recording	<ul style="list-style-type: none"> <li>▪ Recording will start when you select REC icon and press <b>ENTER</b> button.</li> <li>▪ Recording is possible, except when data is being transmitted real-time, by pressing <b>REC</b> button for 2-3 seconds.</li> <li>▪ Recording will end when you press <b>REC</b> button while recording.</li> <li>▪ Always check the camera connection, Micro SD Card memory status, and remaining battery life before recording.</li> </ul>
Playback	<ul style="list-style-type: none"> <li>▪ You can see the list of recorded files by selecting Play icon. Select the file you want to play then press <b>ENTER</b> button.</li> <li>▪ Playback will end when you press <b>REC</b> for 2-3 seconds while playing.</li> </ul>
Transmission	<ul style="list-style-type: none"> <li>▪ Real-time transmission will start when you select Transfer icon and press <b>ENTER</b> button.</li> <li>▪ Transmission will end when you press <b>REC</b> button.</li> <li>▪ Check the connection of camera/wireless module/ remaining battery life.</li> <li>▪ Data is NOT being recorded when file is being transmitted.</li> <li>▪ <b>You can watch real-time video through KAISHOT Viewer</b></li> </ul>
Messages	<ul style="list-style-type: none"> <li>▪ You can check the list of received messages in the Main Menu by pressing Message icon, and select the message you want to check then press <b>ENTER</b> button.</li> <li>▪ You can check the message while recording, playback, or transmission if you press <b>ENTER</b> button.</li> <li>▪ Wireless module has to be connected to check the messages.</li> <li>▪ <b>You can send messages through KAISHOT Viewer.</b></li> </ul>

Functions	How to Use
GPS	<ul style="list-style-type: none"> <li>▪ Select GPS icon and press <b>ENTER</b> button to change your GPS settings.</li> <li>▪ Check GPS module.</li> <li>▪ GPS information is used to set up time, store GPS data while recording, and transmit GPS information while real-time transmission.</li> </ul>
Setup	<ul style="list-style-type: none"> <li>▪ Select Setup in the Main Menu and press <b>ENTER</b> button to change or set up the property value.</li> <li>▪ <b>Record Mode</b> You can check and change the value about Recording Functions.</li> <li>▪ <b>Transmission Mode</b> You can check and change the value about Real-time video transmission and WiFi that are related to wireless module.</li> <li>▪ <b>GPS Setup</b> You can check and view about GPS Functions.</li> <li>▪ <b>Tools Setup</b> You can check and change various setup values such as LCD Saving Mode / Languages / LCD Brightness.</li> </ul>

\* When system is in Lock mode, the only button that can be used is to Unlock the system.

## Recording Functions

- Recording Functions Details

Icon Information in the Screen during Recording
Starting and Stopping a Recording
Pausing, and Restarting a Recording after Pausing
Locking and Unlocking a Recording Function
Checking Messages


- You may not be able to perform Recording when:
  - Camera is not connected
  - Micro SD Card is not inserted or has insufficient memory capacity left
  - Remaining battery life is insufficient
  - Side cover is opened
- Recording may stop automatically when:
  - One file has reached its maximum recording capacity, or any of the situation above (You may not be able to perform a recording function) occurs.
  - When Micro SD Card is not handled in accordance with the User Manual, Micro SD card, data or information stored in Micro SD card may be damaged or lost.
- Values changed in the Setup will affect the properties of recordings.
- Recording will continue while checking the messages.

## [Icon Information in the Screen during Recording]



## [Starting and Stopping a Recording]

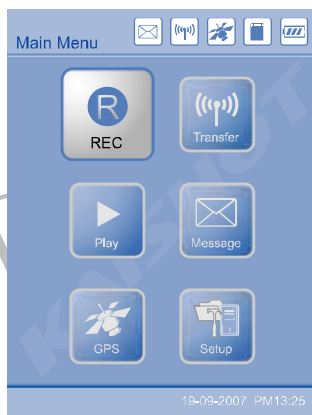
### Starting a Recording

- Select REC icon in the Main Menu and press **ENTER** button to start recording.
- Recording is possible, except when data is being transmitted real-time, by pressing **REC** for 2-3 seconds
- Once recording starts,  icon will appear.

### Stopping a Recording

- Press **REC** button for 2-3 seconds to stop recording.

### How to Start a Recording





Select REC icon and press **ENTER**.





## [Pausing, and Restarting a Recording after Pausing]

### Pausing while Recording



- Press **ENTER** button for 2-3 seconds to pause recording.
- Icon will change  to 

### Restarting after Pausing



- Press **ENTER** button for 2-3 seconds while pausing a recording to restart a recording.
- Icon will change  to 

## [Locking and Unlocking a Recording Function]

### Locking while Recording

- Press **MENU** button for 2-3 seconds, then Lock feature will be activated.
- Lock icon will changes  to 
- Except for pressing **MENU** again for 2-3 seconds to deactivate lock feature, no buttons can function as usual.

### Unlocking

- Press **MENU** button for 2-3 seconds to unlock.
- Lock icon will change  to 
- All buttons will function as usual.



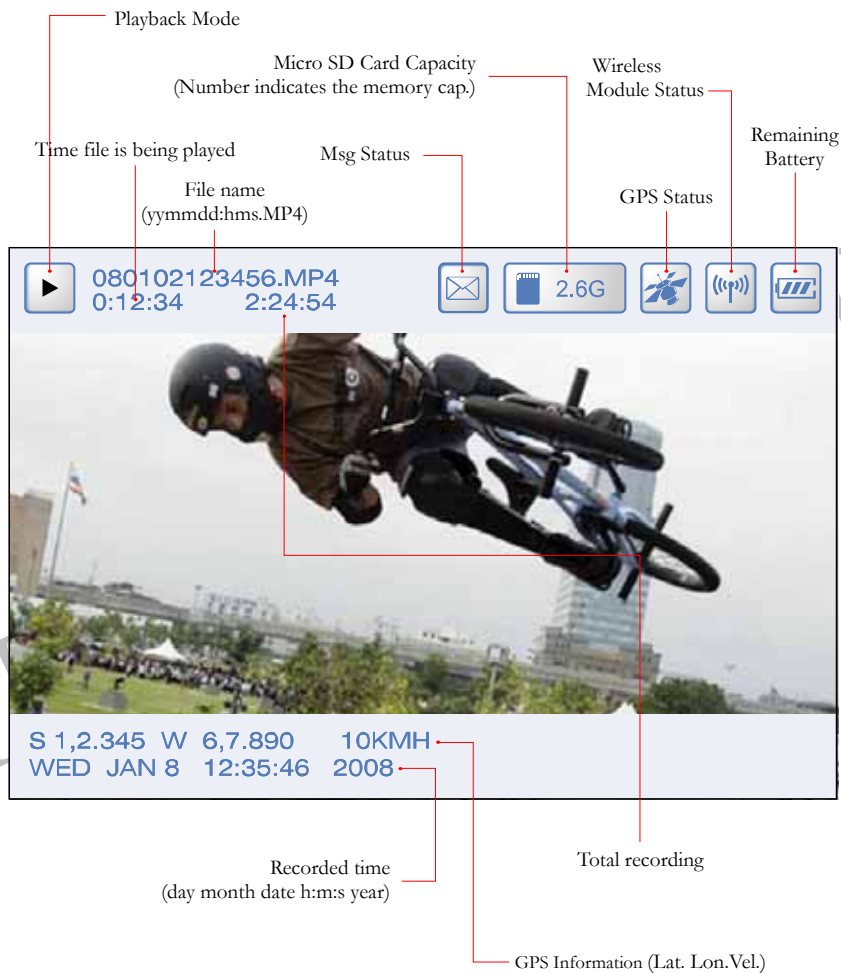
## Playback Functions

- Playback Functions Details

Icon Information in the Screen during Playback
Starting and Stopping a Playback
Pause / Restart / Return to the Start of the Playback / Fast-forward and Rewind
Adjusting OSD, Audio Volume, LCD Brightness
Micro SD Card Management while Playback
Checking Messages while Playback(Please refer “Checking Messages”)


- You may not be able to perform a Playback function when:
  - Micro SD Card is not inserted or not recognized.
  - Remaining battery life is insufficient.
- Playback may stop automatically when:
  - Any of the situation above (You may not be able to perform a Playback function) occurs.

## [Icon Information in the Screen during Playback]



## [Starting and Stopping a Playback]

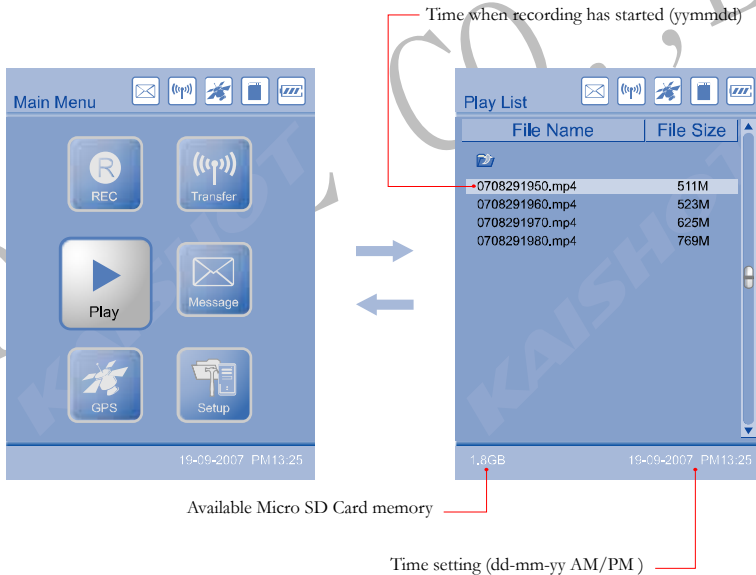
### Starting a Playback

- You can check the list of files recorded when you press “Play” button. Select the file you want to watch and press **ENTER** to start playback.
- The icon will change to 

### Stopping a Playback


- Press **REC** button for 2-3 seconds to stop playback.

### Playback Screen




**[Pause / Restart/ Return to the Start of the Playback / Fast-forward and Rewind]**


## Pause while Playback Mode

- Press **ENTER** button for 2-3 seconds to pause playback.
- Icon will change to 



## Playback after pause

- Press **ENTER** button for 2-3 seconds while pause mode to restart playback.
- Icon will change to 



## Return to the Start of the Playback

- Press  button for 2-3 seconds to return to the beginning of the file and play again.

## Rewinding

- Press  button shortly (less than 2 seconds) to rewind the file.
- Press  again shortly (less than 2 seconds) to resume playback at a normal speed.

## Fast-forwarding while Playback

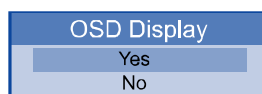
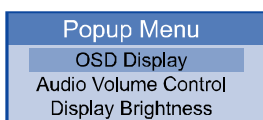
- Press  button shortly (less than 2 seconds) to fast forward the file.
- Press  again shortly (less than 2 seconds) to resume playback at a normal speed.

**[Adjusting OSD, Audio Volume, LCD Brightness]**

- If you press **MENU** button 2-3 seconds while playback, Popup Menu appears.
- If you press **MENU** button shortly (less than 2 seconds), the Menu will disappear.

**Changing OSD Status**

- Select OSD Display and **ENTER** button. Use arrow to select Yes or No.

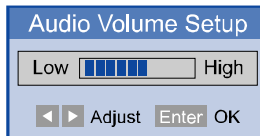
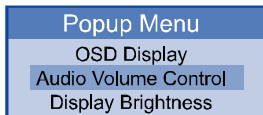


- OSD Display will not appear once you Select No.



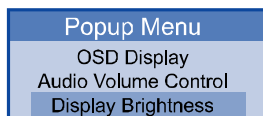
## Adjusting Audio Volume while Playback

- Select desired Audio volume and press **ENTER** button. Adjust volume with      or      button.



## Adjusting LCD Brightness while Playback

- Select desired LCD Brightness and press **ENTER** button. Adjust the brightness with      or      button.



### [Micro SD Card Management in the Recording File Menu]

- Press **MENU** button in the Play List for 2-3 seconds. Popup Menu will appear.
- Popup Menu will disappear when you press **MENU** button again, without changing any values.

#### Removing SD Card / SD Card Information / SD Card Format

- Refer to **Micro SD Card Management** (page.13)

#### Playback from the File List

- Choose the file you want to play and select Play icon, then press **ENTER** button to start playback.

