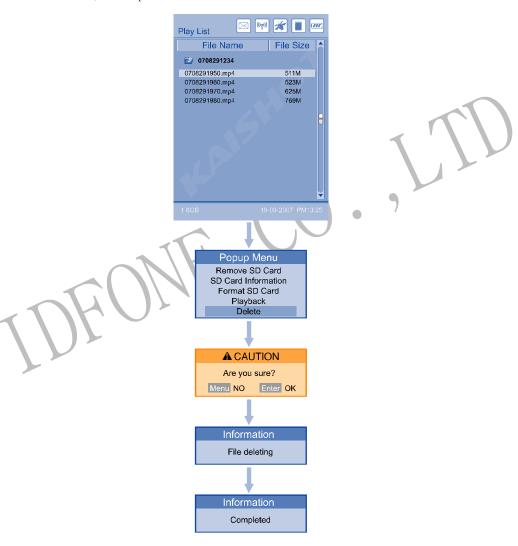
Deleting File / Directory from the File List

 Choose the file or directory you want to delete and press MENU button for 2-3 seconds. Select DELETE, and then press ENTER button to delete.



Playback Functions 31

Transmission Functions (Real-time Streaming)

Transmission Functions Details

Icon information in the Main Screen While Real-time Transmission

Starting and Stopping Real-time Transmission

Locking and Unlocking while Real-time Transmission

Checking Messages while Real-time Transmission

- You may not be able to transmit the video when:
 - Camera is not connected
 - Wireless module is not connected, or signal is weak
 - Remaining battery life is insufficient
- Real-time transmission may stop automatically when:
 - Any of the situation above (You may not be able to transmit the video) occurs, except the case when the signal is weak.
- Values changed in the Setup will affect the properties of transmission, as well as the condition of transmission.
- Transmission will continue while checking the messages.
- You can watch the real-time transmitted video via KAISHOT Viewer. For the information regarding KAISHOT Viewer, please refer to the KAISHOT Viewer Manual.

[Icon information in the Main Screen while Real-time Transmission]



* When wireless module status icon shows weak signals, real-time transmission may not work properly.

[Starting and Stopping Real-time Transmission]

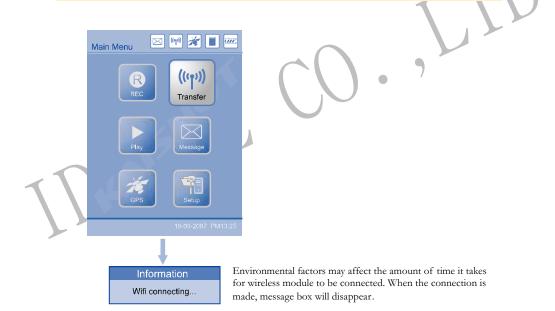
Starting a Real-time Transmission

• Select "Transfer" icon in the Main Menu and press **ENTER** button to start transmission.

Stopping a Real-time Transmission

• Press **REC** button for 2-3 seconds to end transmission.

Real-time Transmission Main Menu



[Locking and Unlocking while Real-time Transmission]

Locking while Real-time Transmission

- Press MENU button for 2-3 seconds while transmission to activate Lock function.
- Lock Icon will change from 🔒 to 🔒
- Except pressing MENU button for 2-3 seconds to deactivate Lock function, no buttons will function normally.

Unlocking

- Press MENU button for 2-3 seconds to Unlock.
- Lock icon will change from 🔒 to 🔒
- All buttons function normally.



Messages

Message Functions Details

Checking Messages(Please refer "Trouble Shooting" for possible problems while checking messages.)

Using Zoom Function while Checking Image Messages

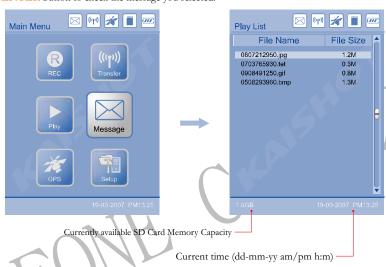
Micro SD Card Management while Checking Messages

- You may not be able to check messages when:
 - Micro SD Card is not inserted, or is not recognized.
 - Remaining battery life is insufficient.
- Checking messages may terminate automatically when:
 - Any of the situation above (You may not able to check messages) occurs, message checking will terminate automatically.
- You can send messages via KAISHOT Viewer.
- Values changed in the Setup will affect the message checking function.

[Checking Messages]

Checking Messages

You can check the list of messages in the Main Menu by selecting Message icon, and press
 ENTER button to check the message you selected.



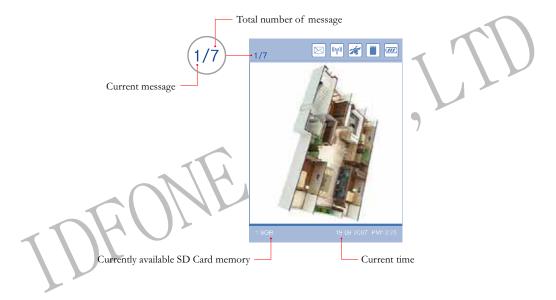
• If there is not messages, you will see the blank screen in the Message menu.



- You can check messages by pressing ENTER button while recording, playback, or real-time transmission. Functions will normally continue while checking messages.
- While Checking messages, press ◀◀ to check previous message, ▶▶ to check next message.

Receiving a New Message while Checking Messages

• During any operations, any new message received will appeare on the screen.



Terminating Message Checking

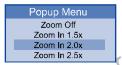
You can return to the Message Menu if you press MENU button shortly (less than 2 seconds) while checking messages. If you press MENU button again in the Message Menu, function that was being performed previously will resume.

[Zooming In a Message]

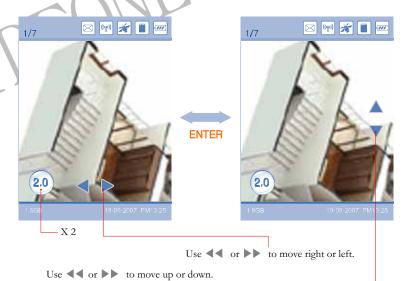
- Menu screen will appear if you press MENU button for 2-3 seconds while checking message.(Previously performed function will resume if you press MENU button shortly (less than 2 seconds)
- If you press MENU button in the Menu screen without changing any settings, Popup Menu will disappear.
- Zoom function only supports image files.

Image Zoom Setup while Checking Messages

• Select applicable enlargement, then press **ENTER** button.



Example of 2 times enlargement. Use **ENTER** button to move up/down, or right/left.



[Managing Micro SD Card in the Messages Menu]

- Popup Menu will appear when you press **MENU** for 2-3 seconds in the Message List.
- If you press MENU button in the Popup Menu without changing any settings, Popup Menu screen will disappear.

SD Card Removal / SD Card Information / SD Card Format

• Please refer to Micro SD Card Management..

Deleting Messages in the Message List

- Choose the files you want to delete, select DELETE icon, then press ENTER button to delete the selected files.
- Please refer to pg. 30 for Deleting Recording Files.

GPS Setup

• GPS Setup Functions Details

GPS Setup

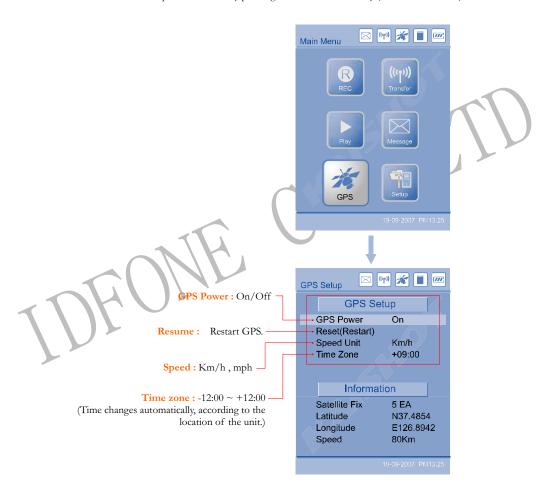
Checking GPS Information

GPS Setup and Checking Messages while Checking GPS Information

- GSP Information is used for Recording and Transmission.
 If GPS is not connected properly or OFF, or if it is impossible to receive information to it, default GPS value will be used.
- You can check the GPS connectivity information via GPS icon. When GPS is not connected, it will NOT show any error messages.
- Although GPS is properly connected, you may not be able to receive GPS information if you stay indoors.
- Select GPS icon in the Main Menu and press **ENTER** button to check and change the GPS setup.
- You will be able to return to the Main Menu, or Setup screen, if you press MENU button shortly (less than 2 seconds).

[GPS Setup]

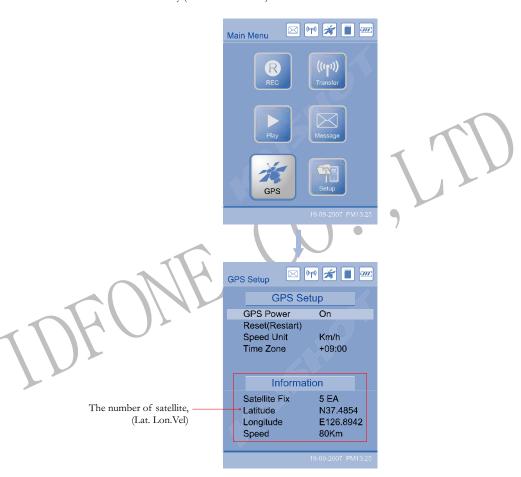
- Select the value you want to change by using $\ \ \, \blacktriangleleft \ \ \,$ or $\ \ \, \blacktriangleright \ \,$, and press <code>ENTER</code> button.
- You will return to the previous screen by pressing **MENU** button shortly (less than 2 seconds).



GPS settings Functions

[Checking GPS Information]

- Check GPS information by pressing GPS icon.
- Press **MENU** button shortly (less than 2 seconds) to return to the Main Menu.



Setup

• Setup Details

Record Setup		
Stream Setup		
GPS Setup (Refer to GPS Setup Function)		
Tools Setup		

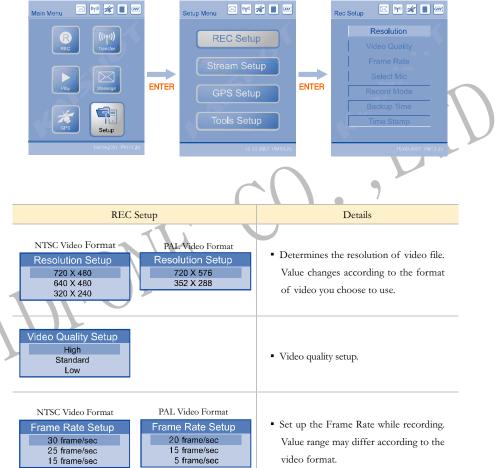
- Select Setup in the Main Menu and press **ENTER** button to set up the value of each functions.
- Press MENU button shortly (less than 2 seconds) to go back to the Main Menu.

• Setup Menu

	Record Setup Stream Setup		Tools Setup	
	- Resolution	- Resolution	- Display Brightness	
	- Video Quality	- Video Quality	- Audio Volume	
	- Frame Rate	- Frame Rate	- Saving Mode	
	- Select Mic	- Select Mic	- Video Format	
	- Record Mode	- IP server Setup	- Micro SD Card	
	- Backup Time	- Network Setup	- Message Alarm	
	- Time Stamp		- Language	
			- Time Setup	
			- Version Information	

[Record Setup]

- Select REC Setup in the Setup menu and press **ENTER** button.
- Press MENU button shortly (less than 2 seconds) to return to the Main Menu.



45 Setup

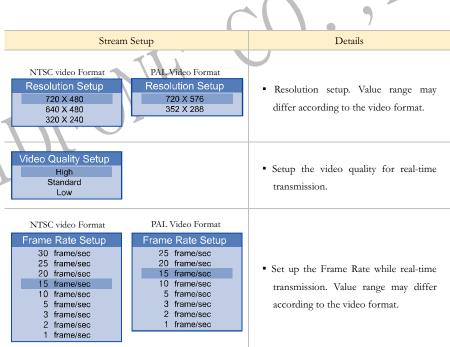
5 frame/sec

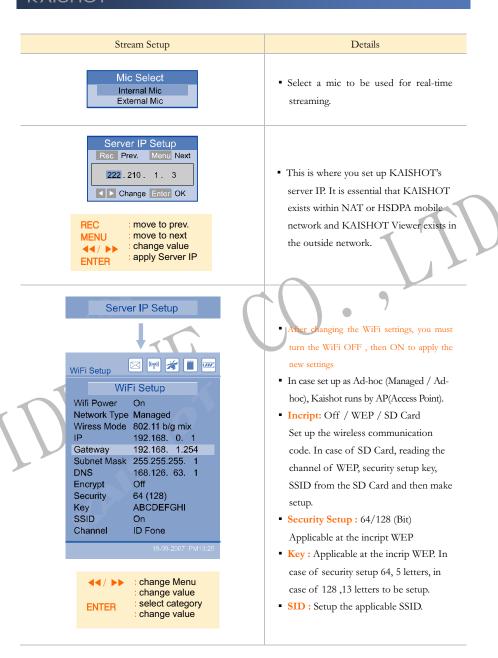
REC Setup	Details
Mic Select Internal Mic External Mic	Select a mic to use for recording.
Record Mode Video & Audio Video Audio	You can choose to record audio and video, or audio only or video only.
Backup Time Setup 0 Min 5 Min 15 Min 30 Min	 When set up as "0 min", you can record up to the maximum amount of time. (except for abnormal situations) When "Backup Time Setup" is completed, recording starting time folder is created when record starts, and will be recorded in the new file at
Time Stamp Setup Yes No	If selecting "Yes", storing the recording time on the OSD while recording, and the recording time is shown at the display below on the OSD while playback.

[Stream Setup]

- Select Stream Setup in the Setup, and press **ENTER**.
- Press MENU" button shortly (less than 2 seconds) to return to the previous menu.







Use AD-HOC Mode (Use as AP Mode)

 $\ ^{\bullet}$ - Set up the AP name of the product (SSID).

*** Caution**

Be sure that the surrounding wireless network environment does not have the same SSID setup.

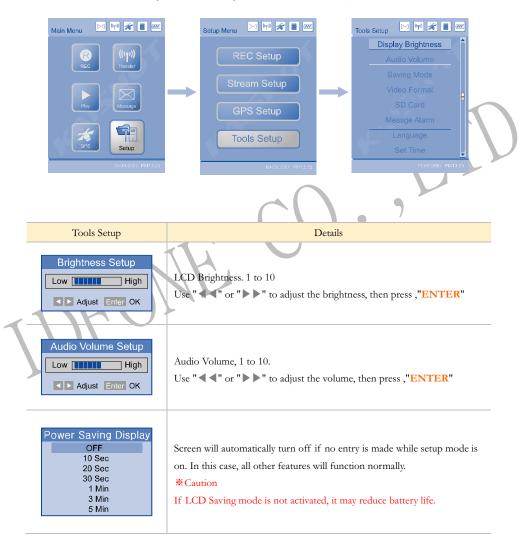
- Select the network type, choose AD-HOC mode using **ENTER** button.
- Select WiFi Power, set it on OFF for 10 seconds using **ENTER** button, and turn it back ON again.

Update the Network settings by using SD Card

- Popup menu will appear when you press MENU for 2-3 seconds in the stream setup List.
- If you press Menu button in the Popup menu without changing any settings, Popup menu screen will disappear.
- After selecting the Update WiFi Settings and press "ENTER".
- Must have WiFi-setting ini file inside the SD card.

[Tools Setup]

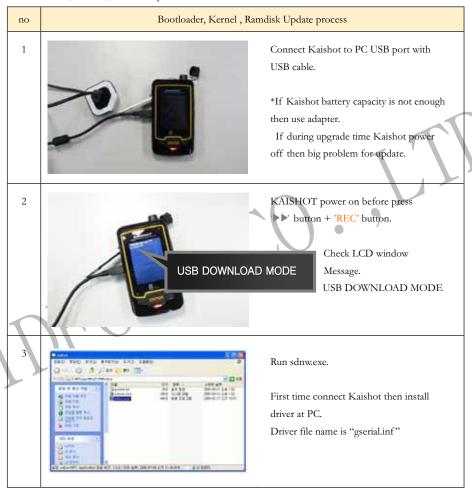
- Select Tools Setup in the Setup menu, and press **ENTER** button.
- It will return to the Setup menu when you press **MENU** button shortly (less than 2 seconds).

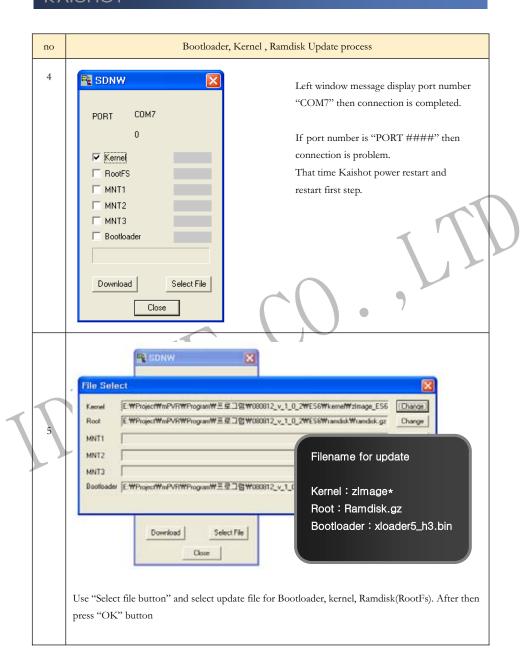


Tools Setup	Tools Setup Details	
Video Format Setup NTSC PAL	Decide video input/output format	
SD Card Setup Remove SD Card SD Card Information Format SD Card	Refer to Micro SD Card Management	
Message Alarm Setup None LED Sound LED + Sound	Choose the method of how you want to be indicated when message is received. It will continue to alarm until the message is being checked.	
Language Setup English Korean Chinese Japanese	This product supports operation in English, Korean, Chinese, and Japanese.	
Time Setup Rec Prev. Menu Next 2008 . 02 . 13	Time Setup cannot be conducted while GPS is received. Time Setup can be conducted while GPS is not being received.	
Version information V1.XX	Software version information.	

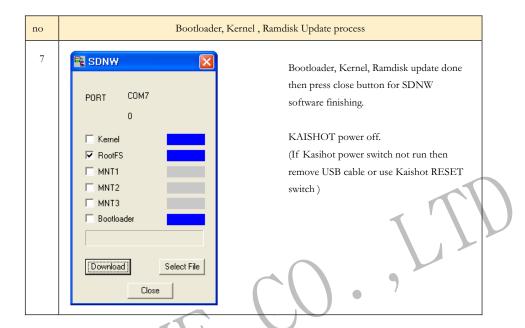
Program Update

lacktriangle Bootloader, Kernel , Ramdisk Update

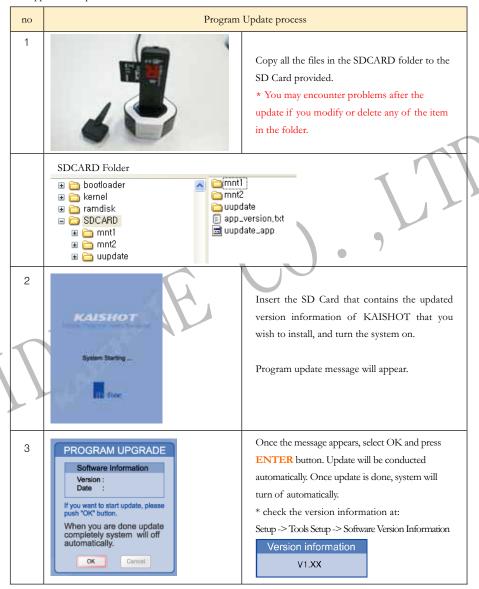








◆ Application Update



Troubleshooting (Pop-up window will disappear when you press ENTER)

	Error Messages	Possible causes and solutions
	▲ CAUTION SD card memory is full.	This message will appear when there is not enough space remained in Micro SD card. Change your Micro SD card accordingly.
	SD card failure. Insert SD card in slot.	This message will appear in the beginning of recording or while recording/ playback if the Micro SD card is not inserted. Insert your Micro SD card, or change the card accordingly.
	Camera connection error. Check connection with camera cable.	The camera is not properly connected to the recorder. Ensure the camera is connected to the recorder securely and connect the camera properly.
	Side cover open. Close side cover.	This message appears when the side cover is open in the beginning of recording or while recording. Recording will rerminate it the cover opens while recording. (Data may not be recorded)
	A CAUTION Battery empty. Soon, system power will be off.	The battery is almost empty. The system will automatically turn off after terminating all functions. Replace the battery or recharge the battery.
	▲ CAUTION WiFi is not found Check WiFi	This message appears when WiFi is not connected / found. Try again after connecting WiFi.
	▲ CAUTION WiFi signal level down Check WiFi setting or signal	This message appears when wireless setup has incorrect value, or WiFi signal is weak. This may occur when WiFi is connected or removed while power is on. Move to the nearest Mesh or AP. Reset the wireless setup value if Mesh or AP are located close. Turn WiFi off and then turn it on again.

 $[\]ensuremath{\,\varkappa\,}$ Call for the service if the same trouble appears after following the Troubleshooting.

Troubleshooting 57

Product Specifications

[KAISHOT]

	Technical Specifications		
CPU	ARM920T		
Mic Input Internal 1 Ch , External 1 Ch			
Internal Speaker	Output Power: 1W		
Enternal I /O Interfere	USB 1.1 : 1port		
External I/O Interface	AV out : 1ea [Φ3.5 AV Jack (RCA)]		
LCD	2.4 " color TFT-LCD (QVGA)		
Micro SD Card/Button	Provided 1GB / 6 buttons		
D	DC 3.7V(using battery)		
Power supply	DC 5.0V(using AC-DC Adapter)		
	Standby (GPS, WiFi, Camera:off): 1.65W		
Damas Canananian	Playback (GPS:on, WiFi:off): 2.4W		
Power Consumption	Recording (GPS:on, WiFi:off): 3.7W		
	Real-time transmission (GPS:on, WiFi:on) : 6W		
AC Advance	AC 100~240V, 50~60Hz		
AC Adapter	DC 5V, 2A		
	Li-Polymer, DC 3.7V		
Battery Pack	2,100mAh : 63(H)x80(V)x10(w)		
	4,200mAh : 63(H)x80(V)x17(w)		
Dimension	63mm(W) X 110mm(D) X 28mm(H)		
Operational Temp.	-10 ℃ ~ 60 ℃		
Material Used	Polycarbonate		
Water Resistance	IP 65		
Wistalia	169.5g (2,100mAh Battery)		
Weight	213.0g (4,200mAh Battery)		

Product Specifications 58

[Hybrid Camera: Standard Camera]

	Technical Specifications	
TV system	NTSC / PAL	
Image Sensor	1/4" CCD	
Lens and View Angle	3.6mm(standard) F2.0 / 68°, lens exchangeable	
Scanning system	525 Lines, 60 fields/sec / 625 Lines, 50 fields/sec	
Min. Illumination	0.5 Lux, F1.2, 5600 °K	
* * Wireless Module	WiFi(802.11 b/g) , HSDPA, WiBro	
* * GPS Module	SiRF star 3(Built In)	
Dimension	105mm(W) X 30mm(D) X 100mm(H) (WiFi included)	
Operational Temp.	-20 °C ~ 50 °C	
Material Used	Polycarbonate	
Water Resistance	IP 65	
Weight	129g	

^{**} Product information and specification subject to change without notice.

※ ※ : Optiona

Product Specifications

[Functional Specifications]

		Functional Specifications	
	os	Embedded OS (Linux)	
Video Input (Camera)		1Ch, NTSC/PAL(Selectable)	
Video Output		1Ch, NTSC	C/PAL(Selectable)
Resolution Video Quality		NTSC: [720 X 480] [640 X 480] [320 X 240] (W X H)	
		PAL: : [720 X 576] [352 X 288] (W X H)	
		High[1.5Ml	ops], Standard[1Mbps], Low[700Kbps]
	D . 12.	NTSC	30/25/15 fps
Frame	Recording	PAL	25/15/5 fps
Rate	Transmission	NTSC	30/25/20/15/10/5/3/2/1 fps
		PAL	25/15/5/3/1 fps
Recording Mode		[Video + Audio] [Video]	
Real-time Protocol Codec File Format Message Format		RTSP/RTP/RTCP	
		H.264(Video), AAC(Audio)	
		mp4	
		Text/bmp/jpg/gif Format	
		bmp/jpg/gif Image zoom (x1 , x2, x2.5)	
Storag	e Medium	Micro SD Card (support up to 8GB)	
Recording time		Continuous recording: 3hours	
		Micro SD Card 1GB recording time: 1 hour 10 mins (720 X 480 / 30fps base)	
One-push recording		Start recording by REC button	
Playback speed		Playback : [x1] [x4] / Rewind : [x4]	
LCD Brightness		Dark ←→ Bright, 10 steps	
LSD Saving Mode		[off] [10 s] [20 s] [30 s] [1 m] [3 m] [5 m]	
Language support		[Korean][English][Chinese][Japanese]	

 $[\]ensuremath{\mbox{\%}}$ Product information and specification subject to change without notice.

Product Specifications 60

FCC NOTE

:This 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 radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee 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.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,

INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Thank you

Questions and Warranty inquiry

Give us a call if you have any questions or before visiting our service center.

You can download latest version of KAISHOT Firmware and Manual in

http://www.idfone.co.kr or http://www.kai-shot.com

Customer Service Center 02-2109-6490

Please be sure to use battery charger, battery and peripherals recommended by manufacturer to prevent damage or breakage to the KAISHOT.

Warranty period: Battery charger (1 year), Battery (6 months)

Any damage caused by the use of imitation product is liable to the user's responsibility.