4 CH Vehicle Mobile DVR



User Manual 2013 AUG V2.1



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A. Features

- Max. up to 4 CH vehicle cameras, can take record for inside and outside the vehicle.
- Video output for live view, playback with monitor.
- H.264 Compression format.
- Recording format : D1 and CIF.
- Built-in single channel microphone.
- Quick Search Overall Event Log.
- The full recording time and date can be showing in the monitor directly.
- Auto-Record after memory card Plug-in and Power Supplied.
- Data Store in SD card for better safety and anti-vibration performance.
- 4 sets of alarm input ports, built-in buzzer.
- Support Record Video with audio, video, G-sensor and GPS data at the same time.
- Optional for 3G module, control the driving status and data at any time.

B. Specification

Items			Description	
Video format		NTSC	PAL	
Video input		4CH Input		
Audio	input	1CH Input		
Video d	output		1CH output	
Audio d	output		1CH output	
Alarm	input	4 alarm input		
Alarm output			Buzzer	
Display	mode	Full	Screen, 4 Split	
Record	highest	D1 720 x 480	D D1 720 x 576	
resolution	normal	CIF 360 x 240	0 CIF 360 x 288	
Recording Frame		Max. 120 FPS	Max. 100 FPS	
Compressio	on Format	H.2	264 Technology	
Operating	g system	Err	nbedded Linux	
Single-tasking		Rec	cord / Playback	
Recording mode		Full-time recording		
LED indicator		Power, recording, GPIO		
Buzzer		Video Loss		
Stora	age		SD Card	
Back-up	system	C	arBox Player	
Firmware	upgrade		SD Card	
Multi-language		English /Simplified Chinese /Traditional Chinese / Japanese /Spanish / German/ Korean (W/O 3G model)		
G-SENSOR		· · · · · ·	Yes	
3G-module		Optional (USB 3G	dongle or built-in 3G module)	
GPS position		Optional		
Control method		IR remote controller		
Power supply		DC+12V / 500mA (not including Cameras)		
Dimension		115mm x 132.7mm x 30mm (W x D x H)		
Weight		0.4kg (including SD card)		
Operation Temperature		-20°C ~ +65°C (inside vehicle)		
Accessories	Standard	3M Extending Microphone,	Pin Power Cable, Alarm Cable, IR Lead, Remote Control, Driver CD, Quick Guide enna, 1.5M Extension Antenna Cord	
	Optional	3G Module	e, G-Mouse, SD Card	

C. Product Appearance

GPS



POWER IN

ALARM IN

MIC

3G USB

3G USB dongle

ES)



Cable Installing Instruction



A: Audio Out V: Video Out 1: CH 1 Video In 2: CH 2 Video In 3: CH 3 Video In 4: CH 4 Video In

D. Product Dimension







E. Record / Stop-Record



1. Power on / Record

Insert SD card into slot and then power on the machine, waiting about 30 seconds after booting completed.

During the DVR booting up, the record indicator will start flashing as the recording is in progress.

- Green light: light on means power on; light off, means power off.
- Yellow light: Light off means GPS not ready, light on means GPS positioning ready.
- Red light: Red Led flashing means DVR is on recording. Red Led off means No-Record. Red Led flashing quickly means playback file.
- ★Remark: When DVR is on playback mode, the DVR will stop record.

2. Turn off / Stop record

After Power-off, DVR will stop record, you can remove SD card and plug it to PC to review the file.



- (1) Before using the memory disk, please format the disk first using the software player in the CD-ROM. If not, device will automatically erase all data in the memory disk before recording.
- (2) All memory disks have limited lifespan. Please regularly watch videos on PC and check the memory disk to ensure proper functioning.

F. System operating instruction

1. Through IR Remote controller instruction As following is the key mapping table for IR Remote controller :



2 Main menu page switch



Page 5/5 setting(with 3G Module)

♦ IR Remote controller Instruction

Manu Setting Push the IR 🖾 key, enter OSD Manu Setting page \circ After entering the OSD Manual Setting Page, Push 💽 key, could change setting for selected item: And push 💽 key to enter each kind of setting page. For leaving each kind of setting page, please push 🖾 to leave and come back to the OSD Setting page.

System Setup instruction

(1) Set Encode Parameter



- Select b to set each Encode parameter item, after setting then push key to save all the setting.
 - Encode Frame Size : D1, CIF ($\square \rightarrow CIF$)/($\square \rightarrow D1$).
 - Encode Frame Rate : 5, 10, 15, 20, 25, 30
 - ($\blacksquare \rightarrow decrease$)/($\blacktriangleright \rightarrow increase$).
 - Encode Quality: Low/Normal/High
 - ($\blacksquare \rightarrow Normal$), ($\blacktriangleright \rightarrow Hlght$).
 - D1 max. 15 / CIF max. 30.

(2) Set Video Parameter



IR remote controller operating instruction

- Up/Down key→ Select current channel for setup
- Left/Right key→ Set brightness/contrast/hue for current
- channel (Left key \rightarrow To reduce)/ (Right key \rightarrow To increase)

(3) Set Time



- Click 🖸 to enter Time Setting page
- Using the button to move column (Year, Month, Date, Hour, Minute, Second and Time Zone..
- Using the I volume of column.
- Click the D to confirm and save the changing.
 - ★ If GPS is available, the time will be calibrated automatically according to time zone.

(4) Set Plate Number



- Click 🖸 to enter Vehicle Number Setting
- Using button to move to different columns.
- Using I button to change the volume
- After setting, click 🖸 to confirm/Save the changing.
 - ★ Available characters: A~Z, 0~9

(5) Delete All Record Data (Disk Format)



- Click D to enter Delete All Record Data (Disk Format).
- Using button to move to different selections (No or Yes), and Click to confirm and execute it.

 \star Caution! All data will be deleted when you select "Yes".

(6) **Default Live View Channel Display**



- Click I to enter the Live Screen Mode Setting after DVR booting completed.
- Using 💶 🗈 to move to different selections (Multi-CH or CH1).
- Click D to save and confirm default display mode after boot-up.

(7) G sensor Setting



- Click D to enter G sensor Setting page..
- Click 🖾 🖸 key to move to the desired setting items.
- Click 🖸 🗈 key to change the setting \circ

- Click I to move to next setting. After finishing all setting, click
 to confirm and save changing.
- G Sensor Setting : On \ OFF.
- G_Sensor Mode: Automobile , Truck and Motorcycle Mode.
- G_Sensor Sensitivity : lowest, lower ,low, normal, higher, highest.

(8) **Defaulting Settings**



- Click 🖸 to enter Default Setting page.
- Using button to move to different selections (No or Yes), and Click to confirm and execute it.
- ★ Caution! When "Yes" is selected / confirmed, the machine would re-start again and clean the all the setting and back to factory default setting.
- (9) Power Management



- Click the D to enter the Power Management Page to Setup Extended Record period after Engine shutdown.
- Using button to change the extended record time (0, 30, 60, 90,120 minutes), then Click to confirm/save the setting.

(10) Version

Menu	Version	n
Power Management	Kernel Version: RootFs Version:	1073 1073
Alarm Setting Password Setting	Application Version: 2012/05/19 10:00:00	1073

(11) Alarm Setting

Menu	A	larm Setting
Power Management	🔺 Alarm 1 :	Off
Version	Alarm 2 :	Off
Alarm Setting	Alarm 3 :	Off
Password Setting	Alarm 4 :	Off

- Click D button to enter Alarm setting page.
- Press I violation (Alarm 1~4).
- Press 🗹 🕑 to change the setting.
- After setting, press I for previous or next. When finishing all the setting, press I to confirm/save the changing.
 - ★ When Alarm is triggered, it can be Off, or CH1, CH2, CH3 or CH4 pop-up to full screen.

(12) Password Setting



- Click the 🖸 button enter Password setting page.
- Click I button to select number for password, and click

▶ key to previous or next space for setting, after finished, click ▶ key to confirm. (You can select number 0~9 for the password. If you don't need the password function, please enter a blank and click "enter" key to confirm.

- ★ When finished entering a password and move to next password location, the former one will show a " *" symbol in order to protect password information.
- ★ When finishing Password Setting, it will request password when enter main menu and playback page.

(13) Language Setting

Menu	Langu	age Setting
Language Setting	Language:	English

- Click 🖸 button to enter Language setting page.
- Click 💶 🕩 to select language you need.
- After it finished, click 🖸 key to confirm.
 - ★ There are 7 languages: English, Traditional Chinese, Japanese, Korean, Russian, Spanish and German for NO 3G Model.

(14) MDVR ID (Only available for DVR with 3G network function)



• Click D key to enter MDVR ID Page, to View unique ID.

(15) 3G Networking. (Only available for DVR with 3G Network function)



- Click 🖸 to enter 3G Network page.
- Press I T to check related setting information(Server IP, APN, Dial up no)
- On 3G-Service, Click b to select on/off the 3G network function. Then Click key to confirm/save the change.
- ★ When select to off the 3G service, it will cause severe cannot receive the recording information, so please be especially aware of this when setting.
- 3. LIVE Mode

2012/05/21 14::	2012/05/21 14:25:41			
	1	2		
	3	4		
			C) km/h

- Click I C
- On Live view mode, click menu key to enter OSD menu or click
 Play to enter playback mode.
 - ★ 🧕 means on record.
 - ★ 🛯 means GPS positioning successes.

 - ★ 💟 means force record triggered by manual.
 - ★ 🖾 means force record triggered by G-Sensor.

4. Playback on DVR.

Click the **b** to enter Playback mode.

S	Select Decode Items							
Start Reco	rd Time	End Record T	ïme					
2012/05/29	15:27:21	2012/05/29 15	<mark>:27:34</mark>					
2012/05/29	15:28:14	2012/05/29 15	:31:28					
2012/05/29	15:31:44	2012/05/29 15	: 34 : 18					
Page	00001	Total Pages	00001					

Select Decode Items: Click 🖾 🔽 to select the Record Event then click to confirm/start playback footage selected.



- (1)1) Click 🗐 🗐 🗐 🗐 to switch the related CH to full display mode; If you want to return to Quad display, please press 🖬 key.
- (2) On Playback, Click 🔳 key to stop and exit the playback mode.
- (3) Press 🛄 key to pause video stream.
- (4) On I mode, click the key to continue play recording file.

G. Playback on Carbox Player

1. Through Carbox Player on PC site

(1) Use SD card to playback directly

Execute the CarBox2.exe from CD-ROM, the display as showing below. Click to choose the backup files or select drive path of memory card or hard disk, and then double-click the file on event list you want to play.

★Caution: It needs to install DirectX 9.0 or above before running CarBox2 software.



Coordinate, Speed and Google Map (when GPS

★GPS Coordinate, Speed and Google Map (when GPS receiver is plug and GPS positioning successfully)

a. Control interface description



1	+	Previous File
2	-	Previous Frame

3	•	Backward Play
4	11	Pause
5		Stop
6		Play
7	IÞ	Next Frame
8	₩	Next file
9		Open folder, select file.
10		Disk backup. Select the backup path for file storage.
11	<u>e</u> j	Google Map
12	\$	Configuration
13	to	Snapshot
14	×	Tool, SD card format, language setting.

Backup

During Review footage through PC, Click" ", then it will popup as following backup dialogue windows.

ID RECORD TIME EVENT TYPE TIME END Total Time 502 2010-12-08 11:31:44 Record Start 2010-12-08 11:41:00:31:57 000:31:56 503 2010-12-08 11:41:09 Record Start 2010-12-08 11:40:28 000:31:56 505 2010-12-08 11:41:09 Record Start 2010-12-08 11:40:28 000:31:56 505 2010-12-08 11:55:18 Record Start 2010-12-08 11:49:48 000:31:56 506 2010-12-08 11:55:18 Record Start 2010-12-08 11:49:48 000:41:00 507 2010-12-08 11:50:35 Record Start 2010-12-08 11:49:48 000:41:00 508 2010-12-08 12:09:43 Record Start 2010-12-08 12:10:37 00:04:00 509 2010-12-08 12:09:43 Record Start 2010-12-08 12:10:37 00:03:55 511 2010-12-08 12:10:37 Record Start 2010-12-08 12:23:49 00:03:55 512 2010-12-08 12:23:17 Record Start 2010-12-08 12:23:49 00:03:55 513 2010-12-08 12:30:17 Record Start 2010-12-08 12:30:55 00:03:55				~	Removable Storage I:\		O Local Disk	
D RECORD TIME EVENT TYPE TIME END Total Time Backup Format 502 2010-12-08 11:31:44 Record Start 2010-12-08 11:35:41 00:03:56 00:04:01 503 2010-12-08 11:41:09 Record Start 2010-12-08 11:45:07 00:03:56 Record Start 2010-12-08 11:45:07 00:03:56 Record Start 2010-12-08 11:45:07 00:04:00 505 2010-12-08 11:45:05 Record Start 2010-12-08 11:45:05 Record Start 2010-12-08 11:45:07 00:04:00 506 2010-12-08 11:55:18 Record Start 2010-12-08 11:54:18 00:04:00 Record Start 2010-12-08 12:04:03 00:04:00 507 2010-12-08 12:09:27 Record Start 2010-12-08 12:18:07 00:04:00 Record Start 2010-12-08 12:18:07 00:04:03 509 2010-12-08 12:09:27 Record Start 2010-12-08 12:18:07 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 00:03:56 <th></th> <th></th> <th>Setting</th> <th></th> <th></th> <th></th> <th>O Backup File</th> <th></th>			Setting				O Backup File	
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503 2010-12-08 11:36:27 Record Start 2010-12-08 11:40:28 00:04:01 Record Start 2010-12-08 11:40:57 Record Start 2010-12-08 11:40:48 Record Start 2010-12-08 11:40:48 Record Start 2010-12-08 11:40:47 Record Start 2010-12-08 12:00:07 Record Start 2010-12-08 12:10:07 00:03:55 S0:03:55	RAW Backup File(*	RAW Ba	Backup Format	Total Time 🔼	TIME END	EVENT TYPE	RECORD TIME	ID
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511 2010-12-08 12:14:09 Record Start 2010-12-08 12:18:07 00:03:58 512 2010-12-08 12:18:52 Record Start 2010-12-08 12:23:24 00:03:65 513 2010-12-08 12:23:17 Record Start 2010-12-08 12:23:19 00:04:02 514 2010-12-08 12:23:17 Record Start 2010-12-08 12:32:59 00:04:02 515 2010-12-08 12:32:58 Record Start 2010-12-08 12:32:59 00:04:02 516 2010-12-08 12:32:58 Record Start 2010-12-08 12:36:55 00:03:56 517 2010-12-08 12:42:23 Record Start 2010-12-08 12:46:25 00:04:02 518 2010-12-08 12:42:23 Record Start 2010-12-08 12:46:25 00:04:02 519 2010-12-08 12:42:23 Record Start 2010-12-08 12:56:49 00:04:02 519 2010-12-08 12:56:49 00:04:01 00:04:01 00:04:01 520 2010-12-08 12:56:49 00:04:01 00:04:01 00:04:01 00:04:01 521 2010-12-08 13:00:31 00:04:01 00:04:01 00:04:01 00:04:01 00:04:01 00:04:01 00:04:01 00:04:01 00:04:01						Record Start		509
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513 2010-12-08 12:23:34 Record Start 2010-12-08 12:27:29 00:03:55 514 2010-12-08 12:28:17 Record Start 2010-12-08 12:32:19 00:04:02 515 2010-12-08 12:37:41 Record Start 2010-12-08 12:36:55 00:03:57 516 2010-12-08 12:37:41 Record Start 2010-12-08 12:45:55 00:03:57 518 2010-12-08 12:42:23 Record Start 2010-12-08 12:45:55 00:04:02 519 2010-12-08 12:47:07 Record Start 2010-12-08 12:55:19 00:04:01 520 2010-12-08 12:55:48 Record Start 2010-12-08 12:55:49 00:04:01 521 2010-12-08 12:55:49 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:55:40 Record Start 2010-12-08 13:05:108 00:03:56 521 2010-12-08 13:05:55 Record Start 2010-12-08 13:05:56 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:05:68 00:03:56				00:03:58	2010-12-08 12:18:07	Record Start	2010-12-08 12:14:09	511
513 2010-12-08 12:23:34 Record Start 2010-12-08 12:23:29 00:03:55 514 2010-12-08 12:32:158 Record Start 2010-12:08 12:32:19 00:04:02 515 2010-12-08 12:32:158 Record Start 2010-12:08 12:36:55 00:03:57 516 2010-12-08 12:32:123 Record Start 2010-12:08 12:41:17 00:03:65 517 2010-12-08 12:42:32 Record Start 2010-12:08 12:46:125 00:04:02 518 2010-12:08 12:47:07 Record Start 2010-12:08 12:55:19 00:04:00 519 2010-12:08 12:56:30 Record Start 2010-12:08 12:55:19 00:04:00 520 2010-12:08 12:56:30 Record Start 2010-12:08 13:00:11 00:04:01 521 2010-12:08 13:01:12 Record Start 2010-12:08 13:00:16 00:04:01 522 2010-12:08 13:01:12 Record Start 2010-12:08 13:00:56 00:03:56	Ba		C:\BlackBox	00:03:56	2010-12-08 12:22:48	Record Start	2010-12-08 12:18:52	512
515 2010-12-08 12:32:58 Record Start 2010-12-08 12:34:57 00:03:57 516 2010-12-08 12:37:41 Record Start 2010-12-08 12:41:37 00:03:56 517 2010-12-08 12:47:07 Record Start 2010-12-08 12:41:37 00:03:56 518 2010-12-08 12:47:07 Record Start 2010-12-08 12:45:57 00:04:00 519 2010-12-08 12:56:30 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:56:30 Record Start 2010-12-08 13:00:11 00:04:01 521 2010-12-08 13:01:12 Record Start 2010-12-08 13:00:51 00:03:56 522 2010-12-08 13:00:12 Record Start 2010-12-08 13:09:51 00:03:56				00:03:55	2010-12-08 12:27:29	Record Start	2010-12-08 12:23:34	513
516 2010-12-08 12:37:41 Record Start 2010-12-08 12:41:37 00:03:56 517 2010-12-08 12:42:23 Record Start 2010-12-08 12:45:107 00:04:00 518 2010-12-08 12:47:07 Record Start 2010-12-08 12:51:07 00:04:00 519 2010-12-08 12:51:48 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:51:67 00:04:01 00:04:01 521 2010-12-08 12:55:08 Record Start 2010-12-08 13:00:31 00:04:01 522 2010-12-08 13:01:12 Record Start 2010-12-08 13:05:56 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:05:66 00:03:56				00:04:02	2010-12-08 12:32:19	Record Start	2010-12-08 12:28:17	514
517 2010-12-08 12:42:23 Record Start 2010-12-08 12:46:25 00:04:02 518 2010-12-08 12:47:07 Record Start 2010-12-08 12:51:07 00:04:00 519 2010-12-08 12:51:47:07 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:56:30 Record Start 2010-12-08 13:00:51 00:04:01 521 2010-12-08 13:01:12 Record Start 2010-12-08 13:05:66 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:09:51 00:03:56				00:03:57	2010-12-08 12:36:55	Record Start	2010-12-08 12:32:58	515
518 2010-12-08 12:47:07 Record Start 2010-12-08 12:51:07 00:04:00 519 2010-12-08 12:51:48 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:56:30 Record Start 2010-12-08 13:00:31 00:04:01 521 2010-12-08 13:06:12 Record Start 2010-12-08 13:06:58 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:09:51 00:03:56				00:03:56	2010-12-08 12:41:37		2010-12-08 12:37:41	
519 2010-12-08 12:51:48 Record Start 2010-12-08 12:55:49 00:04:01 520 2010-12-08 12:55:30 Record Start 2010-12-08 13:00:31 00:04:01 521 2010-12-08 13:01:12 Record Start 2010-12-08 13:05:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:05:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:05:56 56				00:04:02	2010-12-08 12:46:25	Record Start	2010-12-08 12:42:23	517
520 2010-12-08 13:01:12 Record Start 2010-12-08 13:00:31 00:04:01 521 2010-12-08 13:01:12 Record Start 2010-12-08 13:05:08 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:09:51 00:03:56				00:04:00	2010-12-08 12:51:07	Record Start	2010-12-08 12:47:07	518
521 2010-12-08 13:01:12 Record Start 2010-12-08 13:05:08 00:03:56 522 2010-12-08 13:05:55 Record Start 2010-12-08 13:09:51 00:03:56								
522 2010-12-08 13:05:55 Record Start 2010-12-08 13:09:51 00:03:56								
523 2010-12-08 13:10:36 Record Start 2010-12-08 13:14:38 00:04:02								
				00:04:02	2010-12-08 13:14:38	Record Start	2010-12-08 13:10:36	
524 2010-12-08 13:15:19 Record Start 2010-12-08 13:19:21 00:04:02								
525 2010-12-08 13:20:01 Record Start 2010-12-08 13:24:01 00:04:00								
526 2010-12-08 13:24:43 Record Start 2010-12-08 13:28:42 00:03:59								
527 2010-12-08 13:29:26 Record Start 2010-12-08 13:33:24 00:03:58 💌					2010-12-08 13:33:24	Record Start	2010-12-08 13:29:26	527

Step 1. Select the SD card drive no.



ID	RECORD TIME	EVENT TYPE	TIME END	Total Time
1	2010-11-13 06:23:32	Record Start	2010-12-07 00:54:20	570:30:48
2	2010-12-07 00:55:04	Record Start	2010-12-07 00:57:54	00:02:50
3	2010-12-07 00:58:38	Record Start	2010-12-07 01:01:29	00:02:51
4	2010-12-07 01:02:14	Record Start	2010-12-07 01:05:05	00:02:51
5	2010-12-07 01:05:49	Record Start	2010-12-07 01:08:40	00:02:51
6	2010-12-07 01:09:24	Record Start	2010-12-07 01:12:15	00:02:51
7	2010/10/07 01:10:50	Discound Charles	2010/10/07 01:15:40	00.00.50

Step 2. Select the recorded file which you want to backup

Step 3. Select the Backup Format

Backup Format	RAW Backup File(*.sd) RAW Backup File(*.sd) AVI Backup File(*.avi)
Record Start	2010-12-07 00:58:38 🛟
Record End Time	2010-12-07 01:01:29 🛟

Backup format:

(1) RAW backup file. Specific .sd format

	2010-12-10-13-30-01.xd SD 檔案 20,224 KB	
--	--	--

XXXX*.sd file

(2) AVI File(*.avi) backup when take this format as backup

2010-12-10-13-30-10-CHN01.avi KMP - Windows Movie File 18,849 KB	CHN01 for front view camera
18,849 KB	image file, file type: *.avi

★ caution : The difference between .sd format and .avi format is that AVI file contains only video and audio data but lose the GPS coordinates, speed and G-sensor data. so, we would recommend to select .sd format when you back the file.

Step 4. Backup Path: Select your backup destination (e.g.: C:\BlackBox)

C:\BlackBox	Backup Path

<u>Step 5</u>. Backup: Click 'backup' to start saving the file to your specified destination

	Backup
--	--------

Configuration

Before using the machine, please insert the SD card to card reader and connect to the PC to start setting. After setting, you can insert the card back to DVR and start recording.

🚰 Configuration -	[I:N]				
	Video Quality	Password	Unit O	f Speed	
	High ✓ Video Frame Rate	UserName Password	⊙ Km/h	⊖ Mile/h	◯ Knot
1	15 💌	User2 UserName Password			
	D1	Time Zone			
ł	Car Information	Local System TimeZone			
2.1	Audio Recording Ooff ⊙on	Copy Me To Storage			
		Copy Save Cancel			

1	Video Quality	Video Quality	Select the video Quality: High/ Normal / Low
2	Video Frame	Video Frame Rate	Set the recording frame rate for the camera (2, 4, 6, 8, 10, 15, 20, 25, 30)
3	Video Format	Video Format	video signal format D1/CIF
4	Car Information	Car Information	You can input the driver's name or license number here to identify people's identity. Suitable for company or group using.
5	Audio Recording	Audio Recording	Audio recording on or off.

6	password	Password Using Password Input	This function can encrypt the data and prevent others from accessing. Maximum letters:15 letters. Example: 123456789123456 After setting the password up, you have to input password every time for playing the files, modify the setting, formatting the memory card etc.
			 ★ Note : Please check if you have set capital letters for your password and save your password well in other place to prevent from missing.
7	Speed unit	Unit Of Speed ⊙ Km/h	You can set up the speed unit here. Km/h: kilometer per hour Mile/h: mile per hour Knot : knot per hour ★ Note : 1 KM=0.6214 mile, 1 mile=1.6093KM, 1 Knot =1.853KM
8	Time zone	Time Zone	Time Zone: GMT (GPS auto time correction)



While playing the recorded file, you can use this function is to snapshot the picture and save it into your PC. Default saving path for snapshot picture will be in x:\IBoxPlayer/Snapshot folder. File type: .bmp



b. Latitude & Longitude Coordinates



c. G SENSOR G-sensor: Detect & record G-force data.



- (1) X: The G-force from left & right of the car.
- (2) Y: The G-force from front & back of the car.
- (3) Z: The G-force from upside & downside of the car
- d. Speed meter



e. Video Search & Play Speed



- (1) Video Searching : You can use the mouse to drag the bar to search the video quickly.
- (2) Play Speed : Support 2x, 4x fast forwarding and -2x, -4x slow play mode.
- f. Volume control



Volume BAR : Click the left button of mouse control to adjust the volume degree.

(2) 3G client software for viewing directly(select models with 3G modules)

Executive Playback software "3G ClientApp.exe , the playback screen shown as below. Enter the username and password and



★ Note: To perform this software will require DirectX 9.0 or more.

Click review and then select the name of vehicle to view the image(example, the figure of 175) Then click on Channel-01 (or other Channel) and then hold down the left mouse button and drag to the split screen in right side.

The other method to choose split-screen first and then click on Channel-01 with right key of the mouse, click PLAY function to view real-time image.(When the icon becomes end, it means the vehicle that is currently offline. Only the icon return to online status end to see the real-time image.)

neview 👘	Event	1 Route		Thursday, May 05, 2011 10:38:10 AM
 Hool Charrel-01 Charrel-02 Charrel-02 Charrel-03 Charrel-04 				
Vebicle 1.d Driver 10001 75 10007 1018—	Speed 31.69 km/h 0.00 km/h GPS not valid GPS not valid	Updet Texe 5011 656 05 (0:03063) 2011 676 05 (0:03062) 2011 676 05 (0:03064) 2011 676 05 (0:03064) 2011 676 45 (0:03064)	Coogle	9 000 REAR

★ Note: When play real-time image, Channel icon will become green



Click **Route** can watch the Google Map and inquiry the date and time record of the vehicle.....



3GClientApp page and other relevant settings

Login Add Device Style

- (1) Login: click Login on the top of the screen to open the login screen information.
- (2) Add Device: In order to identify each device, add the vehicle information here.
- (3) Style: watch different split-screen, just click Style option to set values; Total 1 * 1, 2 * 2, 3 * 3, 4 * 4, 4 types of split screen to choose.

H. Format Memory Card

When should you 「format」 the SD CARD?

When the used SD card or just a new card, you should format SD card first before use. (the SD Card with delivery has been formatted and tested, you can just plug it in DVR).

 Formatting procedure from PC site: (1). Execute the player "CarBox2.exe" into main page 	e(refer
to the charts below)	
(2). Select 🌌 format button to start as following steps	
See Format Tool Dialog	
O Local Disk	
Format And Clean Record Data	
Format	
Restore Full Disk Space Restore	
English	

Format Tool Dialog		() Rem	ovable Storage	_
	~	I:\		~
ormat And Clean Record [Data			
	CarBox2	×		
	? Format	t this disk - I:\?	Format	
estore Full Disk Space	2 是①	否N		
			Restore	
anguage Setting				
	Eng	glish	~	

O Local Disk	Removable Storage
×	I:\
format And Clean Record Data	
CarBox2	
Carboxz	
Format Fini	ished, Please re-Insert This Disk
<u> </u>	P
Restore Full Disk Sp	確定
	Restore
	Restore
anguage Setting	
anguage becang	

(3). After formatting completed, re-insert the SD card to do relative setting. please insert the card into DVR for recording.

Process to Format the SD Card on DVR:

1. Select "Delete All Record Data" of Menu to format SD card.



1. Select "Yes" and Click "Enter" to start formatting.

Menu	
Delete All Record Data	
Default Live View Channel	
G_Sensor Setting	
Default settings	ana an 🔽

3. When the screen back to LIVE mode ,the formatting is completed.

I. Restoring Memory Card

When should you $\lceil restore \rfloor$ the SD CARD?

When you have backup the record files into PC and want to use the SD card for other purposes, you can restore the SD Card to normal format, so it can be used correctly.

How to 「restore」 SD card?

- 1. Put SD card into card reader
- 2. Put car reader into USB port on PC.
- 3. Execute the player "CarBox2.exe" [™] into main page(refer to the charts below [™])
- 4. Select restore button to start as following steps

 (4.1) click 「restore」 button and it will pop-up the dialog window, click 「yes」 to start restoring.

🔾 Local Disk	V	• R I:\	emovable Storage	~
format And Clean Record	Data			
	CarBox2		×	
Restore Full Disk Space –	? Res 是①	tore this disk - I%	Format	
Language Setting	r	English	1	

	e Digital Storage Devic 💻	
Capacity:		
81.2 MB		
ile system		
FAT32		
<u>A</u> llocation unit size		
1024 bytes		
	vice defaults	
/olume <u>l</u> abel		
/olume <u>l</u> abel Format <u>o</u> pti	ions	
olume label Format opti ✓ Quick Fo	ions	
olume label Format opti ✓ Quick Fo	ions	
/olume label Format opti	ions	
/olume label Format opti	ions	
/olume label Format opti	ions	

(4.2) System will show up 「Restore this disk」 dialog window

(4.3) Check the quick format and click "Start" to format. After formatting is complete please click "OK", then "Close" dialog window.

	Capacity:		
	81.2 MB	*	
	Eile system		
	FAT32	*	
	Allocation unit size		10
ormatti	ng Secure Digital Storage Device (G:)		X
1	Format Complete.	OI	
1		01	
1	Format options	01	
1		01	
0	Format options	01	
0	Format options	01	
1	Format options		

(4.4) Click "OK" to finish restore SD card, After finished, you can use the memory card for other purposes.

O Local Disk		Removable Store	age -
	~	I:\	*
ormat And Clean Reco	rd Data		
CarBo	v2		
(Carto	A .A		
	Restore Disk Comp	leted, Please re-Insert This Disk	c –
			-
testore Full Dis	一確	正	
		Restore	J
Language Setting			

J. Installation & Set up for 3G module

Please confirm the 3G system with the telecom provider and select appropriate 3G module for local region usage.



1. 3G Module Installation a. 3G Module Plug Position



1. Take apart screws (4pcs) from both front and back panels and remove the upper cover.



2. Install SIM card and 3G module on the positioning marked as red cycle.

b. Example for installation processes of HUAWEI EM770W

(The SIM card should be bought from local telecom service provider extra)

i. 3G module installation



1. The 3G module is sloped to plug into slot of PCI-E



2. Flat press the 3G module on the mother board.



3. Two pieces of M2 screws Locked on the 3G module.



4. Connect the antenna plug at Main position as red cycle marked. Then Network module installation is completed.

ii. Disable PIN protect code on SIM card first then plug it to SIM slot (PIN protect code can be disable by mobile phone)



1. Whirl the sliver button to right side to unlock the slot of SIM card on front panel



3. Press the SIM card until it is fixed on the slot.



2. Shift the black cover to left side and plug SIM card flat into the slot.



4. Shift the black cover to right side and whirl the sliver button to left direction to fix firmly.

2. 3G internet setting

i.

- Please confirm whether the code number is closed or not. a.
- Confirm if The Telecommunication providers' APN is the same with b. Dial-Up Number's information, if not, please follow all 3G Config Tool setting file steps.

i. Please dou as below:		and open t	he setting page
	🔒 3G Config Tool		
	Removable Storage		
		~	
	G Net Configuration		
	UserName:		
	Password:		
	Server Address:		
	Server Port:	13579	
	APN:		
	Dial-Up Number:		
	3G On/Off:		
	Apply OK	Cancel	

The explanation for setting up:

🏭 3G Config Tool	
Removable Storage	
H:\	~
G Net Configuration - Loaded!	
UserName:	
Password:	
Server Address: 61	.221.66.200
Server Port: 13	579
APN: int	ernet
Dial-Up Number: *9	9#
3G On/Off: 🗹	
L	
Аррly OK	Cancel

- 1. UserName: No need in common
- 2. Password: No need in common
- 3. Server Address: Enter Server IP address setting----Default Server IP

Address is 61.221.66.200

- 4. Server Port: Default Sever Port is 13579, Not recommend to change the original setting).
- 5. APN: 3G APN, generally preset to be Taiwan Telecommunication providers, if in other area, Please check local Telecommunication providers offered APN setting name.)
- 6. Dial-Up Number: 3G Dial-Up Number, generally preset to be *99#, if in other area, Please check local Telecommunication providers offered 3G Dial-Up SETTING Numbers.
- 7. 3G On/Off: To choice whether star the 3G tele-connecting function or not. "Pick" (V) mean "Star" commonly, if not willing to use tele-connecting function , please directly neglect it.
- ii. Please put USB FLASH DRIVER into the PC's USB drive port, choice & click the proper disk storage. And input the following data as below:

🔒 3G Config Tool				
Removable Storage				
H:\	~			
- 3G Net Configuration - Loaded!				
UserName:				
Password:				
Server Address:	61.221.66.200			
Server Port:	13579			
APN:	internet			
Dial-Up Number:	*99#			
3G On/Off: 🔽				
Apply OK	Cancel			

iii. After inputting, pick <o.k.> and process saving, the 3G Module information setting would be finished at this moment. Please check the USB Flash Driver DISK to find out if our <net3g.ncf>file existed.



- iv. And Please put your USB FLASH DRIVER into the SA-650-CF USB connecting Port, and re-connect the battery again.<After first {star}, if update information successfully, It would re-start again after 10 seconds.>
- v. After re-start, please pick the 3G internet item up in contents to confirm whether the 3G information updating successful or not.



When updating successfully, all the updating information would shown on the 3G module related web information.



When 3G connecting successfully, the right upper screen would show N signal.