Ultimate In-Vehicle Recording System



# PLANET HALO User's Guide 1.0



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#### **1** Information : this is an information message

▶ This product is a device for recording high-resolution video, designed to monitor driving behavior and capture incidents that could occur while your vehicle is on the road or parked. The recorded evidence may or may not hold any legal validity in the court of law. Bear in mind that we are not responsible for any disputes or loss in court from recorded or unrecorded video data. Be safe, drive safe!

### **1. Product Information**

- Thank you for purchasing our product. This manual also includes our product warranty information, so please keep this manual for future reference.
- Please read the safety instructions completely before operating this product.

• This product is a device for recording video and audio and is to be installed on the in side of your vehicle. Optional cameras may be mounted on the outside of the vehicle. This product is to help drivers monitor their driving behavior. The recorded audio and video hold no legal validity.

• The purpose of this product is to record surroundings of your motor vehicle when driving or parked. There is no guarantee that the product will capture every desired image.

• This product may not record as an event during a mild impact or a minor collision. We recommend to categorize a certain situation by pressing the emergency button.

• We cannot guarantee any product defects if a memory card other than the one provided with the camera is used.



Main body



Side camera

Camera Bracket





User's manual



SD memory card / Cable holder / Holder adhesive tape



Cigarette plug (power cable) / Video cable / Video extension cable



### **Optional accessories**



Direct power cable (controls power voltage to prevent battery discharge for continuous recor ding)

SD memory card (8G / 16G / 32G)

SD memory card reader

External HDD

#### [Checking LED lamp signal]

• Power : The LED light will flicker during the reboot once the power is supplied after turning t he engine on. The LED light will be turned on once the rebooting is completed. (If there is a problem with the battery, or the battery protection mode is on, the LED light will continue to flicker)

• GPS : The green LED light will appear while receiving GPS reception. (The LED light will be turned off after 10 seconds if there is no GPS reception)

• Video recording : The red LED light will appear during video recording. (The LED light will flicker every 1 second during driving mode and will flicker every 3 seconds while in park mode)

• Event recording : The blue LED light will appear during event recording. (The LED light will be turned off if the event recording mode is off)

#### [Product button functions]

Power button

- : Pressing the 'power' button for 3-4 seconds, will turn on/off the product.
- Audio button
- : Press the 'audio' button to turn on/off audio.
- Parking button
- : If you press the 'parking' button once, the recording mode will change to parking mode.

\*Pressing the 'parking' button for 3-4 seconds, will turn on/off the audio.

: If you press the 'parking' button once more, then it will change back to the normal recording mode.

Parking mode is a function that allows you to record for a longer period of time than normal recording mode by reducing the frames per second. The parking mode records at 3 frames per second

If you set '0' (do not use) for parking mode in the configuration, it will not change the recording mode even if you press the 'park' button.

#### Screen button

: The screen button allows you to switch the displaying screen mode; full(1ch.), 2ch. and 4ch when you see the playback via video out device.

#### Emergency button

: This function enables you to store data for a longer period than the normal recording by creating an 'event' occurrence while driving or parking.

: If you press the 'event' button from the time of accident, it categorize the event. This means that you can store data for a longer period than the normal recording.

### **Key Functions and Features**

• This product provides real time high-resolution recording with the option to record up to 4 cameras (front, internal, left and right). Recording begins after you connect the unit with the power cable and turn on the engine. The product stops recording when you turn off the engine. The last few seconds will be recorded after the power disconnects. When the memory card is full, the recording cycles to the beginning and begins to overwrite the data.

#### [4 channel high-resolution video image]

: The product is able to record clear images by processing the video in Variable Bit Rate (VBR).

[Recording 4 different directions simultaneously: front, internal, left and right] : Easy to install cameras with multiple angles and directions for recording.

#### [Simultaneous playback mode : full, 2ch. and 4ch. screen mode]

: The viewer allows you to watch video playback in single channel mode, 2 channel or four channels.

#### [Automatic parking mode]

: Set the parking mode time in the menu of the Viewer program, to when you want park mode to be activated.

#### [Built-in GPS and high-sensitivity G-SENSOR]

: View the location (linked to Google maps), speed and acceleration of your vehicle by using the embedded GPS. Events are categorized with g-sensors.

#### [Vehicle battery monitoring]

: Prevents the vehicles battery from discharging by monitoring the battery voltage.

#### [External camera]

- : Low power consumption design.
- : Best quality resolution by using embedded a deinterlace filter.

: The auto mirror function allows for the external cameras to be placed and adjusted to the appropriate direction

1) Select the desired location to mount the camera, and then attach the sliding bracket to the windshield.



Prior to attaching the holder, please be aware that cold weather, cond ensation, and dust may cause the holder from sticking properly.

2) Slide the product on to the bracket.

3) Place the side and rear cameras on the appropriate position and connect the camera cables to the camera input terminal by using the provided extension cables.

4) Insert the SD card into the main body if it has not been inserted already. (Ensure that the SD card is inserted the correct way).

#### [Note : Using the SD memory card]

: In order to remove the SD card, the LED lights on the camera must be completely turned off

: The SD card contains both the Viewer program and the update program. Please copy and p aste the programs to your PC.

: Using either damaged or low-quality SD cards could damage the recorded data, could skip data and decrease the speed of video playback.

: Please be aware of the fact that the SD card does not last forever, and will wear out after us ing it for an extended period of time. It also may cause errors when recording. Try to conduct a format and run virus checking programs from time to time to prevent the SD card from malfunctioning. SD card related problems are not under the manufacturer's guarantee and the manufacturer or the supplier is not responsible for your data loss or missing recordings.

: We recommend you to make a back up of your files and save them to other storage mediums such as your PC, in the event of an external power shortage.

: Do not put heavy pressure on the SD card and never use a wet SD card.

- 5) Connect a cigarette plug to the power terminal of the product.
- 6) Insert the cigarette plug into the cigarette jack of your vehicle.

7) Check the LED lamp.

8) Use cable holders to tidy up cables.

# **Specifications**

Main body [PH-4]

Camera	Front: ¼" CMOS image sensor (105 degree) Internal: ¼" CMOS image (infrared) sensor (142 degree) Side camera input: up to 2 PH-SC (see below)
Recording Resolution	720x480 / 1CH : 30 fps, 2CH: 15 fps per channel, 4CH: 10 fps per channel / *5 fps per channel (Parking mode)
Recording Format	H.264 VBR Recording
Output Device	CVBS output (1V Vp-p 75 ohm)
GPS	Built-in type GPS module
G-Sensor	Built-in 11BIT 3 Axis (X, Y, Z axis), acceleration sensor Detects sudden start & stop / impact / overspeed / emergency
Recording Medium	SD memory card: SD, SDHC : 2GB~32GB support External HDD support
Audio Recording	Built-in high-sensitivity microphone PCM COMPRESSION
Audio Announcement	Built-in high-quality speaker for notice announcement
Recording Mode	Normal (continuous), Parking mode, Event mode
Time Setting	GPS embedded model : Before GPS connection : run by internal RTC time After GPS connection : automatic internal RTC time setting
Power	Rated voltage : DC 12V ~ 24V cigar plug Operating voltage : DC 7V ~ 28V
Power Consumption	12V : 350~390mA
Temperature Range	Storage (-30°C~80°C) Operating (-10°C~70°C)
Other Functions	Auto update, battery protection, auto parking mode

	PH-SC (Side camera)
Camera	1/4" CMOS image sensor (92 degree)
Recording Resolution	720x480
Output Display	CVBS output (1V Vp-p 75 ohm)
Power	Operating voltage : DC 4V ~ 5V
Power Consumption	140mA
Temperature Range	Storage (-30°C~80°C), Operating (-20°C~70°C)
Other Functions	Deinterlace filter, auto mirror

• Insert the SD card in to your PC, or use a memory card reader to connect the SD card to your PC. Open the SD card folder and then double click on [planethalo.exe] file to run the viewer program.



#### [Setup configurations]

1) Click the 'Configuration' icon



2) 'Select Drive' window appears. Select drive and then click the [ok] button.

Select drive					×
Select driv	/e				ОК
Drive	Volume Label	Total Size	Used Size	Remain	Cancel
D:		32.07GB	31.97GB	92.70MB	
-					
					Refresh

3) 'Configuration' window appears. Select each function and its settings, then press save. The updated settings are saved to the SD card. Insert the SD card into the SD card slot of the product and turn the power on. The product will be updated with the new settings.

guration	
ackbox Setting Viewer Setting	
Frame Rate Min Middle Max	Save Audio No  Ves
G-Sensor Sensitivity(Driving) X Y Z Min G-Sensor Sensitivity(Park) X Y Z Min Max G-Sensor Sensitivity(Park) X Min Max Min Max Max Auto Parking 20 Off Minute Event Ratio 30 None Max	Speaker Volume 4 0 0 0 0 0 4 0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0
Connected camera Front Rear Current Password Confirm Password Change Password Information Company Vehicle Type License Plate Driver	Access to Function Keys <ul> <li>Unblock</li> <li>Block</li> </ul> Auto Shutdown Timer   Off   Save   Cancel

 $\triangle$ 

Please be aware that if the [index.dat] file gets deleted from the SD card, it will not save the configuration settings. The [index.dat] file can be created again when the SD card is inserted into the product and the power is turned on, but the settings will not be applied.

• Recording frame setting (default setting : maximum)



- Maximum recording mode (max. normal recording mode function)
- : This is the normal recording mode at 10 frames per second (fps) for 4 channels.
- Mid-recording mode (mid.)
- : records at 7.5 fps for 4 channels.
- Minimum recording mode (min.)
- : record 5 fps for 4 channels.
- G-Sensor sensitivity setting (default setting : while driving / parking (X)6, (Y)6, (Z)6



- X-axis / Y-axis / Z-axis.

- This feature adjusts the sensitivity of the shock sensor. Select the sensitivity level from 1 (min.) to 10 (max.) to save the video recording as an 'event'.



The higher the sensitivity level the more event recordings.

• Auto parking mode (default setting : 0)

Auto Parking 0	
0	30
Off Mir	nute

- Configuration setting : 0 (do not use) ~ 30mins (max.)

-This function records at 3 frames per second when the vehicle is parked. The camera will record at the normal frames if it senses an impact to the vehicle. It will also change from park mode to the auto driving mode when the vehicle turns on.



If you select '0 (do not use)' for the configuration setting, this will disable parking mode. Pressing the 'parking' button on the camera will also have no affect if the auto parking is set to '0'.

• Event save ratio (default setting : 30)

Event Ratio 30	
0	30
None	Max

- Configuration setting : 0 (do not use) ~ 30% (max.)

- This function sets the total event recording capacity

(%) out of the whole capacity of the SD card. For instance, if you set '30' as the event recording ratio, all event recorded data will not be deleted prior to reaching 30 percent of the SD card. If the total event recorded data reaches beyond 30 percent of the SD card, the data will begin to delete starting with the oldest events first in consecutive order.

#### Connected camera (default setting : 4 cameras)

Connected camera			
Front	🔽 Rear		
Left	Right		

- Choose the cameras that you want to record.

Change Password



- The password function prevents unauthorized users from viewing your recorded data.
- Information

Information —	
	Company
	Vehicle Type
	License Plate
	Driver

- You can insert information such as company name, vehicle type, license plate and drive name or ID to be displayed on the screen or screen shot.
- Audio recording (default setting : to save)



- Option to turn on or off audio recording.
   Pressing the 'parking' button for 3-4 seconds can change the audio recording function to on or off.
- Speaker volume (default setting : 4)

Speake	er Volu	ime 4		
0	1	1	1	- 4
Off				Max

- Adjusts the volume of the audio announcement and operation status melody.

• Time zone : regional time setting (default setting : +9(Seoul))

Time Zone	
GMT +09:00	•
	Get GMT

- \* GMT(Greenwich Mean Time)
- Pressing [Get GMT] will adjust the time of your camera to your time on your computer
- Time Zone setting will also automatically set, through the camera's GPS.
- Time settings

Set Time			
2011-9-23		(FRI)	
Set 2	PM	5:10:00	*

- When you change the time, please ensure '□ set' is checked in order to activate your updated time.
- Voltage check (default setting : (Normal/Parking mode) do not check)

Voltage Check(Driving)	Voltage Check(Driving)
Not check	Not check
	Not check
Voltage Check(Park)	Vc 10.5 v
	11.0 v
Not check	11.5 v
	12 0 v

- This function allows for avoiding battery discharge protecting your vehicle's battery.
- Driving mode and parking mode are configured separately.

-Not check: operates without battery protection.

- 10.5V : Camera stops operating when the voltage drops below 10.5V, but starts again when the voltage goes over 10.5V.
- 11.0V : similar to above at 11.0V.
- 11.5V : similar to above at 11.5V.
- 12.0V : similar to above at 12.0V.

You may need to set the clock ahead of the current time, in order to adjust the time difference that is taken to insert the SDcard into the product and reboot the system. This is irrelevant with internet access

Access to function keys	- Access to Fund	tion Keys	
Access to function keys	Output	Block	

- Select 'Block' option to prevent unauthorized persons from using the function keys on the camera.

#### Auto shutdown timer



- Select a time period you wish to use the 'auto shutdown timer' function. This allows your camera to shutdown after a certain period of time when the engine is turned off.

Click on 'Viewer Setting' under 'Configuration'. Select the functions you desire and press save on the configuration settings. The updated settings are saved to the SD card. Insert the SD card into the SD card slot of the product and turn the power on. The product will be updated with the new settings.

Configuration	
Blackbox Setting Viewer Setting	
AVI Save Folder	
D:₩	
Snapshot Save Folder	
D:w SmortBookup Soup Folder	
D:\	
Video display mode	Mirror Ch 1 Ch 2 Ch 3 Ch 4 Swap 3 & 4
Default Value	Save Cancel

Please be aware that if the [index.dat] file gets deleted from the SD memory card, it will not allow you to save the configuration settings. The [index.dat] file can be recreated when the SD card is inserted into the product and the power is turned on, but the configuration settings will not be applied.

• Select the folder for AVI, Snapshot and Smart Backup to be saved.

AVI Save Folder	
D:₩	
Snapshot Save Folder	
D:₩	
SmartBackup Save Folder	
D:₩	

Video display mode (default setting : Direct Draw)

-Video display mod	е
💿 DirectDraw	
🔘 DIB	

- DirectDraw select this option if you are using a high-quality graphic card.
- DIB select this option if you are using a low-qualify graphic card.
- Speedometer (default setting : MPH)

-Speedometer-	
🔘 Km/h	
MPH	

- Adjust the speed of your vehicle in kilometers per hour (Km/h) or miles per hour (MPH) in accordance with your local road code.

• Mirror

– Mirror —		
📃 Ch 1	📃 Ch 2	
📝 Ch 3	📝 Ch 4	
🔲 Swap 3	& 4	

- Mirror function allows you to switch the viewing mode between actual image and mirror image. Choose the camera that you would like to view as a mirror image.

#### [Playing the recorded data]

1) Click the 'OPEN' button to load the data from the SD card when connected to your PC.



- 3) [Select drive] window appears. Select the SD card drive and then click the 'OK' button.
- 5) A list of playback appears. Select the file to watch by double clicking on a file.

#### \* All- Normal+Event files

	All		All Event		Norma	al	
No	Block		Time	Event		*	
6	3	20	00/01/02 08:28:27	Event			
7	3	20	00/01/02 08:30:12			=	

#### \* Event- event recorded files

	All	Event	Normal	D
No	Block	Time	Event	<b>^</b>
0	3	2000/01/02 08:26:27	Event	
1	3	2000/01/02 08:28:27	Event	=

\* Normal- normal recorded files

	All	Event	Normal	
No	Block	Time	Event	<b>^</b>
0	26	2012/02/17 11:37:17		
1	27	2012/02/17 11:40:00		=

#### [Printing the video image on display]

1) Click the 'PRINT' icon to open print option, then click the [OK] button. This allows you to print the video image on display during playback.



#### [AVI Backup]

1) This allows the files to be exported and converted to a file readable for a PC media player such as Windows Media Player or VLC. Click the 'AVI' button to open AVI Backup window. Select the following options: Save Folder/ Filename/ Caption (Date, Time, Speed, Coordinate )/ Audio Save and the channels to be selected and click 'Convert'. The file will then be saved to your designated folder



2) Filename will be saved as (user's input)\_CHn.AVI [n:Ch.1(front)/ 2(rear)/ 3(left)/ 4(right)]

AVI Backup	×
Save Folder	
C:\Users\SSI\Documents\BlackBox\AVI	
Filename	
20110915_182612_CHn.AVI	
Caption Date,Time Speed Coordinate	
4 Audio Save	1/1
Convert Stop Quit	t

- 1 : Browse (folder) location
- 2 : Enter the filename
- 3 : Select save option: Date, Time/Speed/Coordinate
- 4 : Audio save option
- 5 : Status bar of saving
- 6 : Overwrite filename option
- 7 : Select which channel to save / all channels

#### [Smart backup]

1) This function enables to select desired time periods of recording data and watch them vi a Viewer and other PC media players.



- 1 : Playback list
- 2 : Select button
- 3 : Delete button
- 4 : Delete all button
- 5 : A selected bloc from the playback list.
- 6 : Saving status
- 7 : Start button (select the folder location + insert filename)

#### [Saving the video image on display as jpg, png, bmp files]

1) Click the 'Capture' icon to open [Select Channel] window. Select the 'Save Folder' and fil e type such as JPG, PNG, BMP and then click on the 'OK' button.



- 1 : Browse (folder) location
- 2 : Enter the filename
- 3 : Choose desired channel display type
- 4 : Select file type (JPG, PNG, BMP)
- 5 : Select the channel
- 6 : Option for overwriting on the same filename
- You can select your desired channel. Filename will be saved as (user's input)\_CHn.bmp (file type). (n: Ch. number 1[front]/2[rear]/3[left]/4[right])



 You can select all 4 channels. Filename will be saved as (user's input)\_QUAD.bmp (file type)



• GPS Tracker : This function allows users to track driver's history by forming the driven route on the map.

1) Click the "Viewer-Tracker" button.



2) Click the [OPEN] button.



- 3) [Browsing] window appears. Select the drive for the SD card and click on [OK].
- 4) A list of files appears on the bottom. Double click on the file you want to see (check the 'Select only' box) to trace the driven path from the start to the end. Click on a dot to show the date, time, latitude, longitude and speed at that location. Click on [Play] to watch the video on the right side of the screen.





• 3D Maps: 'Street View' function: This allows users to watch the recorded driving video by panorama view linked with Google Earth. Users can easily recognize the exact location and situation through satellite images, road and surroundings information by using the GPS.

Google Earth must be downloaded to view the files.

- 1) Click the "3D Maps" button. This will create a file (.klm) which can be opened with Google Earth.
- 2) Save the file on your PC and then double click to open. This will start Google Earth and show the driven route on the map of the selected time.
- 3) Clicking on 'edit' then 'show elevation profile' in google earth will graph a line for speed and elevation on every part of your route. The top speed and elevation is also detailed.

#### [Functions of Viewer]

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		1(	All	Event	Nor	rmal
1			No Block	K Time	Event	•
		9	32 49	2013/04/04 17:14:10	Event	41.
DI ANICT LI AL A	BLANET HALL	1	33 49	2013/04/04 17:14:29	44	41.
PLANET HALO	PLANET HALO	1	34 50	2013/04/04 18:36:33		41.
		9	35 50	2013/04/04 18:36:35		42.
Leading Edge Mobile Incident Reporting	Leading Edge Mobile Incident Reporting	9	36 50	2013/04/04 18:37:22	Event	42.
		1	37 50	2013/04/04 18:38:12	Event	42.
			38 50	2013/04/04 18:38:48	Event	42.
			39 50	2013/04/04 18:39:35	Event	42.
			40 50	2013/04/04 18:40:10	Event	42.
		l l	41 50	2013/04/04 18:40:57	Fuent	42.
			42 01	2013/04/04 21:03:35	Event	42.
		H	MA 51	2013/04/04 21:03:30	Event	42.
			45 51	2013/04/04 21:05:17	Event	43
			46 51	2013/04/04 21:06:23	Event	43
PLANET HALO	PLANET <b>HALO</b>					-
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Leading Edge Mobile Incident Reporting	Leading Edge Mobile Incident Reporting		Hide Ma	<mark>⊳ 12</mark>		
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 Playback display: It shows the playback of your recorded video data from the SD card. Double click the mouse (left) button twice to enlarge the displaying screen. Double click again to go back to normal screen display. Zoom in and out by scrolling your mouse wheel (upward – zoom in /downward – zoom out) (Min. 1.0 ~ Max. 3.0 times). Click and drag your mouse pointer to view the desired position on the displaying screen.

2. G-Sensor Graph: Shows 3 axis of the G-sensors. If you want to see the graph more at a closer view, press the 'Zoom' button on the top left corner of the box.



- 3) GPS Information: latitude, longitude, azimuth and time of playback.  $\bigcirc$  $\bigcirc$ 4) -1. Playback Position Slider : Position of playback. -2. Playback Time (Total time of current playback / block time of current playback) 5) Control Button (4ch. Viewer does not function high-speed plays) 44 4 4 Ib. ... M 3 5 6 9 - 1 : Jump to previous file - 2 : Reverse playback search - 3 : Frame by frame in reverse mode - 4 : Reverse playback - 5 : Pause - 6 : Forward playback - 7 : Frame by frame in forward mode - 8 : Forward playback search - 9 : Jump to next file 6) Speed : speed display in kmh, mph 7) Volume Control Slider : Controls the volume of recorded audio. 8) -1. Playback Speed Slider : Adjusts playback speed. -2. Brightness Control Slider : Changes the brightness of the video
  - -3. Saturation Control Slider: Changes the saturation of the video
  - 9) 1Ch. / 2Ch. / 4Ch. / Open file / Configuration / Print / AVI Backup / Smart Backup / Save (Capture) / Tracker button



10) Click on Normal, Event or All to show the lists of each recorded.



- 11) Playback List : Shows recorded files in the playback list: double click to play.
- 12) Google Maps: GPS information is linked to Google maps, for vehicle tracking. Click on Hybrid for real image viewing
- 13) Homepage button
- 14) Software version information / Minimize window / Maximize window / Close button



#### [Upgrading the product]

Our product may need upgrading for continuous product development and maintenance. For the latest firmware upgrade, please visit our webpage under 'Firmware download.'

- 1. Insert or connect the SD card to the computer.
- 2. Download the upgrading file from out homepage to the SD card.
- Insert the SD card into the product and turn the power on. Then LED will begin to flicker. Remember not to unplug the power or remove the SD card during a firmware upgrade until the lights have stopped flickering.

#### [Viewer requirement]

- CPU : Pentium4 (Recommended-Dual Core)
- Memory : RAM 2G (Recommended-RAM 4G)
- Graphic : Graphic card compatible with DIRECT-X 10
- Operating System : MS WINDOWS XP/VISTA/7

### Frequently Asked Questions

Problem	Troubleshooting		
✓ Product does not start.	<ol> <li>Check that the power of product is properly connected.</li> <li>Use only the cable that is supplied or recommended by your local dealer or supplier.</li> </ol>		
✓Video is not as clear as it should be.	<ol> <li>Make sure your camera lens is clean and dust free.</li> <li>Make sure your vehicle's windshield is clean.</li> <li>Make sure the desired resolution is selected.</li> </ol>		
<ul> <li>✓ Footage is not being saved on the SD card.</li> <li>✓ The device does not recognize the SD card.</li> </ul>	<ol> <li>Eject your SD card and insert it into the device again.</li> <li>Make sure your SD card is not locked.</li> <li>Format your SD card and try it again.</li> </ol>		
<ul> <li>✓ Cannot receive GPS signal</li> <li>✓ Loss of GPS reception</li> </ul>	<ol> <li>Check that the GPS cable is connected properly.</li> <li>Make sure your windshield is not tinted.</li> <li>If you have not used the product for more than 3 days or are using it for the first time, it may take longer, as much as up to 15 minutes, to receive the GPS signal.</li> <li>The GPS may lose reception depending on weather conditions and surroundings. Stop at a location where your GPS can regain its reception, before proceeding.</li> </ol>		

#### Warranty Policy

Planet Halo values your business and strives to provide you with the very best of service.

General warranty is provided by Planet Halo ("PH") unless your Planet Halo product ("Product") was purchased from an authorized distributor or authorized reseller. Distributors may sell Products to resellers who then sell Products to end users. Please see below for warranty information or obtaining service. No warranty service is provided unless the Product is returned to an authorized supplier or return center.

Note: The term of your general warranty period shall commence on the purchase date appearing on your purchase receipt from an authorized distributor or authorized reseller and extends only for the period of time set forth in the Product documentation.

Proof of purchase shall be required to be eligible for this warranty and to establish the commencement date of this warranty. To verify the warranty of your Product, Please refer to your User Manual for a statement of your limited warranty. A User Manual can be obtained from your SD card which comes with Product or authorized distributor or reseller or the Planet Halo web site.

No Product may be returned directly to Planet Halo without first contacting PH for a Return Material Authorization ("RMA") number. If it is determined that the Product may be defective, you will be given an RMA number and instructions for Product return. An unauthorized return i.e. one for which an RMA number has not been issued, will be returned to you at your expense. Authorized returns are to be shipped prepaid and insured to the address on the RMA in an approved shipping container. Your original box and packaging materials should be kept for storing or shipping your Product. If upon inspection of your returned Product, Planet Halo suspects fraud or deems such Product to be counterfeit, PH may, in its sole discretion, confiscate such Product or take such other actions as it deems necessary. To request an RMA, please contact your supplier.

**Note:** RMA shipments may be subject to delays if we encounter discrepancies such as entering incorrect information, wrong product shipped to PH or incorrect quantity.

YOUR EXCLUSIVE REMEDY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT.

PH may elect which remedy or combination of remedies to provide in its sole discretion. PH shall have a reasonable time after determining that a defective Product exists to repair or rep lace a defective Product. PH's replacement Product under its limited warranty will be manufactured from new and serviceable used parts. PH's warranty applies to repaired or replaced Products for the balance of the applicable period of the original warranty or ninety days from the date of shipment of a repaired or replaced Product, whichever is longer.

#### Warranty Policy (Cont.)

PH'S ENTIRE LIABILITY FOR ANY DEFECTIVE PRODUCT SHALL IN NO EVENT EXCEED THE PURCHASE PRICE FOR THE DEFECTIVE PRODUCT. THIS LIMITATION APPLIES EVEN IF PH CANNOT OR DOES NOT REPAIR OR REPLACE ANY DEFECTIVE PRODUCT AND YOUR EXCLUSIVE REMEDY FAILS OF ITS ESSENTIAL PURPOSE.

NOTWITHSTANDING ANYTHING ELSE IN THIS POLICY OR OTHERWISE, PH WILL NOT BE LIABLE WITH RESPECT TO THE PRODUCTS UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY (I) FOR ANY AMOUNT IN EXCESS OF THE PURCHASE PRICE FOR THE DEFECTIVE PRODUCT OR (II) FOR ANY GENERAL, CONSEQUENTIAL, PUNITIVE, INCIDENTAL OR SPECIAL DAMAGES. THESE INCLUDE LOSS OF RECORDED DATA, INTERRUPTION OF USE, THE COST OF RECOVERY OF LOST DATA, LOST PROFITS AND THE COST OF THE I NSTALLATION OR REMOVAL OF ANY PRODUCTS, THE INSTALLATION OF REPLACEMENT PRODUCTS, AND ANY INSPECTION, TESTING, OR REDESIGN CAUSED BY ANY DEFECT OR BY THE REPAIR OR REPLACEMENT OF PRODUCTS ARISING FROM A DEFECT IN ANY PRODUCT. THIS SECTION DOES NOT LIMIT LIABILITY FOR BODILY INJURY OF A PERSON.

#### Your Use of the Product

PH will have no liability for any Product returned if PH determines that:

The product was stolen from PH.

The asserted defect: is not present, is attributable to misuse, improper installation, alteration (including removing or obliterating labels and opening or removing external covers (unless authorized to do so by Planet Halo or an authorized Service Center), accident or mishandling while in the possession of someone other than PH.

The Product was not sold to you as new.

The Product was not used in accordance with PH specifications and instructions.

The Product was not used for its intended function (for example, in-vehicle recording environment).

#### Additional Limitations on Warranty

PH's warranty does not cover Products which have been received improperly packaged, altered, or physically damaged. Products will be inspected upon receipt. Please see additional examples of the warranty limitations below:

#### Packaging

- Improperly packaged
- Non-qualified shipping container

#### Alterations

- Counterfeit label(s)
- Customer added wires
- Labels have been switched
- Labels exhibit tampering
- Missing barcode or top cover label
- Serial number on product does not match barcode on end

#### Warranty Policy (Cont.)

#### Damage

- Broken pins on connector
- Connector(s) are damaged, cracked, missing or broken
- Cracked components on the circuit board
- Dented base casting
- Torn or punctured tape seal
- Dented top cover
- Deep scratch
- Loose, damaged, or missing screws
- Missing PCBA (Circuit Board)
- Obscured breather filter holes
- Stripped mounting hole threads

#### Warranty Period

- Main Camera Unit: 12 months (from purchase)
- External Camera: 6 months (from purchase)
- SD Card and other accessories: N/A

#### **After Services**

- Product parts of a discontinued product will be kept for 12 months only
- Make sure you record on the warranty form upon your purchase of the product and please keep it for after services
- After services may or may not be free of charge depending on the type of product defect. Repairing costs may arise upon examination of the product

	After Services			
Opon Dillerent Occasions	Within the Warranty Period	After the Warranty Period		
Product defect or malfunction occurs after using it	Replacement or Repairing (Free)	Repairing (Cost Charged)		
Product defect or malfunction occurs during shipment (upon purchase)	Replacement or Repairing (Free)	N/A		
Product defect or malfunction occurred during shipment (upon after services)	Replacement or Repairing (Free)	Replacement or Repairing (Free)		
Repeated defect or malfunction occurs more than 5 times	Replacement or Refund	Repairing (Cost Charged)		
Product defect or malfunction occurs due to natural disasters	Repairing (Cost Charged)	Repairing (Cost Charged)		