

**Honeywell**

Sales inquiry please contact:

[sales@eng.douyee.com.sg](mailto:sales@eng.douyee.com.sg)

[www.eng.douyee.com.sg](http://www.eng.douyee.com.sg)

**Honeywell**



# CAR BLACK BOX

## Beyond Security

User Manual



Camera can be rotated 180 degrees only to the direction of driver's seat.

This user manual can be modified for the function enhancement of product without prior notice.

# Contents

CAR BLACK BOX Beyond Security

Safety Precautions	02
Product Characteristic	06
Product Composition	08
Specifications	09
Title & Function	10
Installation	12
Usage	13
PC Viewer	16
FAQ	22

## Safety Precautions

In case of tinted windows, the video quality may be degraded.

- ⚠ Do not operate the product while driving.  
Please operate after pulling over into a safe place.
- ⚠ The ideal temperature to ensure the product's operation is -10°C-50°C. Do not expose the product to direct sunlight for a prolonged period of time. This may cause damage to the product. It may cause a malfunction.
- ⚠ Do not install the product in a space where it could block the view and interfere with driving.
- ⚠ Clean the attached side of product.  
Adhesion may be reduced due to foreign substances.
- ⚠ Please attach firmly not to fall the product down while driving.  
In case of an incorrect attachment, it does not operate normally and could interfere with driving due to the falling.
- ⚠ If the location of attachment changes, it may not be recorded the angle you want because of the change of angle.
- ⚠ In the case of using this product for a long hours, it may not be recorded the images you want because of the change of angle by vehicle vibrations, etc.

- ⚠ If the product is operated without the memory card, it will not function properly.
- ⚠ Be careful not to damage the cable during securing the cable.
- ⚠ Do not spray water or detergent directly to the product while cleaning the vehicle.
- ⚠ Be careful not to put fingerprints or foreign substances on the camera lens.  
The video quality may be degraded because of fingerprints or foreign substances.
- ⚠ If there is a lighting around the camera lens, the video quality may be degraded.
- ⚠ If the product is damaged after accident or the power is blocked, it may not be recorded the images normally.
- ⚠ Do not disassemble, repair or modify randomly.
- ⚠ Do not press the rotating parts with excessive force.
- ⚠ Please use the original components from our company.
- ⚠ The product can be rotated 180 degrees only in a counterclockwise direction.  
It cannot be rotated in a clockwise direction.

When not using for a long time, please disconnect power.  
It can be a cause of battery discharge and fire.

## Safety Precautions

The memory card is consumable so it should be replaced with a new product after using for a while. Please use the same product with the provided product.

- ⚠ Do not give a strong impact or operate with sharp objects.
- ⚠ Please use a rating voltage only.
- ⚠ The time in the product may not be accurate depending on the surrounding environment.
- ⚠ Please check the images of memory card regularly for the normal operation.
- ⚠ The memory card must be formatted on a regular basis. When using for a long time without formatting, it may not read the data due to memory error. You can prevent errors in the memory card through formatting.
- ⚠ Do not remove the memory card or turn the power off while the memory card is in use.
- ⚠ Do not disassemble or modify randomly.
- ⚠ Please use only the supplied memory card.
- ⚠ Please save important data safely on the storage medium other than a memory card.
- ⚠ Do not remove or insert the memory card while the product is in use. The product may not operate properly and problems such as corruption of saved video data can occur.

- ⚠ The memory card can be overwritten randomly or formatted by the Black box. Please keep backup the important data.
- \* GPS signal reception can be degraded under the influence of weather such as rain, fog, etc. and electronic jamming.
- \* GPS signal reception can be degraded under the overpass, in the tunnel, in the building area, etc.
- \* If driving a vehicle in a poor reception of GPS, it may take more time to recognize the current location than in the stationary state.
- ⚠ We are not responsible for damages due to the careless operation of user and the accident during driving.
- ⚠ This product can be modified for the function enhancement without prior notice.
- ⚠ We are not responsible for damage or loss of data in the memory card in any case.
- ⚠ Improper use of batteries may result in overheating, fire, or explosion.
- ⚠ Do not puncture or expose to excessive force.
- ⚠ Keep batteries out of reach of children and pets.
- ⚠ Do not use near high temperatures.
- ⚠ Batteries should be stored at a temperature of 0°C~40°C.
- ⚠ Batteries can be stored at a temperature of 70°C for one week.
- ⚠ Batteries are guaranteed to last for 6 months.

## Product Characteristic



### 2Mega pixel

Provides clear resolution by using a 2 Mega Pixel sensor.



### Constant Recording While Driving

Provides Constant high resolution recording at 30fps by using a wide angle 120° lens.



### Event Recording

At the moment of accident while driving, detecting excessive impacts such as sudden stop, acceleration and rotation, built-in 3 axis acceleration sensor detects the movements which is recorded automatically in the event video.



### Manual Recording

When the driver presses the emergency recording button, the video is sent to the event video even if it is not an accident.



### Parked Recording

When the vehicle is not in motion, Parked Recording mode is turned on and records video at 5fps.



### Memory Card Format

Micro SD memory card in the product can be forced to be formatted.  
(Please save important data before formatting)



### Sequential Deletion of Old Images

If a storage capacity of Micro SD memory card is exceeded, it automatically deletes from the oldest footage and save the new images.



### Audio Recording Function

Audio is recorded while video recording through the built-in microphone. (ON/OFF)



### Voice Information Function

The setting status of Black Box can be easily identified through the built-in speaker. (Mute ⇔ Melody ⇔ English)



### Camera Rotation Function










The camera can be rotated both horizontally and vertically and recorded easily with 180 degrees rotation of the camera in a counterclockwise direction in the case of the indoor and the front recording if necessary.



### Video Playback Function through the Viewer

The saved video can be played easily through the viewer program at the PC.

## Product Composition

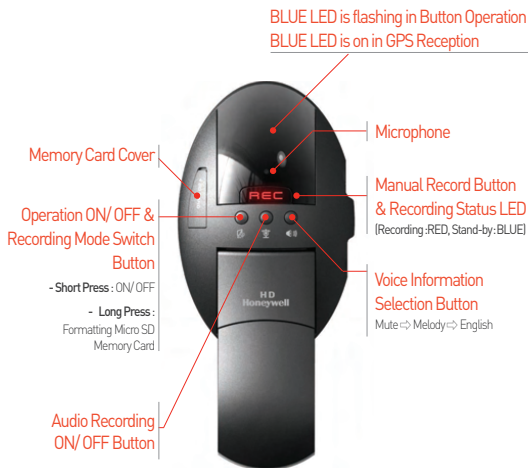
	Inserted into the product 		
Terminal Unit	Memory Card	Memory Card Reader	
			
Cigar Jack (3m)	3M Tapes (2ea)	Wire Strap Clips (5ea)	
			
User Manual	Video Cable (Optional)	GPS Module (Optional)	Y-Cable (Optional)

※The provided components may be altered to improve performance without prior notice

## Specifications

Specification	HBB-200HD	Remarks
Camera	2Mega Pixel CMOS Sensor	1/3.2 Inch (Sensor size)
Resolution	HD (1280 x 720P), 30FPS	FPS (Frame Per Second)
Video Compression	H.264	
Recording Angle	Wide angle 120 degree lens	Possible to record the front and inside of the car
Sensor	built-in 3 axis acceleration sensor	Detect impacts, sudden stop, acceleration and rotation
Recording Type	Constant recording	Continuous recording while the black box is in use
	Event recording	Shock sensor event detection Records 5 sec. before and 15 sec. after detection (total 20 seconds)
	Emergency Recording (Saves to Event recording folder)	Records 5 sec. before and 15 sec. after the user presses the "REC" button (total 20 seconds)
	Parked recording	Records at 5FPS 5 sec. before and 15 sec. after motion is detected (max. 1 minute)
Storage	Micro SD Card Support Capacity : 4GB~32GB	Support SDHC
Recording Capacity	Constant recording: 60% Event recording: 20% Parked recording: 20%	May differ according to memory capacity. The system requires approximately 200MB.
GPS	Support	Optional
Audio Recording	Built-in microphone	ON/OFF
Voice Information	Built-in speaker	Mute ⇄ Melody ⇄ English
Operating Power	DC12V ~ DC24V	Use the vehicle power
Operating Temperature	-10°C ~ +50°C	
Operating Humidity	20% ~ 80%	
Storage Temperature	-10°C ~ +70°C	Refer to the battery safety precautions

## Title & Function



## Installation



1. Check the insertion of memory card



2. Attach a double-sided tape to bracket



3. Check the area for attachment



4. Remove the protective film of double-sided tape and attach the product



5. Remove the protective film of lens



6. Adjust the angle of lens



7. Connect the camera power (Cigar Jack)



8. Arrange the wire

\*Warning: Do not install or remove the GPS while the product is being operated.

## Use

### Black Box Operation

#### Turning the Black Box ON/OFF and formatting the memory card

1. Pressing the button briefly will turn the Black Box ON/OFF
2. Turning the Black Box OFF will put it in Stand-by mode
3. Holding down the button will format the Micro SD memory card.

### Recording Type

#### Constant Recording

1. REC button is red in constant recording.
2. Video recording is recorded every one minute.
3. If the mode is changed to Event, Manual, or Parked recording, the video recording may be less than 1 minute.
4. The video recording will be less than 1 minute after the Black Box is turned off.

#### Event Recording

1. REC button becomes red to start recording when the event occurs.
2. Video will be recorded from 5sec. prior to 15 sec. after an event is detected. (Total 20sec.)
3. If Event Recording has begun, a secondary event will not be detected.
4. The video recording of an event that occurs directly after a prior event may be less than 20 seconds.



### Parked Recording

1. If the vehicle is motionless for more than the set time, Parked Recording mode will be activated.
2. Parked Recording mode activation time can be set in the Settings menu. (No Setting, 5 min., 10 min., 15 min., 30 min.)
3. Recording will begin 1-5 seconds before a motion is detected and end 15 seconds after. If there is continuous motion, recording will be saved at 1 minute intervals.
  - \* In low light, motion can be detected through changes in the Gain level and C-MOS Sensor rolling.
4. Video will be recorded at 5FPS.

#### Manual Recording



1. Pressing the Manual Recording (REC) button will activate manual recording.
2. Video from 5 seconds prior to pressing the button to 15 seconds after will be recorded. (Total 20 seconds)

#### Other Features

### Memory Card Maintenance

On the 1st and 15th of every month, if the power is turned off and then on, you will hear a reminder that says, "It is time to check the Memory Card." To prevent errors that can occur as a result of not formatting the memory card for an extended period of time, please reformat the memory card on a regular basis.

※ When the Black Box is off, there may be no output depending on the battery capacity.

### Temperature Detection Function

If the product becomes too hot, the internal temperature sensor will turn off the product.

("T57" at the bottom right corner of the screen indicates that the product is off. "T45" indicates that the products is on again.)

(The numbers at the bottom right corner do not indicate the temperature.)

#### Firmware Update

1. Using a PC, format the memory card as FAT32.
2. Copy the firmware update file to the memory card's root directory.
3. Insert the memory card into the Black Box.
4. Turn on the Black Box.
5. Proceed with the update after the audible instructions.
6. The Black Box will restart automatically after the firmware upgrade has completed.

\*An error may occur if the power is turned off during a firmware upgrade.

**N  
O  
T  
E**

The power of the Black Box could be shut down by the accident during constant recording or event recording. In this case, the footage in about 1-3 seconds after the accident might be recorded except the footage before the accident.

## Installation



Installation files are stored on the memory card.  
To install the viewer program, please use the supplied memory card reader.  
It is recommended to use after installing the program and formatting the memory card since the installation files take up space.  
Program can also be downloaded at [www.honeywellblackbox.co.kr](http://www.honeywellblackbox.co.kr)



- Start the Black Box viewer installation program.



- Press the NEXT button and proceed to install.

## Support Condition

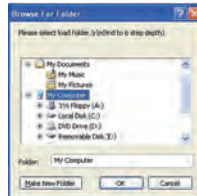
- Windows 7(64bit, 32bit), Windows XP(SP3 or more), Windows Vista(64bit, 32bit)
- DirectX 9 or higher  
(<http://www.microsoft.com/korea/windows/directx/default.msp>)
- 512MB RAM Memory or more
- The latest graphics drivers [required]  
(When using the old drivers, it may be blue on the playback screen or the error signal would be appeared.)



- Click the Icon to start the Black Box viewer program.



- Select the resolution of video.



- Select the memory card or folder of recording footage.  
EX) Removal Disk(F:.)

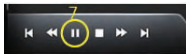
## Operation Description



## Video Playback Function



1. Play the video of previous file on the list
2. Play the video before 5 seconds
3. Play the video
4. Stop the video
5. Play the video after 5 seconds
6. Play the video of next file on the list
7. Pause



## Play Section, G Sensor & Speed Display Function



1. Display the position of currently playing time in the entire playback file  
- Display the current playback time with real-time graphs and text

## 2. Speed display

- Display the current speed of a vehicle

## 3. GPS operation display

- Display the GPS operation
- It is displayed as  in the normal reception and is flashing during playback.

## 4. G sensor display

- Display the graph of G sensor

## Setting Function during Operation



## 1. Play speed setting

- Select the desired speed among 0.5, 1, 1.5, and 2
- Press the button 1, if do not want to set up speed

## 2. Screen brightness

- Adjust the brightness with + and - buttons
- Press the button 2 after completing the adjustment of brightness

## 3. Image reversal

- Display the upside-down image

## 4. Save the still frame

- Capture and save the still frame during playback

Move to the directory of the saved file automatically

## 5. Audio setting

- Set the volume with the audio setting bar
- Set the volume with the up and down direction keys during playback

## •Set and cancel full-screen view (Enter)

- Press ENTER key to set and cancel full-screen view during playback

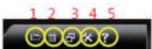
## •Stop and play during playback (Space bar)

- Press Space bar to stop and play during playback

## •Playback speed and play the previous video (←→)

- Select the left and right direction keys to adjust the playing time during playback

## Management and Setting Function



1. Open the folder  
Designate the path to save image
2. Delete  
Delete the selected item
3. Copy the image file  
- Copy the selected file  
- It can be played on other players
4. Setting  
Set and check the required information to the Black Box and the viewer
5. Help

## Environment Setting



The menu for environment setting of the Black box.

1. Audio Recording : Setting for the audio recording
2. Mic Volume: Setting for the microphone recording volume.
3. Voice Information : Setting for the voice information
4. Speaker Volume: Setting for the Black Box information volume.
5. Acceleration : Setting for the acceleration sensor
6. Parked Recording Time: Setting for the Parked Recording mode.
7. Parked Recording Motion: Motion detection sensitivity setting for Parked Recording mode.
8. Time Setting : Setting for the Black box time  
[Designate the flag to apply the setting]
9. Time Zone : Regional time setting
10. TV-Out: Setting for TV output mode and screen format.
11. Save the File Path : Display the currently designated path
12. Capture File : Select the capture file format
13. Vehicle Speed : Select the unit of speed
14. Language Setting : Select the language of the Black box and the viewer
15. Video Selection : Select the video that is currently playing
16. Version Information : Output the version information  
- Select the mode and press the SAVE button to save the environment setting as a file and press the CANCEL button to cancel

#### The voice information : "Check the memory card"

- Make sure the memory card is correctly inserted
- Remove the memory card and insert again
- Reuse the memory card after formatting
- Replace with a new memory card if the same problem occurs after formatting the memory card

#### The voice information : "A system failure occurs"

- Make sure the memory card correctly inserted
- Remove the memory card and insert again
- Reuse the memory card after formatting
- Supply power again

#### The quality of the recorded video is not good

- Make sure the protective film of camera lens is removed
- Make sure if there are no fingerprints or foreign substances on the surface of camera lens
- Make sure the surface of windshield is clean
- Make sure if there are no lightings around camera lens that causing glare

#### The product is not working

- Check the power supply specification and supply power again
- Make sure if the fuse of cigar jack is connected
- Make sure if using the original power cable

**Honeywell**