ASKEY

ASKEY Connected DashCAM

CDR6013-WG

User Manual

Nov. 2017

ASKEY Computer Corp.

Content

1. Introduction

Thank you for purchasing this advanced Connected Car Cam. This device is specifically designed for the functions descript as the following.

1.1 Features

- Full HD 1080p single camera driving recorder
- 1920x1080p video recording
- Wide view angel FOV 120˚(H)
- 2 Mega Pixel CMOS Sensor
- 2inch LED backlight TFT panel, QVGA 320 x 240 pixel color screen
- Built in LTE/3G, Wi-Fi, Bluetooth and GPS function
- 3.7V, 750 mAh rechargeable Li-ion battery non removable battery
- Seamless looping recording
- Support up to 128GB Class 10 Micro SDHC
  (Suggest to use Micro SDHC 95 MB/s R, 90 MB/s W)

1.1.1 Package Contents

The package contains the following items. In case there is any missing or damaged item, contact your dealer immediately.

The device	Mount bracket	Power Cable 1: Cigarette Car Charger 5V 2A Cigarette Car Charger with 5m cable with USB mini-B connector.
	Micro SD card	Power Cable 2: Power Box 5V 2A power box with 5m cable with USB mini-B connector.

Remark: Please notice there is one power cable in your package box. You could confirm with

before your purchasing.

1.2 Device Overview
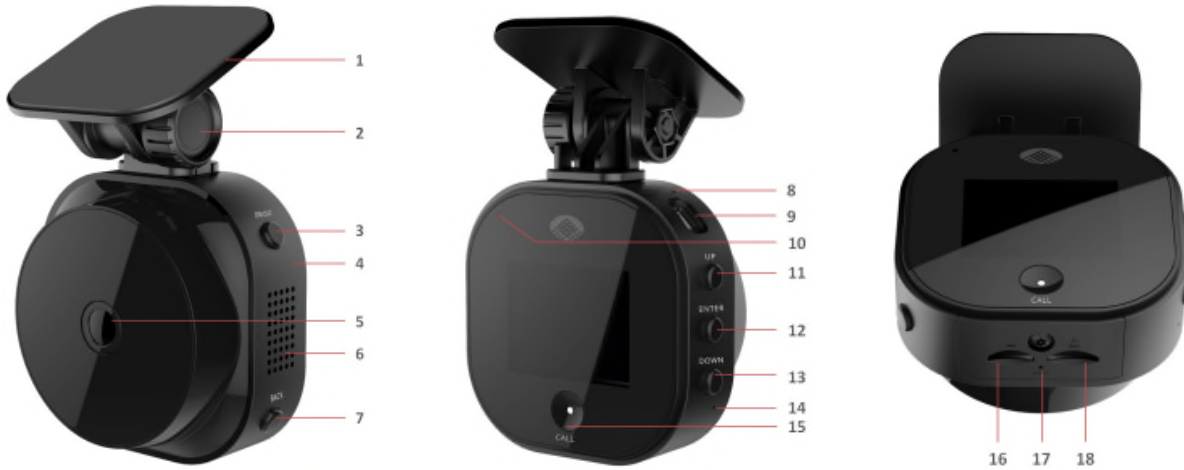
No.	Description	No.	Description
1	Mount Bracket	11	Up Button
2	Knob/Hinge	12	Enter/OK Button
3	Power Button	13	Down Button
4	Main Device	14	Microphone-2
5	Camera	15	Call Button
6	Speaker	16	SIM Card Slot
7	Back/Return Button	17	Reset Button
8	Microphone-1	18	Micro SD Card Slot
9	USB port		
10	LED Indicator		

1.3 Getting Started

1.3.1 Insert Memory Card and SIM Card

Follow the direction indicated as the following to insert the memory card and SIM card. (Please contact with your Operator to get the SIM card.)

Micro SIM card
Micro SD card
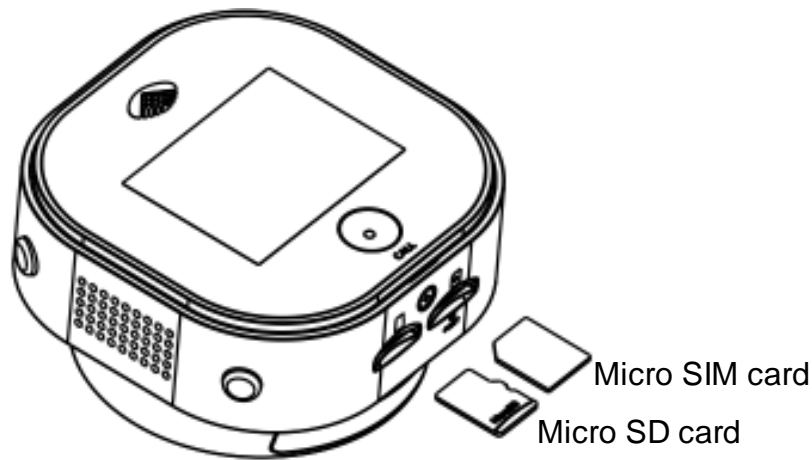
1.3.2 Install in Vehicles

Please follow the steps to make sure the device is securely locked in place.

1. This device shall be installed near the rear view-mirror, at the center of windshield, if possible, for optimal viewing.
2. Mount the device nearby the room mirror. Make sure the camera view area in LCD.
3. Position the mount bracket on the windshield, and then press to paste on the windshield. Make sure the base is securely locked in place.
4. Loosen the knob swivel to adjust tilt angle. Locking knob, and confirm that the device is securely locked in place.

1.4 Power the Device On / Off

Use only the attached car charger for activating the device and charging the built-in battery.

1. Connect one end of car charger connector to USB port on the device.

2. Plug the other end of the car charger to the cigarette lighter socket of your vehicle. Once the vehicle engine is started, the device automatically turns on.

3. Switch key from ACC to OFF position, then device will enter sleep mode and start consuming battery power.

1.4.1 Auto Power On/Off

Once the vehicle engine is started, the device automatically turns on and starts recording (must have SD card).

When the vehicle engine stopped, the device will turn to sleep mode after 5 seconds, in sleep mode, the device gets the power by battery. Turn device off, long pressing the Power button around 3 seconds, a power off confirm dialog shows, pressing Enter button to power off the device completely.
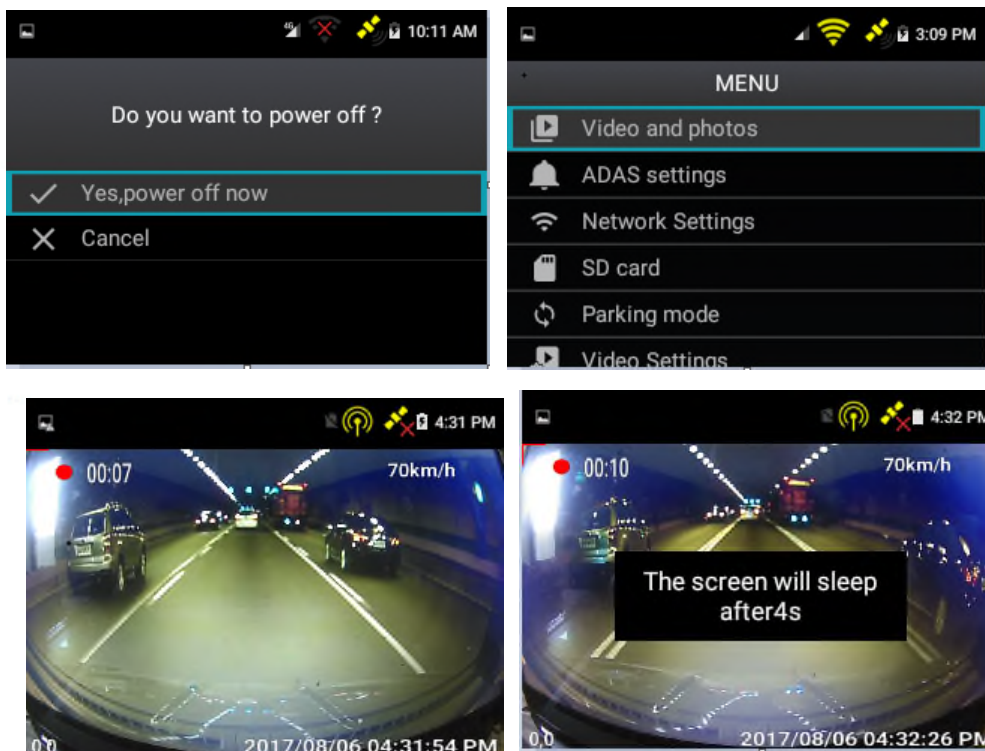
1.4.2 Manually Power Off

Press the power button around 2-3 seconds to power off, a dialog will be shown and press Enter button to confirm it.

1.4.3 Reset the Device

In case the device fails to function normally due to unknown causes, click the reset key on the bottom of the device.

1.4.4 Set the Date / Time

Date and Time will be automatically updated after registered the LTE/3G network, connected to Wi-Fi or receive the GPS signal

1.4.5 LED Indicator

LED Indicator Status	Description
Red light keeps flashing	Power on and recording
Red light on	Sleep mode

Call Button LED Status	Description
Red light keeps flashing	Connecting to service center and waiting answer the eCall.
Red light on	Answered the eCall

1.4.6 Menu Operation

Press Enter button to enter menu setting, press Up / Down button to select sub menu, then press Enter button OK to enter the setting, press Up / Down button to select the option, and then press Enter button OK confirm. After completing the setting, press Back button to exit menu setting.

2. Using the Driving Recorder

2.1 Recording Videos

Before starting recording, please insert a SD card into the SD card slot. With car charger connected the device will automatically turn on and start recording, the video recording icon shown on the left top of the   screen and a red color LED blinks . The recorded files are saved on the SD card. To stop recording, press Enter button again.

The recorded files are saved on the SD card, you can get these video files under path \\sdcard\DVR\driving\normal_video when you insert the SD card into your PC or playback these files under the menu items of "Video and photos/Normal".

2.1.1 The Recoding Screen

Icons on the recording screen.

Status icon	What it means
● 00:00	Video is recorded
🔋	Show the battery level and charging status
● 00:04	Recording time counter
🔇✗	No sound when recording video
70km/h	Tell you the current vehicle speed
ADAS ✗	ADAS is disabled
12:43 PM	Display the current time
🛰	Satellite signal is acquired
🛰✗	No satellite signal is acquired
🛰	GPS location information is acquired

📶	Connected to Wi-Fi network
(ᵖ)	Wi-Fi hotspot allow other device sharing your 3G/LTE connection.
⁴ᴳ	Connected to 3G/LTE network and show the signal strength.

2.1.2 Voice On/Off when recording

Enter the Video Setting to enable Voice when recording Off / On.

2.1.3 Take Picture

During recording, press Back button can capture the current scenery as a picture.

2.1.4 Screenshot

Press Power and Down button at the same time can capture the current screen as a picture. The screen pictures are saved on the SD card, you can get these under path \\sdcard\pictures\screenshots when you insert the SD card into your PC.

2.2 Playback the Videos and Photos

2.2.1 Normal Videos

As mentioned, video recording is started as soon as the device is powered on, but you have to insert a SD card before recording. Without any setting in advance, the video recording will keep continuous. The recorded video can be categorized into 4 types of Normal video, Collision event video, Risking driving video and Security monitor video in Parking mode (Vehicle engine is off), and video files are saved on the SD card under path \\sdcard\DVR\driving. The oldest files will be overwritten if the SD card fills up. All kinds of video files can be played directly on device. Enter into its corresponding sub menu item of "Video and photos" for normal, event, risking driving and parking videos, scrolling through video clips or photos using "UP" and "DOWN" button, to playback or view chosen video or photo files by pressing "ENTER" button. The difference of 4 types of recorded files will be explained in later sections.
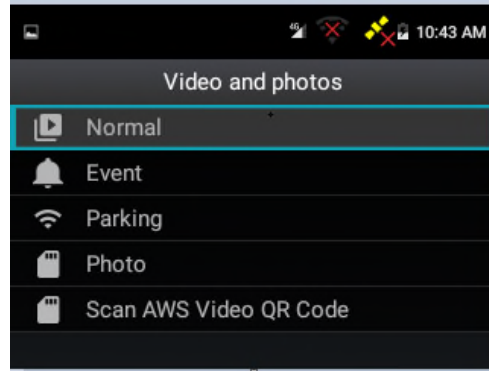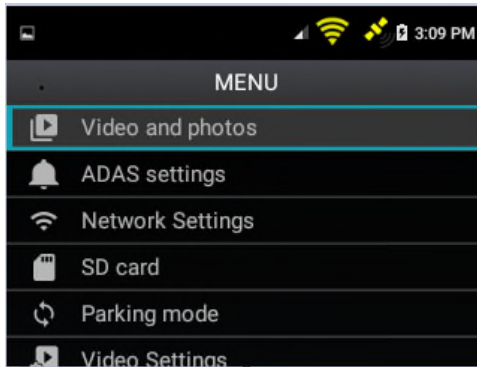
2.2.2 Event Videos

The Event video record is triggered and activates in the case of a car collision accident which is determined by the gravitational acceleration.

When collision is detected, this device will save the recorded video clips under \\sdcard DVR\event\event_data_video and upload them to cloud forcibly.
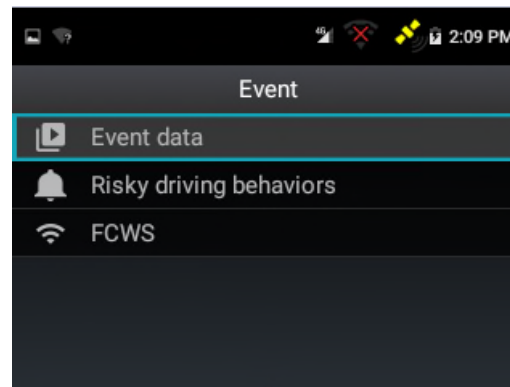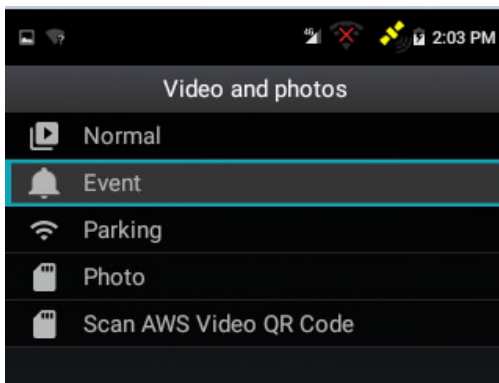
2.2.3 Risky Driving Videos

Risking driving is indicated the behaviors of hard-brake or hard-turn. The video record of risking driving is activated and determined according to the variation of Angular velocity via gyroscope and g-sensor.

When risking driving is detected, this device will save the recorded video clips under \\sdcard\DVR\event\rdb_video and upload them to cloud forcibly.

2.3 Network Settings

The device built-in LTE/3G, Wi-Fi and GPS module, please insert a SIM card before power on, when LTE/3G or GPS signal has been received, the recorded video can be tracked at this time.

2.3.1 LTE and 3G Frequency Bands

Please make sure the LTE and 3G frequency bands with your operator in local before you insert the SIM card into the device.

* **Support LTE Band**
  EU/JP/TW/APAC requirement:
  2 (1900 MHz)
  4(1700 MHz)
  5(850 MHz)
  17(700 MHz)
  26(850 MHz)

* **Support 3G Bands:**
  WCDMA 2(1900 MHz), 4(1700 MHz),5(850 MHz)

* **Peak Downlink/Uplink**
  HSPA+ DL: 42Mbps, UL: 5.76Mbps, LTE Cat4 DL: 150Mbps, UL: 50Mbps

2.3.2 Wi-Fi

The device support IEEE802.11 b/g/n, 2.4GHz Wi-Fi connections. Press Enter button to select Network Setting menu to activate the Wi-Fi hotspot function. Insert a SIM card before you activate the Wi-Fi hotspot function. (Please notice you will be charged by local operator if you activate it).

2.3.3 Bluetooth

The device support Bluetooth 4.1, the profile can support SPP. Press Enter button to select Network Setting menu to activate the Bluetooth function. Make sure the profile can be connected to your mobile device before you activate it.

2.3.4 APN Setting

Press Enter button to select Network Setting menu, enter LTE to select "Access Point Names", press " + " icon then use on-screen keypad to input the APN.
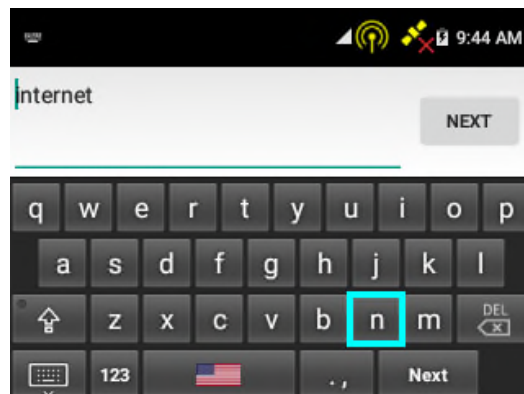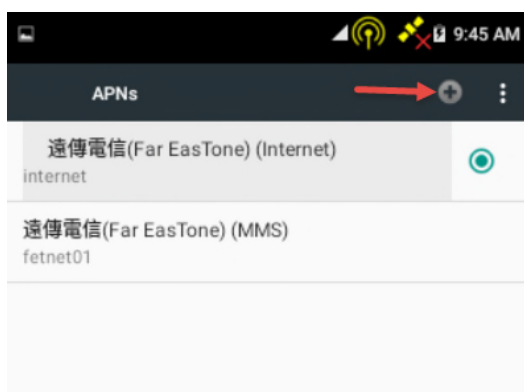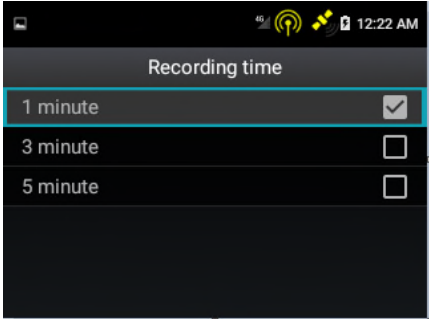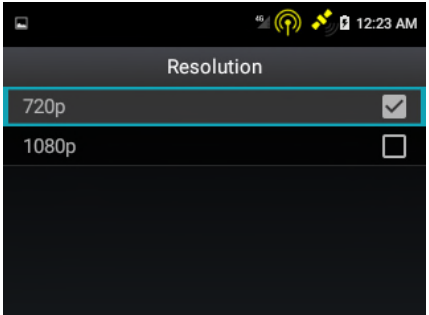
2.4 Menu Options
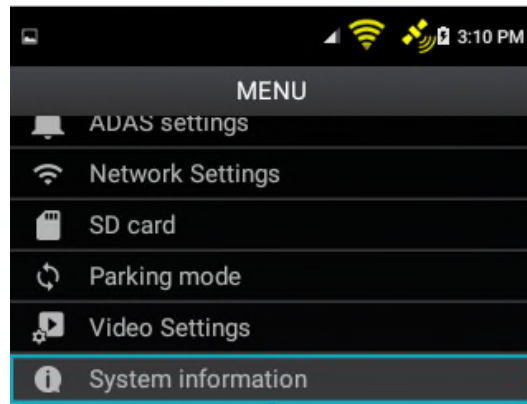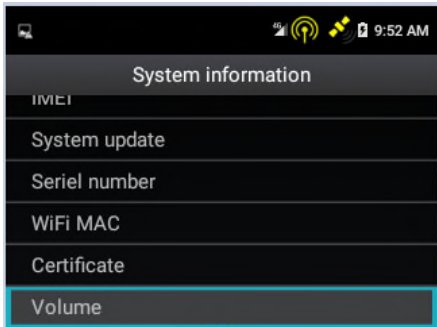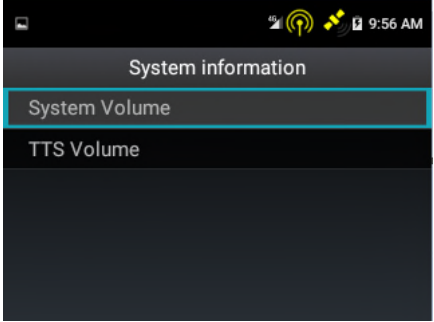
Main Menu		Description	Available Option
Videos and photo	Normal	Playback recorded movies and view capture photos.	Review / Change to Event folder / Delete
	Event		Event data / Risky driving behaviors / FCWS: Review / Delete
	Parking		Review / Delete
	Photo		Review / Change to Event / Delete
ADAS Setting	LDWS	Off – No warning tone when lane departure. On – Turns on the LDWS, there will be warning when depart from the lane.	▣ -Off ☑ -On
	FCWS	Off – No warning tone when collision occur. On – Turns of the FCWS, there will be warning before a possible collision when the vehicle in front of you.	▣ -Off ☑ -On
Network Settings	Operator Name	Display the Operator name after insert an available SIM card.	

	Wi-Fi	Set the Wi-Fi connection.	
	LTE	Set the LTE connection and APN.	Roaming / Network / Access Point Name(APN)
	Wi-Fi Hotspot	Set the Wi-Fi as an AP router.	On / Off
			Set up ID/Password
	Bluetooth	Set the Bluetooth connection.	On / Off
SD card	Format	Delete movies and photos saved on the SD card.	Yes / Cancel
USB port	Mini USB	Only for charger, Can't data transmission	
Parking mode		Set the parking mode on / off and the sensitivity.	On / Off / Auto detection
Video Setting	Recording time	Select to limit recording time pre file.	1minutes / 3minutes / 5minutes
	Resolution	Set the video resolution.	1080p(FHD) / 720p(HD)
	Display	Set the display brightness and on / off when recording.	Brightness / On / Off
	Information	Setting the location	-Off

		data on the video recorded.	☑ -On
	Voice when recording	Set the voice recording on / off when video recording.	On / Off
System setting	Manufacture	Display the manufacture.	
	Model name	Display the model name for the device.	
	IMEI	Display the IMEI for the device.	
	System Update	Select to update the firmware if you receive the notification from the service center.	Check current version / Version update
	Serial number	Display the serial number of the device.	
	Certificate ID	Display the Certificate ID of the device.	For more Regulatory compliance and marks (E-labels) about NCC/FCC/JRF/JPA, please refer to your device via the following steps: **System setting → Certificate.**
	Volume	Select the volume of the device and the voice(TTS) alert.	

	Version	Display the current firmware version of the device.	

2.5 ADAS

2.5.1 Auto Calibration

When the ADAS (containing the sub functions of LDW, FCW) is enabled, the ADAS engine will take around 1-2 minutes to calibrate its parameters of hood level, horizontal level and horizontal Pan automatically. With these 3 parameters obtained accurately such that the ADAS can further work correctly. Three short lines will appear on the screen once the calibration procedure is finished. Please notice ADAS doesn't work if the parameters are not acquired.

2.5.2 FCWS (Front Collision Warning System)

When FCWS is enabled after satellite positioning, the system calculates distances between the front vehicle and our vehicle and the headway time, the device will has voice alert and display an alarm screen before a possible collision when the vehicle in front of you.

- **Notice**

FCWS turned on, a green square wireframe with distance is displayed on the screen from the moment the front vehicle is detected, and as long as the headway is greater than the predefined headway time threshold.

- **Warning**

FCWS turned on, a red square wireframe with distance is displayed on the screen with voice alert, when the headway is less than 2.5 second.

2.5.3 LDWS (Lane Departure Waring System)

When LDWS is enabled after satellite positioning, the device will has voice alert and display an alarm screen if vehicle begin to depart from the original lane. Press Enter button to select the LDWS setting (the default setting is Off).

Turn on LDWS function, the recorded movie will give a voice alert and a red line is displayed on the screen if the vehicle depart from the original lane.

2.6 Firmware Upgrade

Check the device has already connected to the vehicle power before you activate the firmware upgrade service. While the firmware upgrading, do not remove or stop the vehicle engine. This information may be important for service and support communications.

2.6.1 Firmware Upgrade via OTA

Enter the System Upgrade and select Check Version to check and upgrade the firmware version. Make sure the device already connected to Internet before proceed firmware upgrading. Please notice you will be charged by local operator if you activate it.
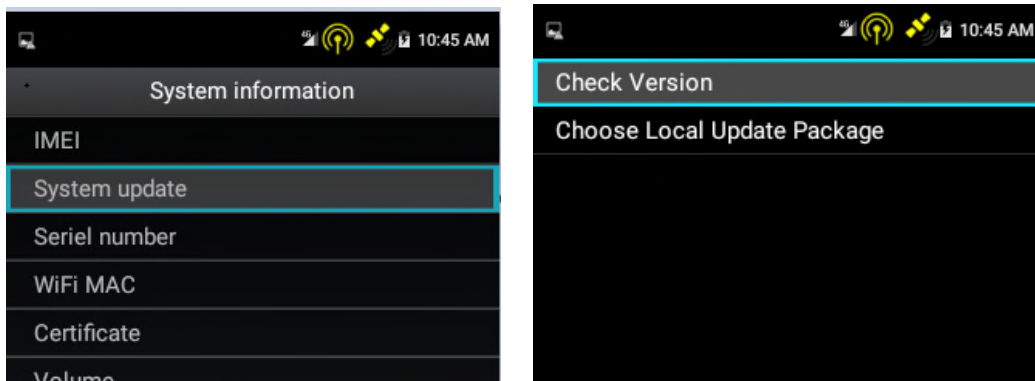
2.7 Emergency Call

When detect car crash, the device will trigger voice call to service center automatically, and you will receive the phone call from service center who will communication with you. (Please notice you will be charged by local operator if activate it).

2.8 Technical Specifications

Model Name	CDR6013-WG
Support OS	Android 6.0
Display	2inch LED backlight TFT panel, QVGA 320 x 240 pixel, brightness 200 nits ,
Dimensions	76mm (L) x 76mm (W) x 40.7mm (H)
Weight	Around 150g
Battery Pack & Life	3.7V, 750mAh(non-removable lithium-ion battery), target 30minutes @ 100nits, 720p, playback
Processor	Qualcomm MSM8956 (Dual core AMR A72 1.8GHz and Quad core ARM A53 1.6GHz)
Graphics	Adreno 510 @ 600MHz
Main Memory	On board 2GB LPDDR3 and 8GB eMMC
Sensors	1. G-Sensor(Accelerometer) 2. Gyroscope 3. GPS
WLAN	802.11 b/g/n Wi-Fi Antenna*1
Bluetooth	BT 4.1., Profile: SDP, HFP, HSP, PAN, HID, SPP, FMP, GATT
Modem	WCDMA HSPA+/FDD LTE and TD-LTE
SIM card slot	Support, single Micro SIM(3FF)
GPS	GPS, AGPS & Glonass
Interface	1 x micro USB 1 x Card reader (Micro-SD),
Camera	Single camera: 2MP with 1080p/720p video recording, FOV 120°(H)
Audio	Built-in high quality speaker x 1
Microphone	Analog Microphone x2
LED Status	Dual color LED x1(power button), red LED x2(call button)
Buttons	5 function keys(power, back, enter, up and down) Reset and eCall button
AC adapter	Output: 5V 2A ;9V .15ACigarette Car Charger Input: 12V/24V DC Cable length: 5m cable with USB mini-B connector
Environment	Operation Temperature: -20 to 60 ℃. Storage Temperature: -20 to 85 ℃ Humidity: 95%(60 ℃)

3. Appendix

3.1. Package

Planning.

3.2. Memory Card Capacity

Capacity	Normal recording	Event recording	Log	Photo	Capacity for Firmware Update
4GB	1.6GB	1.12GB	0.16GB	0.32GB	0.8GB
8GB	3.6GB	2.52GB	0.36GB	0.72GB	0.8GB
16GB	7.6GB	5.32GB	0.76GB	1.52GB	0.8GB
32GB	15.6GB	10.92GB	1.56GB	3.12GB	0.8GB

The oldest files will be overwritten if the SD card fills up.

4. Troubleshooting

Contact us if you have questions need some help or cannot use the device normally.

Telephone: E-mail: sales@askey.com.tw

Manufactured by Askey Computer Corporation

10F, No.119, Jiankang Road., Zhonghe Dist., New Taipei City 23585, Taiwan

5. FCC warning statement

This radio transmitter FCCID: H8NCDR6013   has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT
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.

CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF exposure warning
This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

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.