

USER GUIDE

Read user manual carefully in order to protect the user's safety and ensure the accurate use of the product.

JAEWONCNC

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Made in Korea

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1. USER INFORMATION



THANK YOU FOR CHOOSING JAEWONCNC IROAD VEHICLE RECORDER.

This manual contains how to operate product and guide you to use correctly, please read carefully before using product.

Please read carefully and follow the instructions given. This manual will guide you through on the instructions for the device.

This manual is based on IROAD NX7 model. Please be informed that there might be some unintended errors.

Contents of the manual might be modified without prior notice.

■ GUARANTEE AND SUPPORTING

- Please visit our website at www.iroadkr.com
- ${\sf Global\ website\ address(\ Global\ -\ www.iroadk.r.com\ /\ Singapore\ -\ www.iroad.sg\ /\ HongKong\ -\ www.iroad.hk\ /\ Malaysia\ -\ www.iroad.my\)}$
- $\ Please \ download \ the \ dedicated \ viewer, \ latest \ firmware \ and \ other \ product \ information \ from \ the \ IROAD \ website.$
- JAEWONCNC is not responsible for any problem caused by illegal use of the product.
- Though this product records and saves footages in the event of accident, it does not guarantee every single accident scenes are fully recorded.
- If the impact on the vehicle is minor, the accident scene may not be recorded as the impact sensor is unable to detect minor ones.
- The recordings obtained from the product might be used as a proof of accident. However,
 JAEWONCNC will not be responsible for any gain or loss caused by the accident.

■ COPYRIGHTS AND TRADEMARK

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 Any unauthorized uses of IROAD is prohibited and is punishedable by the law.

2. PRECAUTION



■ VOLTAGE RELATED ISSUES

- Please make sure to use recommended / stable voltage only.
- Otherwise, misusing may cause product failure, fire accidents, explosion or damage to the vehicle.
- Do not arbitrarily disassemble and modify the product. Otherwise, it might cause damage of the product and electric shock. It should be considered user's fault and void the warranty.
- Make sure that the power cable is not cut or damaged when attaching other electronic gadgets on the vehicle, otherwise it can cause product failure or danger of electric shock, and please use qualified power cable which is produced by JAEWON CNC.
- It is highly recommended not to arbitrarily connect the uninterrupted power cable to vehicle as it can cause malfunction of the product by different conditions of vehicle and surrounding environments. (Please contact professional engineer if you need to install it)

■ INSTALLATION

- Do not mount dash cam on where sight might be disturbed. It may cause an accident.
- Connect all the cables provided into right slots. That may be parts of the problem.

■ THE RIGHT USE

- Do not use dash cam while driving. Please park your vehicle in safe place for use
- Do not force a product or its lens because it may cause product malfunction.
- Keep the device away from flammable or explosive stuff causing explosion and fire.
- Do not cover the device with fabric or other tools. Malfucntion or fire would cause once it is overheated.
- When the device is used for too long, it may cause skin burns.
- The quality of image could deteriorate while the car is passing through tunnel or at very dark night with no light.
- Recording quality might be reduced by excessive tint.
- Image quality could deteriorate when the temperature of the device exceeds the optimal operating temperature.

3. PRECAUTION



■ MANAGEMENT

- Please turn off the dash cam when exposed to direct sunlight or used for too long. Otherwise, malfunction or breakdown would occur.
- Please check whether the device is working before driving a car.
- Do not remove SD card or turn off the power cable during the firmware update. It may cause malfunction or loss of data.

■ MEMORY CARD AND PRECAUTION

- There is the lifetime of memory card which is expendable.

Some errors could occur if the lifetime of memory card reached or being stayed in high temperature environment. Periodic maintenance is required.

- The device must be turned off when inserting / removing memory card.
- It may cause to lose data or malfunction of memory card if the memory card is removed or inserted during product.
- Keep memory card in case all the time when not in use.
- Please avoid places where are humid and very hot.
- Genuine IROAD memory card is recommended. Failure to use a genuine one may cause error or malfunction of product.

Memory card is expandable and the memory card's warranty is 6 month period.

(it may cause to reduce life cycle of memory card if using with constant power cable)

- Please regularly format the memory card twice a month for stability.
- (Format function supported by a dedicated viewer is recommended.)
- Product is only permitting recording files and NX7 program. Any other files will be deleted in order to keep stability. (Please use the SD card for the product only, otherwise it will be deleted.)
- It takes up to 5 minutes depending on the memory capacity to use SD card if the first time of using it is.

 Please do not remove the SD card while the device is running.

4. PRODUCT OVERVIEW





3 5inch TN Touch LCD 3 Sinch TN Panel Easy to use with GUI



High Definition Vivid FHD Front: Full HD 1920x1080p 30frames Rear: HD 1280x720p 30frames



Hyper Lapse - Long Driving Recording Compress video while driving at constant frame (1FPS)



Low capacity, Long Driving Recording Time Lapse -Long Parking Recording

Compressa the video while driving in a constant frame (1FPS) Low capacity, Long Driving Recording



ADAS - Advanced Driver Assistance System LDWS, FCWS



EV/DW

SAFEGUARD for All Yours Safety

Automatic low voltage cutoff function is embedded in the device for the safety of the car battery. Uninterrupted Power



Night Vision

Record the brightest and the cleanest images even in low light environments.



Variable Recording Mode

Automatic parking mode and motion detection function. 24 hours recording mode.



High Intensity Security LED

High intensity LED makes it possible to check outside whether product is working.



Voice Recording & Voice Guidance

High Quality Sound Recording Clearer Voice Guidance by Built in Speaker



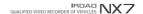
External GPS

Driving information through external GPS. Time, Driving Path, Direction with recorded video.



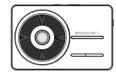
Dedicated PC Viewer & Smartphone Playback Playback recorded data.

set various functions on dedicated PC Viewer. Playback on PC and Smartphone playback available.



■ Basic Components

- The picture of this package may differ form the real.
- . The images of components can be different from the real and some may be changed.
- . Product has a built in memory card.(32GB)



Front Camera



Rear Camera



Uninterrupted Fuse Cable



User Manual





IROAD Genuine Micro SD



Rear Camera Cable

■ Optional Components

- The picture of this package may differ form the real.
- The images of components can be different from the real and some can be changed.
- Users are able to purchase the optional components from IROAD website. (Please refer to page 1 for IROAD website)





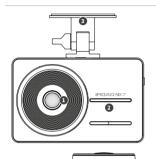


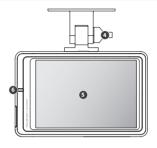
Cigar Jack Power Cable

External GPS Antenna

SD Card Reader

6. NAME OF EACH PART





Micro SD Card Slot







- 1 Front Camera Lens
- 2 Security LED
- Transparent Cradle
 - 4 Cradle Screws
 - 3.5 inch Touch LCD

- 6 REC LED
- Power Connector
- Rear Camera Cable Slot (V-IN)
- 9 External GPS Connector
- 10 Power Button

- Rear Camera Cable Slot
- Security LED
- Rear Camera Lens
- 15 Transparent Cradle

7. SPECIFICATION

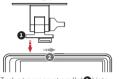


 $\cdot \text{The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.}\\$

Model	IROAD NX7
Image Sensor	2.0 Mega Pixel Image Sensor
Resolution / Frame / Viewing Angle	Front Full HD 1920x1080p 30fps, Rear HD 1280x720p 30fps / Front 140 °, Rear 130 °
LCD	3.5 inch (480x320) Touch Panel
ADAS	LDWS, FCWS, FVDW
Audio Input	Mic embeded
Video / Audio Compression	H.264 / ADPCM
Vibration Sensor	3-axis acceleration sensor (Start recording when it senses external impact)
External GPS Sensor	Synched with Google map, Inform the location and travelling speed of the vehicle.
Capacity	Micro SD 16GB~128GB
Recoding Modes	Driving / Event(Impact), Parking / Motion Detection, Time Lapse, Hyper Lapse
Uninterrupted Power	Low voltage cut off, overheating prevention is embedded.
Power Supply	DC 12V - 24V
Operating Temperature	-20 ~ 60°c
LED	Security LED embedded
Viewer	IROAD PC Viewer: Windows XP/Vista/7/8/10, 32bit/64bit support



■ Mounting a Cradle for Front Camera



Tuck a transparent cradle(1) into the main body(2) and then push the cradle in.

■ Placing Cameras



- where the product will be attached on the windscreen. · Make sure to install the product on
- where sight is not disturbed.

■ Product Installation





- (Wipe out with soft cloth or tissue) 2. Attach product.
 - (Remove the protective film from the adhesive tape of front/rear camera)

1. Use soft cloth to wipe out the spot where the product will be attached.





3. Connect the cable of rear camera (Connect the rear camera cable V-IN slot)



■ Product Installation





- 4. Connect power cable to DC-IN slot.
- Other side of cable connect to vehicle fuse or cigar jack cable.
 In order to install uninterrupted power cable,
 refer to the webiste www.iroadkr.com or look at this instrcution page 10.
- 6. Make sure that the product is operating normally.
- Clean up the power cable and rear camera wiring with cable holder or using edge part of vehicle.

■ Connect External GPS.





Connect external GPS to the GPS slot of the top. It provides vehicle speed, location and other additional information if connect external GPS. Please make sure to have some distance between main product and GPS.

■ Inserting SD Memory Card





. Make sure to insert SD card in the right way.

Push the SD card into the memory card slot until you hear clack sound.

When using memory card for the first time / When the memory card is reused after format. The system will be in standby mode for 3~5 minutes to create system files and checking the memory card.

Recording starts with voice guide saying "Start Recording".

10. UNINTERRUPTED FUSE CABLE



•The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ Uninterrupted power function?

It prevents battery discharge beforehand while in parking mode. The uninterrupted power function ensures your battery is protected.

The discharge of battery voltage will be prevented in advance for 24 hours if the battery level goes down the minimum preset level.

(There might be able to occur natural battery discharge caused by the long term parking hours or each vehicle status. Please change voltage level up to high especially in winter season, refer to the instruction.)

■ How to Install Uninterrupted Fuse Cable









- 1 Find right fuse using electric tester from fuse box of the vehicle.
- [VCC]Line (Yellow Line): Make sure engine's off and connect to a current flowing fuse.
 [ACC]Line (Red Line): Connect to fuse which should be not electric current.
- 3 Connect GND line to vehicle itself which has to connect iron part of vehicle itself. Do not connect bolt of dash board where current is not flowing.
- 4 Connect the power cable to confirm the operation of product, and then neatly organize cables to finish installation work.
- The colors of the VCC, ACC, and GND wires may change, so please check and install them.

 Please refer to website www.iroadkr.com for the details of uninterrupted power installation, contact a technician for accurate installation.

 Please perform switching test (Driving mode <->-Parking mode) before completing the installation.

11. PRODUCT OPERATION



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■ Product Operation

Power ON	- All LED will be turned on when the engine is on Start normal recording along with voice guidance.
Power OFF	- All LED will be turned off when the engine is off or the constant cable is disconnected.
External GPS	- GPS LED flickers while external GPS is connected. (GPS LED will be on constantly while connected to satellite) - Please recheck the connection if there is not LED on despite external GPS installed.

12. BUTTON SCENARIO GUIDE



• The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ Button Scenario Guide 1



Power OFF	- Press the ♠ button for 5 seconds The power is turned off along with voice guidance.
Power ON	- Press the button for 5 seconds Start recording along with voice guidance.

Manual Recording	- Please press (a) button Start manual recording along with voice guidance.
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13. RECORDING MODE



■ Recording Mode

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Normal Recording	- Normal recording starts when power is connected Security LED flashes once every second.
Hyper Lapse	- It compresses and records the video which recorded for 8 minutes (driving mode) at 1 frame per second (1 FPS).
Event Recording	- It will be recorded for event recording mode if it detects any shock. (REC LED flickers) - It will return to Normal recording mode after completing event recording.
Parking Recording	 It will switch to parking mode if G sensor does not detect movement for 5 minutes. It is recorded with 10 frames in order to extend recording time. When the ignition is on, it automatically switches to normal recording mode.
Time Lapse	- It compresses and records the video which recorded for 8 minutes (driving mode) at 1 frame per second (1 FPS).
Motion Detection Recording	- It records if there is any movement within a range of 3 meters distance Security LED will blink quickly.

14. VOICE GUIDANCE



•The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ Voice Guidance

Power ON	Driving mode starts, Safe driving
Normal Recording	Start recording
Menu Entry	Stop recording
Parking Recording	Start parking mode
Motion Detection Recording	Impact occurred during the parking
Manual Recording	Manual recording
GPS Connection	GPS is connected
System Off	Shut down system
Change Settings	Setting is changed, reboot the system
Firmware Update	Program is installing, do not turn off the power
Firmware Completed	Restart the system by completed updating
Firmware Failed	Program file is damaged and cannot be installed
Memory Card Invalid	Memory card is damaged, restart the system
No Memory Card	No memory card
Memory Card Format	Format the memory card. Please wait
LBP ON	Shut down the system to protect the car battery
LBP Booting	Restart the system to protect car battery

15. VIDEO FOLDERS IN SD MEMORY CARD



•The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ Saving Directory

.driving_text

text event

normal

log

manual

event Event (Impact) Recording Folder

- Save Event (Impact, Parking, Motion) Recording.

normal Normal (Driving) Recording Folder

- Save Normal (Driving, Hyperlapse, Timelapse) recording.

log Save the operation status as log file.

manual Save data of manual recording. (Up to 10 files are saved, and old files are overwritten when the number is full.)

16. FIRMWARE UPDATE



•The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ Manual Update



Firmware update

- 1. Disconnect the power cable.
- Remove the SD card from the product and connect it to the PC/Laptop.After decompressing the firmware which downloads from IROAD website, please copy the file to the Micro SD card.
- 3. Please turn the ignition on to supply power stably.
- 4. Insert SD card back onto the device.
- 5. Connect the power cable.
- 6. Start the update along with voice guidance.
- 7. The device is rebooted once the update is completed



■ Live Screen





When the dash cam is turned on, the above screen is displayed on the LCD with the voice guidance.

Status Recording mode, GPS, Voltage Status / Date, Time

■ Manual recording Press the manual record button to start the manual recording.

 ■ Audio recording
 Audio Recording On/Off

 ■ Sound
 Voice Guidance On/Off

 ■ LCD OFF
 LCD Screen OFF

■ Menu Main Menu

■ Live Screen



When the dash cam is turned on, the above screen is displayed on the LCD with the voice guidacne.

■ Tap on the screen, switch to the front, rear recording and PIP.



■ Main Screen



Tap on the main menu button, then menu screen is shown.

 ${\it \#When entering the main menu, recording is paused to stabilize the product. After moving to the live screen recording is restarted.}$

Live screen Check live screen.

■ Playback Play back the saved recordings.

Setting Manage various settings.



■ Playback





Tap on the palyback button, then the recording lists are shown.

- Total Normal Event My folder Press the 'Tab' button on top to arrange saved files in timely order.
- Press the left/right arrow to move to the previous / next page.
- Top on the file you wish to play, then the chosen file will be played. (Refer to the right)



■ Camera



Tap on the settings button on the main screen.

- Press 'Camera' button to adjust the resolution, brightness, night vision, security LED, and hyper lapse settings.
- Night vision is configurable only at the front camera and improves the recording definition at night time.
- IROAD NX7 has a fixed resolution of 1080p for front camera and 720p for rear camera.



■ Time Setting



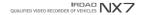
Tap on time button on the setup screen to adjust date / time, auto rebooting and time zone settings.

■ Date / Time Setting Tap on date / time button to adjust the date / time.

Touch the button once, then arrows will appear. Use them to adjust

■ Automatic Reboot Activate / deactivate automatic reboot by toggling it and the time for rebooting can be scheduled by keying it in.

■ Timezone Setting Touching timezone button and you can set the configuration to adjust the time zone for country or region.



■ Sound



Tap on sound button on the setup screen to activate / deactivate audio recording and voice guidance.

■ Volume Setting Choose among Low / Medium / High

■ Audio Recording Toggle it to turn On / Off audio guidance

■ Voice Guidance Toggle it to turn On / Off voice guidance



■ Functtion Setting



It can be controlled touch a setting button to Use or Not Use. [ADAS, FCWS, FVDW, LDWS]

ADAS Function (Advnaced Drivers Assistant System)	ADAS Use / Not use
FCWS Function (Front Collision Warning System)	FCWS Use / Not use
FVDW Function (Front Vehicle Departure System)	FVDW Use / Not use
LDWS Function (Land Departure Warning System)	LDWS Use / Not use

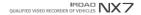


ADAS function is available when paired with

IROAD's genuine GPS antenna.

Message will be come out when you try ADAS Function

without external GPS antenna.



■ Detailed Settings



It can set up the sensitivity of LDWS, FCWS, and the speed for LDWS. Thereby touch a detailed setting button as above picture.

■ LDWS sensitivity Select Activation Speed of LDWS
■ FCWS sensitivity Select Activation Speed of FCWS
■ ADAS Volume Choose among Low / Medium / High

■ Bonnet Guide Line Please set the blue line on the middle of bonnet and set the red line to the end of bonnet.





■ Parking



It can set up the Parking Recording, Impact / Motion, Time Lapse and Time.

*Timelapse function is automatically activated if user do not select any of parking recording options.

■ Parking Recording Toggle it to turn On / Off parking recording

■ Parking Impact Toggle it to turn On / Off impact mode

■ Parking Motion Toggle it to turn On / Off motion mode

■ Timelapse Toggle it to turn On / Off timelapse during parking

■ Timer Toggle it to turn On / Off timer function



■ Sensitivity



It can set up the Impact (Driving/Parking) / Motion Sensitivity.

■ Driving Impact Choose among Low / Medium / High

■ Parking Impact Choose among Low / Medium / High

Motion Detection Choose among Low / Medium / High

■ LBP



It can set up the LBP, winter LBP setting and Power off voltage.

■ LBP Toggle it to activate / deactivate LBP function

■ Winter LBP Toggle it to activate / deactivate winter LBP function. (The cut off voltage on 12.3V from Nov to Mar)

■ POWER OFF Tap on the power button to adjust the power off voltage value.

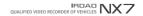
		Vo	oltage(v)		
Power Off	11.3	11.5	11.8	12	12.3
	23.3	23.5	23.8	24	24.3

■ High Temp Shutdown



It can set up the High Temp Shutdown function.

■ High Temp Shutdown The temperature (75°C) reached in parking mode. The power is cut off to protect.



■ Memory



It can set up the overwrrite ON / OFF, memory allocation and formating are available.

■ Event & Normal Adjust the percentage of memory space allocatted between event folder and normal folder

 $\ensuremath{\ensuremath{\mathbb{X}}}$ Be aware that all the data will be lost once the setting is changed.

■ Format Free Memory overwrite is turned ON/OFF using the format free function.

■ Format All the data on SD card will be removed and the system will be rebooted.



■ Secret Mode: This function will be supported through the firmware update.



It can set up the password setting(secret mode).

■ Secret Mode The secret mode protects the recorded video and prevents deletion.

** After changing this setting, enter the password you set when entering the main menu. You entered the incorrect password 5 times. You cannot enter the menu within 3 minutes.





■ LCD Timer



It can set up the Always on (clock / live) and auto hibernation settings.

- Auto hibernation
- Touch what you want and it will be ticked, and press back button to save the configuration.
- Always on

- After selecting real-time video, clock, ADAS, and speed among Always ON functions, the set functions operate after a period of time.
- If choosing constant on mode, turning off function on the main menu is disabled and LCD lifespan may be shortened.



■ Calibration



·The function is able to be changed for firmware upgrade or product enhancement without prior notice, please visit website regulary.

■ LCD



It can set up the LCD Brightness, Touch correction, Reverse Rear View settings.

■ LCD Brightness Choose among Dark / Normal / Bright

Run touch correction when tapping on the screen is not smooth and well.

■ Reverse Rear View If select the reverse rear view, rear recording videos is inverted on LCD

** When real-time video (rear recording) is checked on the LCD screen, it is displayed in forward or reverse direction.
Please note that the set value is not applied to the recorded video.



■ Version



Tap on the version to adjust firmware version and default settings

■ Default Setting Touch reset settings to complete the initialization after rebooting the product.



■ Program Installation

- 1. Please download installation program from IROAD website (www.iroadkr.com)
- 2. Please click the installation file and run it.
- 3. Install on the PC according to the installation guide.
- 4. When installation is completed, "IROAD Viewer" is created on the PC desktop.



■ Ruining the Program

- 1. Please run IROAD Viewer
- 2. Open File Click the icon
 in the viewer to browse folder window as shown in the picture.

 Select removable disk, press "OK" button.



36. DEDICATED PC VIEWER



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■ List of Recordings & Front / Rear Palyback



- Front Image Playback Screen
- Rear Image Playback Screen
- 3 Recording File List

- 4 Playback, Control
- 6 G-Sensor (Acceleration) Graph
- 6 Playback speed, Birght, Dark control

Menu

O	Setting
В	Backup
	Screen Capture

Video Control

▶ ◀	Left / Right Reversal
<u>*</u>	Up / Down Reversal
	Full
#	Channel (Front / Rear) Switching

Viewer Information

#	Language
0	Viewer Info



■ Backup



- Clcik the 'Backup' icon 🔒 in main screen menu.
- There are separate front and rear video (2CH recording files) backup.
- AVI files are able to be played using a separate video program installed on the PC.
- If users want to set up GPS info file, please check it and click the "OK" button to proceed with the backup.



■ Setting



- Camera Setting Set up Front / Rear camera
- ADAS ADAS ON / OFF
- 3 Time Setting Set up Date / Time Rebooting function for using stably
- 4 Sound Volume, Recording, and Notification On / Off
- 5 System Set up voltage / high temp shutdown
- 6 Memory Set up Normal / Event recording rate
- Fevent Set up parking recording (Imapct / Motion)
 Set up Impact / Motion Sensitivity
 Auto Off and Timer and Hyper Lapse (1fps)
 Set up Timelapse (1fps) during parking
- User Settings users can check vehicle information.
 It must contain up to 20 characters including letter,
 numbers and special characters (, _ -).
- Information check the information of the dash cam and PC Viewer.

39. TROUBLE SHOOTING



■ Product is not working.

- 1. Recheck if power cable is connected.
- 2. Check whether the authentic power cable is connected.
- Make sure constant power cable is connected to correct fuse.

 (Professional installation is recommended)

■ Unable to run playback.

- Recordings can be played using a dedicated viewer and IROAD app on smartphone.
- 2. Some video players may not support images.
- 3. If error occurs on recording consistently, contact for after sale service.

■ Unable to run rear camera recordings.

- Rear images are shown on the dedicated viewer or via IROAD app on smartphone.
- Install a dedicated pc viewer to run playback.
 If error occurs, turn off power, disconnect rear camera cable, and then reconnect and try again.

■ The quality of recorded video is not good.

- 1. Check if there is any dust or dirt on front and rear camera lenses.
- 2. If windscreen is tinted, it may reduce video quality.
- 3. Tinted windscreen, backlight may reduce quality of video.

■ No power when engine is off. (After long term parking)

- Power will be disconnected by safety guard voltage if it goes down below set up voltage.
- Battery discharging period might be shorten by battery condition or outside temperature.

■ Video is not recorded at all

- 1. Make sure recorder is powered on.
- 2. Make sure SD card is inserted correctly.
- 3. Format memory card and try again.

PC cannot find memory card.

- 1. Check if SD card reader is faulty.
- 2. Insert a SD card reader onto other USB port on PC.
- Using USB multiport or assembled computer might have problem with reading USB.

■ The device is unable to recorded, Power cannot be turned on.

- The device will turned off while engine ignition off, in case installed by cigar jack power cable.
- Connecting to uninterrupted power cable is recommended in order to use parking mode. (Ignition is off)

