PI-SIGHT Open Auto Software

User Manual

caution

Be sure to check and comply with road regulations before using the product.

OpenAuto is an open source DIY project, not an official Google product, and comes with no warranty.

It is.

Also, we have not received any warranty or certification from Google, and Google has not provided any guarantees or certifications through Android updates.

If you decide to block OpenAuto, OpenAuto may not work.

The features of the software may be added or changed depending on the version, and the contents of this manual may also change.

You can.

To use Android Auto with your device, you need a compatible Android phone or tablet.

This is required.

1. Get a Raspberry Pi that matches your PC operating system from www.raspberrypi.com

   Download and install the Imager program, then run it.

2. Connect the memory card, select Delete in the Operating System tab, and select Storage.

   Click on the memory card in the tab and then click Write to format the memory card.

   It is.

3. Download the img file of the desired software from vudev.net,

   On the Operating Systems tab of the Raspberry Pi Imager, click Use Custom

   After that, select the downloaded img file.

4. Select the memory card in the Storage tab and click Write to write to the memory card.
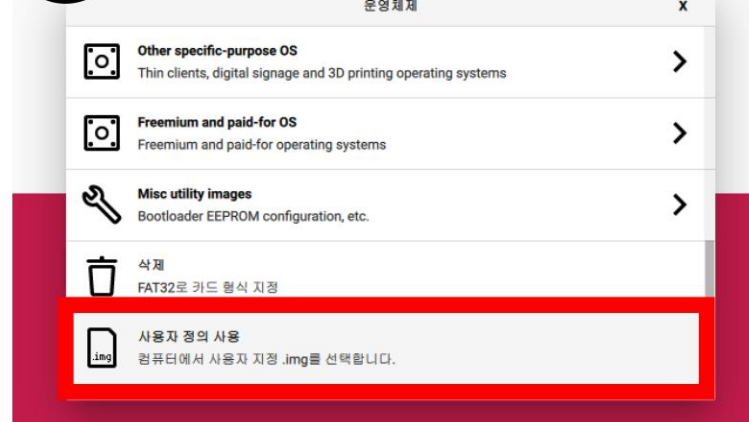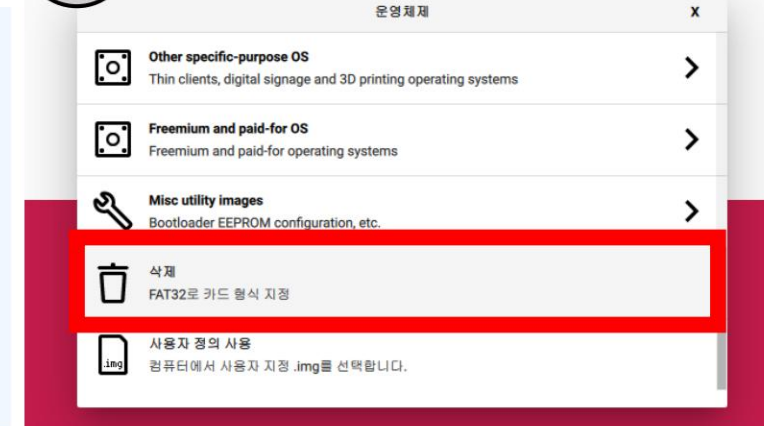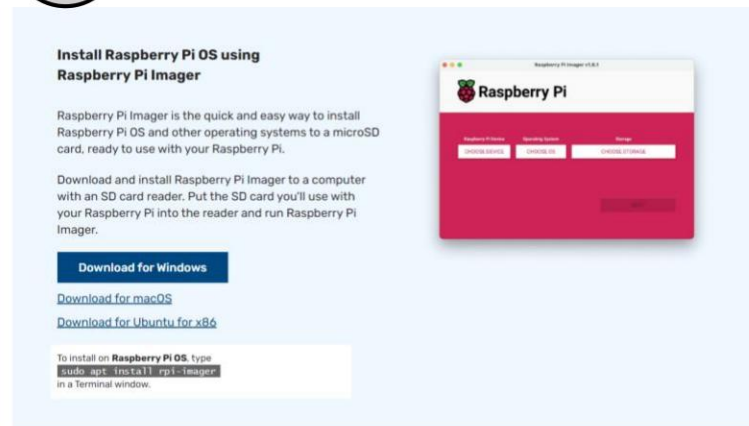
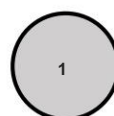   The software installation will begin. Once the installation is complete, insert it into the device.

   Please use it.

If you remove the memory card during a write operation or terminate the program,

Format errors may occur. This can be resolved using methods such as diskpart.

there is.

OpenAuto software lets you use your Raspberry Pi as an Android Auto head unit for your car.

A solution that enables you to do so.

When you wirelessly connect your device to an Android smartphone and run Android Auto, the display

This will display the Android Auto screen, which includes Android navigation, phone, Google Assistant, etc.

You can use all the functions of Auto. Also, the rear camera is the same as the rearview software.

Supports rearview mirror function and loop recording.

Users can use the display in front of their eyes to access navigation, rear view, and other necessary information without moving their heads.

You can check the information and control the device without taking your hands off it via the remote control mounted on the left handle.
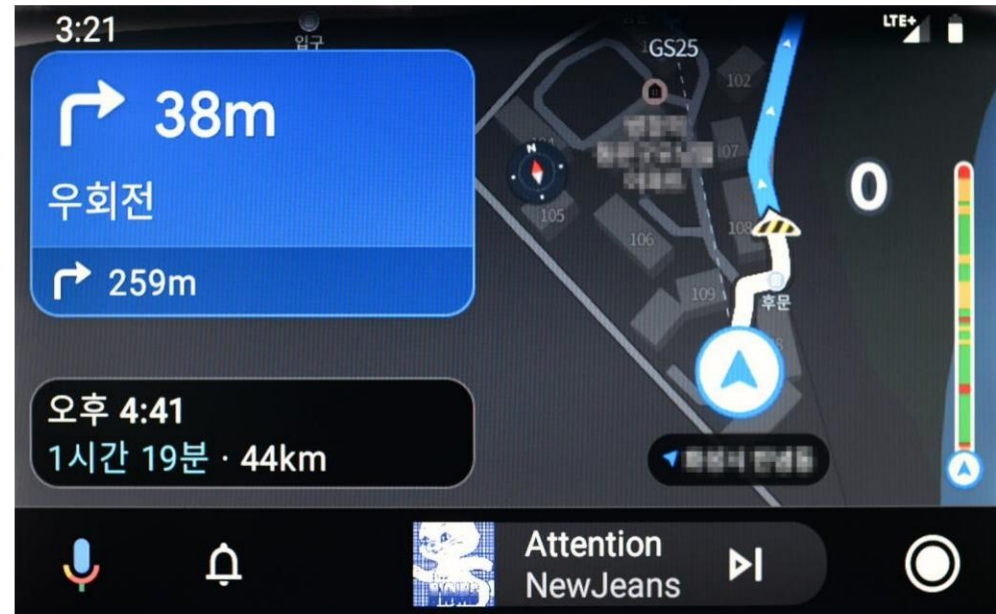
You can also control Android Auto with your voice using Google Assistant.

there is.

3500mAh battery, can operate for about 5 hours at medium display brightness.

When the Bluetooth headset module is installed, it can be connected to a smartphone via Bluetooth without a separate Bluetooth receiver.

Here you can listen to music and make calls.

To connect wirelessly to Open Auto, install Android Auto on your smartphone.

You need to start the D Unit server.

Enabling Developer Settings in Android Auto will start/stop the head unit server

A button appears.

1. On your Android smartphone, go to Settings - Device Connection - Connection Preferences - Android

   After pressing Auto to open the Android Auto settings screen, click the Version tab at the bottom.
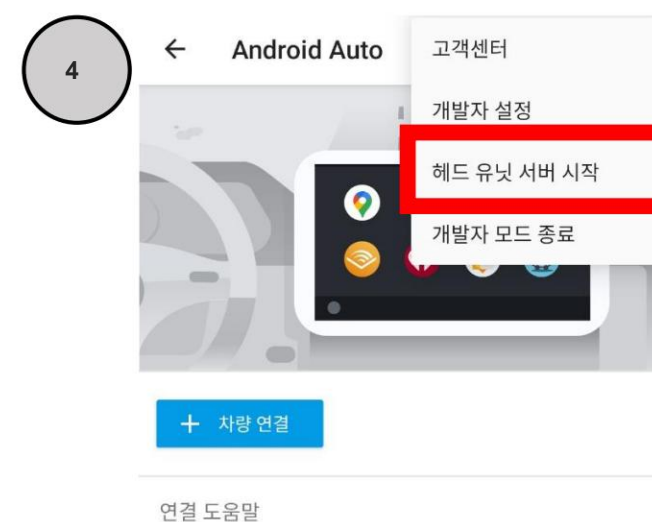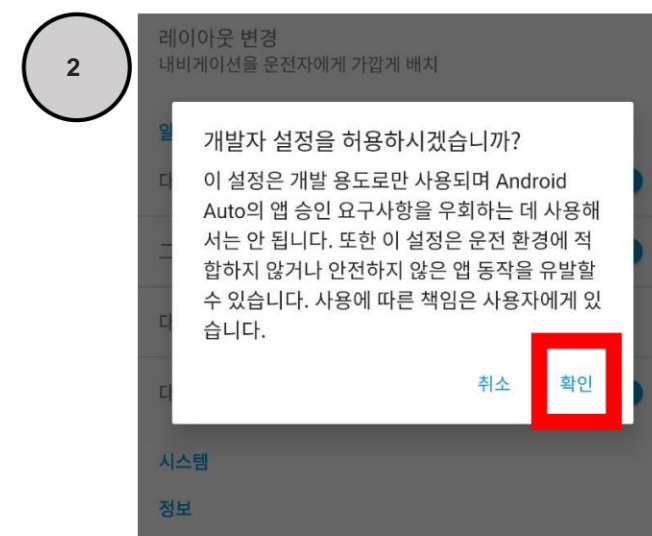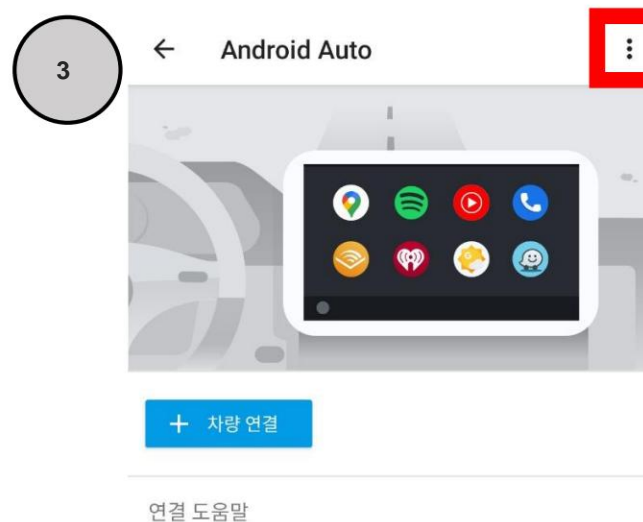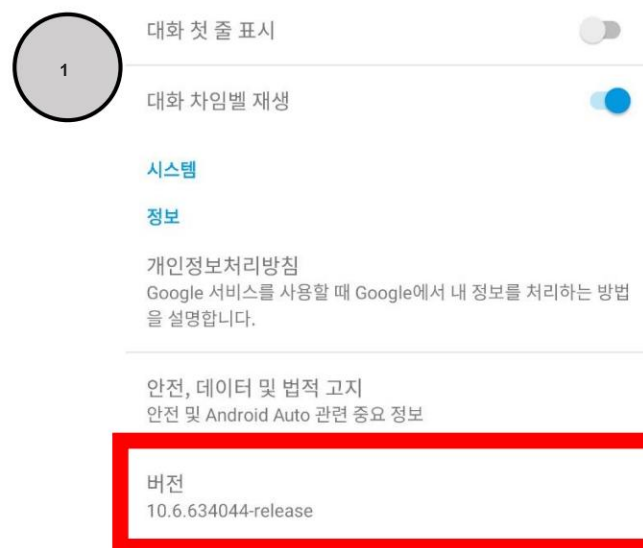
   Touch continuously.

2. Tap OK on the Allow Developer Settings notification to allow.

3. Go to the top of Settings and tap the three-dot menu in the upper right corner.

4. When the Start Head Unit Server button appears, setup is complete.

This process is only performed once during initial setup and does not need to be performed again.

1

대화 첫 줄 표시

대화 차임벨 재생

시스템

정보

개인정보처리방침
Google 서비스를 사용할 때 Google에서 내 정보를 처리하는 방법을 설명합니다.

안전, 데이터 및 법적 고지
안전 및 Android Auto 관련 중요 정보

버전
10.6.634044-release

2

레이아웃 변경
내비게이션을 운전자에게 가깝게 배치

개발자 설정을 허용하시겠습니까?
이 설정은 개발 용도로만 사용되며 Android Auto의 앱 승인 요구사항을 우회하는 데 사용해서는 안 됩니다. 또한 이 설정은 운전 환경에 적합하지 않거나 안전하지 않은 앱 동작을 유발할 수 있습니다. 사용에 따른 책임은 사용자에게 있습니다.

취소   확인

시스템

정보

3

← Android Auto   ⋮

+ 차량 연결

연결 도움말

4

← Android Auto

고객센터

개발자 설정

헤드 유닛 서버 시작

개발자 모드 종료

+ 차량 연결

연결 도움말

1. Power on (press once) / Power off (press twice)

2. Reduce display brightness

3. Increase display brightness

4. Remote control pairing mode (press for more than 2 seconds)

5. Turn the remote control on/off

6. Entry screen: Start Android Auto (press for more than 1 second)
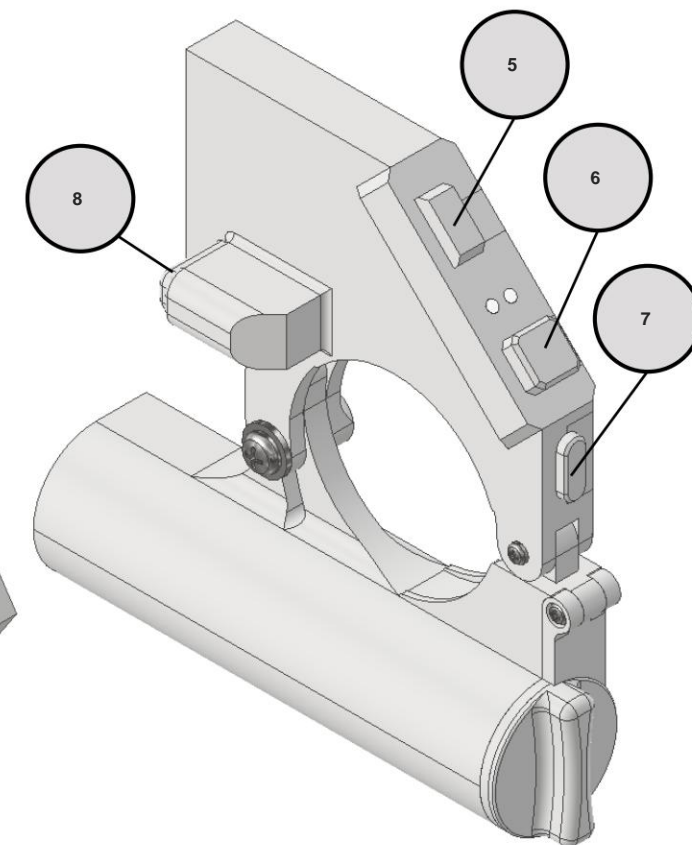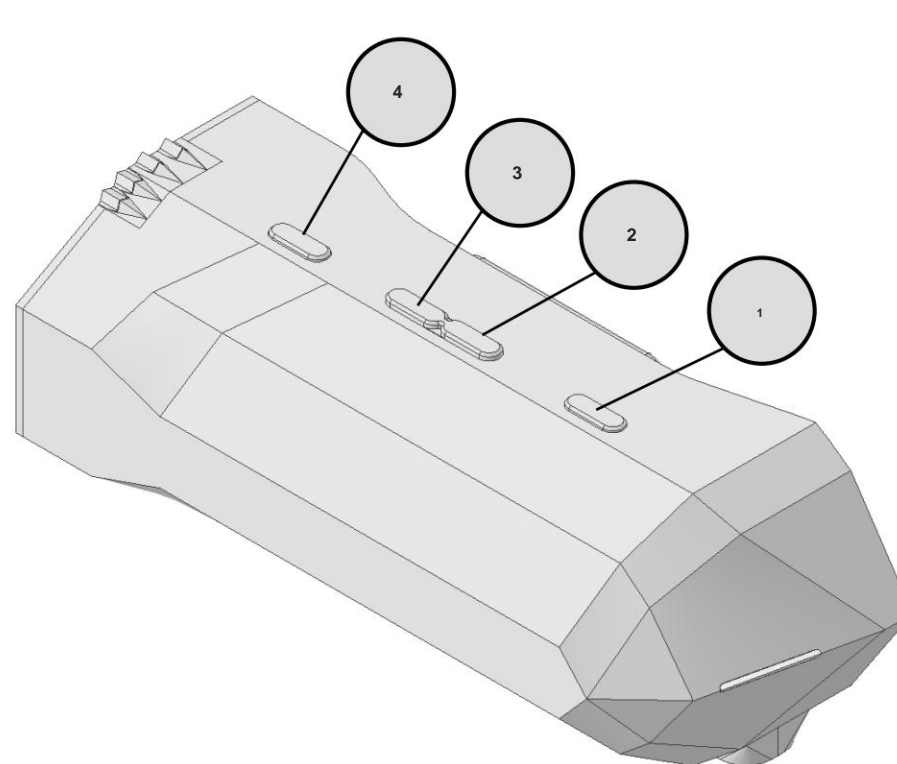
    Android Auto: Up/Down/Left/Right/Confirm

                (Previous/next song when swiping left/right for more than 1 second)

7. Google Assistant, hang up the phone

8. Quick view of rear camera (short press)

   Keep viewing the rear camera (when pressed for more than 1 second)

1. Put the batteries in the remote control, turn it on by turning the power switch up, and the main body

Insert the battery and memory card correctly and press the power button once to turn on the device.

Start. After booting, the entry screen will appear.

2. If the remote control is connected: Wait a moment on the entry screen and then press the

The blue BT-Device letters remain lit and the network is

The hotspot will turn on when you press the index button on the remote control.

The Mera image is displayed and when you move the joystick up and down, the bottom of the screen

You can see the slide bar moving. Connect to your smartphone

Skip to the process.

3. If the remote control is not connected: A blue BT- appears in the upper right corner of the screen.

The Device text is blinking or off, and the Network Information tab shows wlan0

The word "down" does not print and the hotspot does not turn on.

In this case, go to step 4 and pair the remote control again.

4. Remote control pairing: Place the remote control near the main body with the remote control turned on, and pair it with the main bar.

Press the Fn button on the device for 2 seconds to enter pairing mode. The device will

Wait a moment while it searches for nearby devices and automatically connects to the remote control.

If the connection is successful, proceed to step 2.
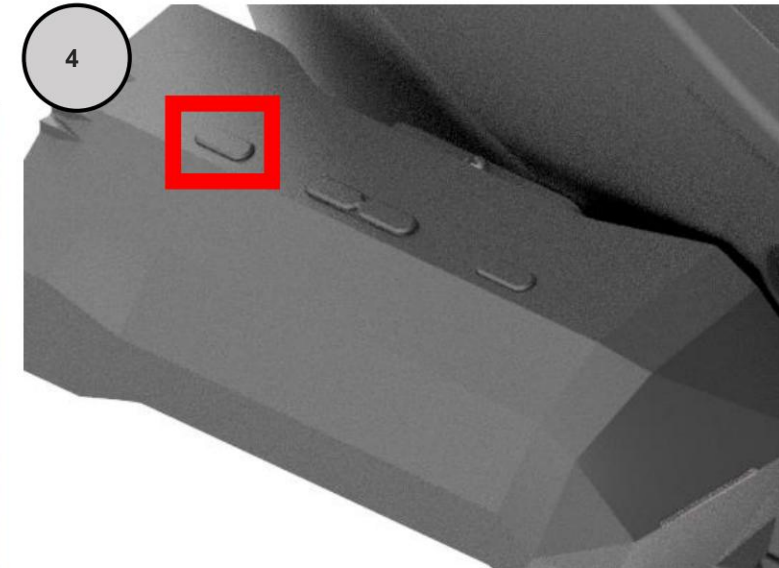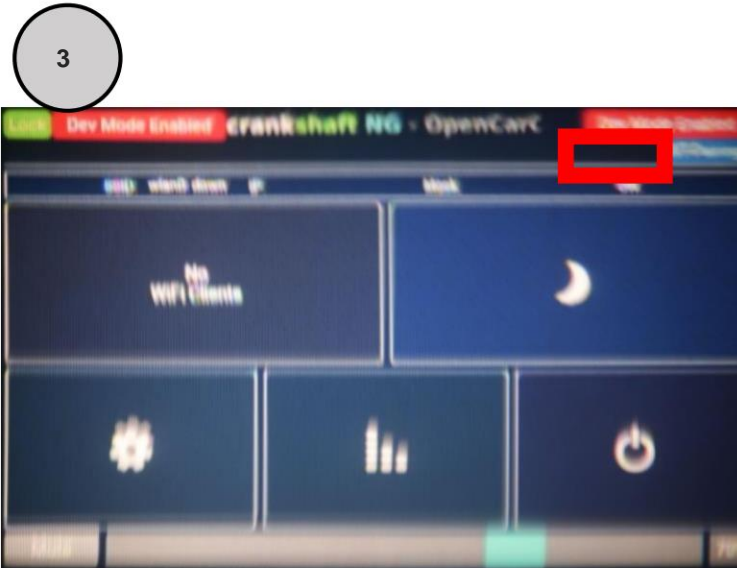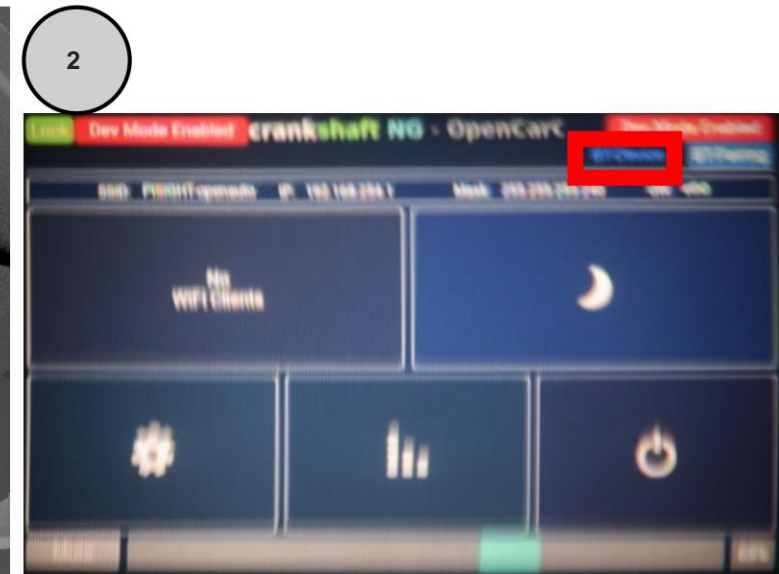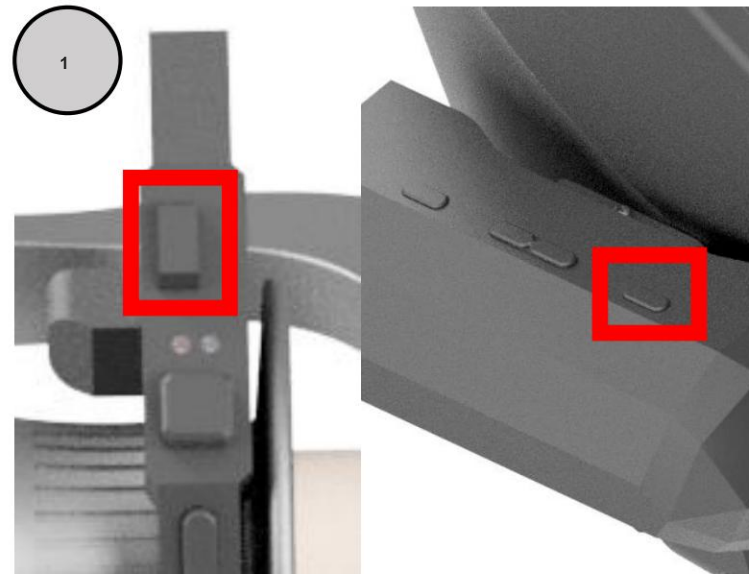
1. Turn on your smartphone's WiFi, go into settings and connect to the device's hotspot.

　Oh. The default SSID is PISIGHT-openauto, and the password is 1234567890.

　no see.

2. A notification appears saying that the Internet cannot be used because it is WiFi without a network.

　You may get a warning. In this case, do not press the button on the notification window, but press Back.

　Press the button to ignore the notification.

3. When connected to Wi-Fi, it indicates that you are not connected to the Internet.

　Or the notification is normal.

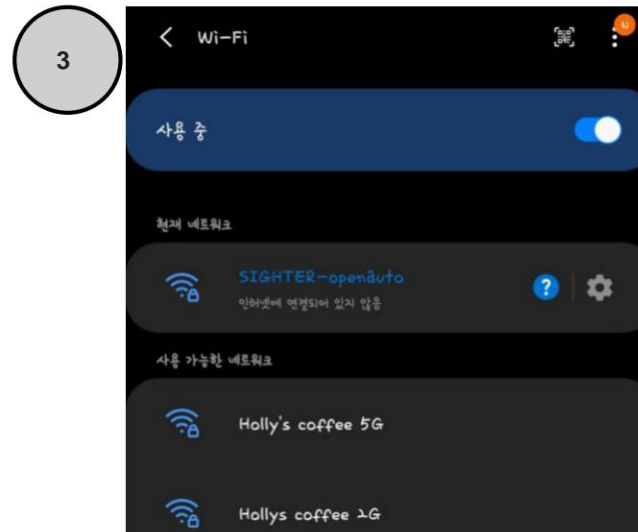4. In Android Auto settings, tap the three-dot menu in the upper right corner and

　Click the Start Unit Server button.

When you select the connect button in the Internet connection notification number 2, your smartphone will connect to cellular

The network connection will be disconnected because data usage is stopped. In this case, the smart

After deleting the device's Wi-Fi from the phone, reconnect it and check the Internet connection notification.

Press back to ignore.

(1)

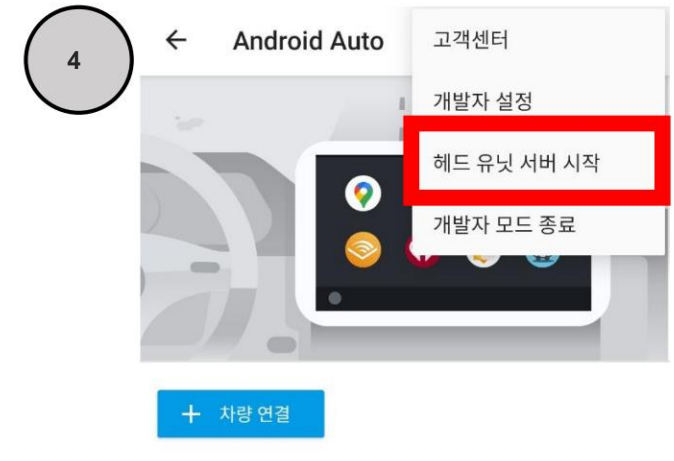| ← Wi-Fi　　　　　Q ⑦ |
| --- |
| Wi-Fi 사용　　　　●— |
| 📶 SIGHTER-openauto　⚙
연결됨, 인터넷 사용 불가 |
| 📶 ▓▓▓▓▓　　　🔒
저장됨 |
| 📶 ▓▓▓▓▓▓　🔒
저장됨 / 자동 연결 꺼짐 |
| 📶 ▓▓▓　　　　🔒 |

(2)

인터넷 연결 확실치 않음

인터넷을 사용할 수 없는 Wi-Fi 네트워크에 계속
연결하려면 이번만 연결하는 옵션을 선택하거나,
인터넷을 사용할 수 없어도 이 네트워크에
연결하도록 휴대전화를 설정하세요.

[설정 > 연결 > Wi-Fi > 고급 > 모바일 데이터로
전환 > 예외 네트워크]에서 설정을 변경할 수
있습니다.

이번만 연결

항상 연결

연결 해제

(3)

< Wi-Fi　　　　　🔲 ⋮
사용 중　　　　　●—
현재 네트워크
📶 SIGHTER-openauto　❓ ⚙ 인터넷에 연결되어 있지 않음
사용 가능한 네트워크
📶 Holly's coffee 5G
📶 Hollys coffee 2G

(4)

← Android Auto　　고객센터
개발자 설정
헤드 유닛 서버 시작
개발자 모드 종료
＋ 차량 연결
연결 도움말

1. If the connection to the smartphone is complete, the first tile is No WiFi Clients

   The text disappears and the Android Auto icon appears. The remote control's

   Press and hold the stick for 1 second to start Android Auto.

2. If your smartphone has never been connected to Android Auto before,

   The initial setup of De Otto will begin. Please follow the instructions.

3. You can move the cursor using the joystick. Moving up and down will take you to the top.

   You can move the focus effect with the tab (yellow square) and bottom tab (red square).

   And moving left and right will move the focus within that tab.

4. Press the thumb button on the remote control or move the focus with the joystick to select My

   You can launch Google Assistant by selecting the shape of a large

   You can perform various functions through assistants.

   • Set destination (e.g. Sogang University)

   • Set song (e.g. Play Hypeboy, next song)

   • Adjust the volume (e.g. to 60 percent volume)

   • In addition to phone calls (e.g. call mom), text

   messages, weather, etc.
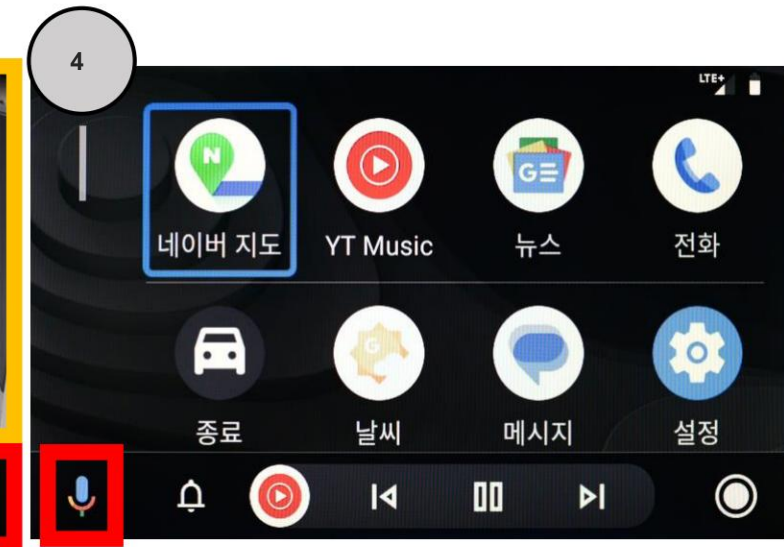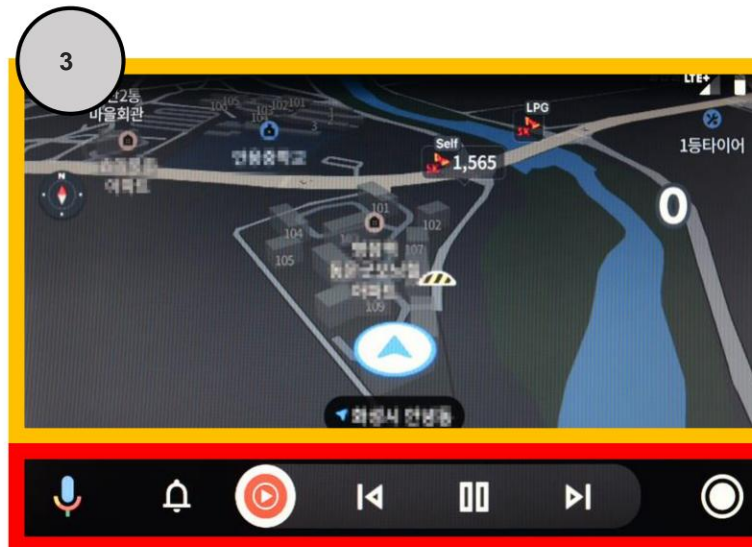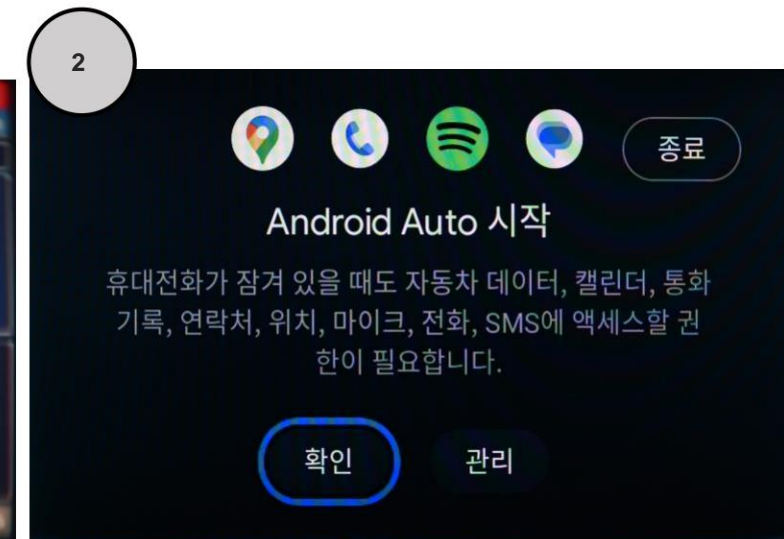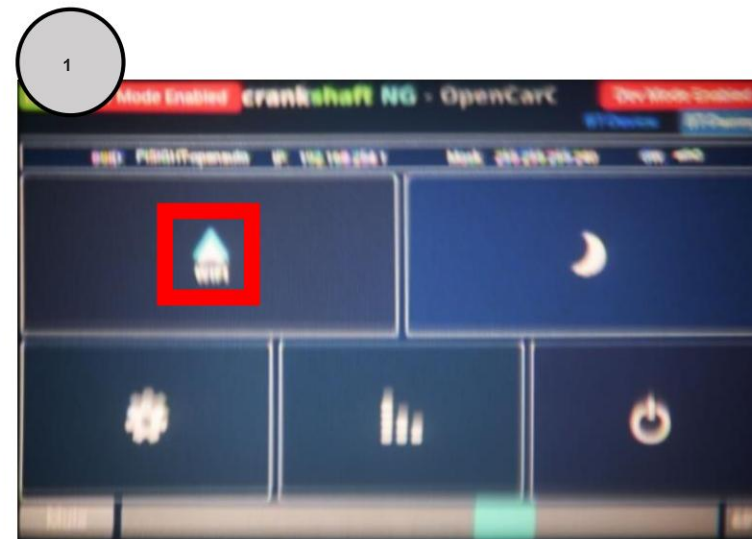
1. After removing the memory card from the main body and connecting it to a Windows PC, the boot disk

There are videos inside the DashcamRecordings folder on your device.

Each time it is turned on, the number of the internal video folder increases by one.
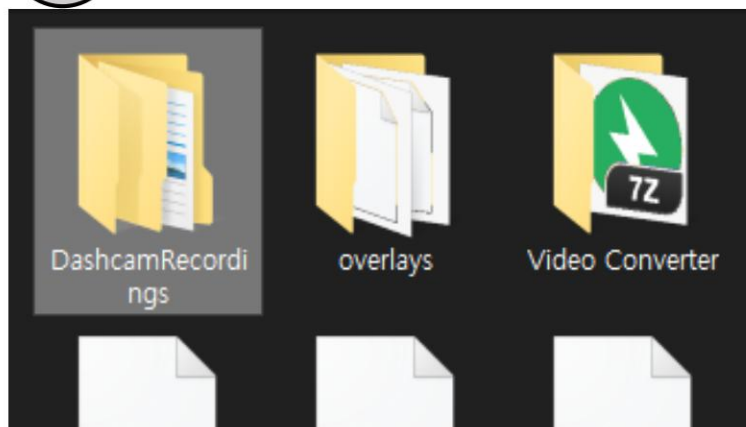
This requires conversion.

(When connecting the memory card to the PC, you must format the memory card.

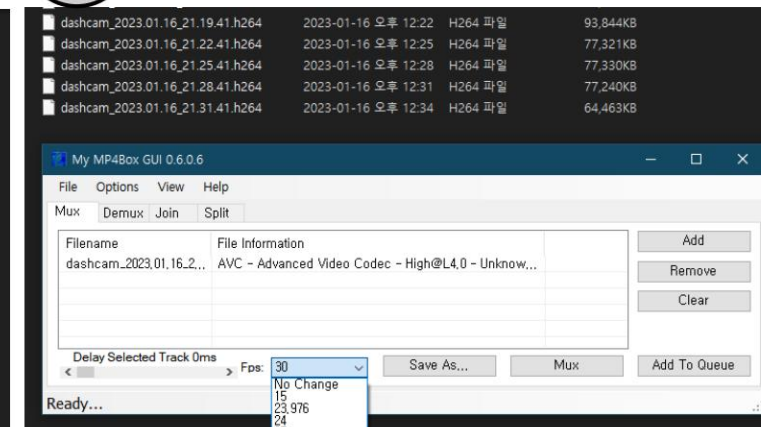A notification may appear. Used on Raspberry Pi OS and Windows.

This is a normal notification that occurs due to the difference in memory format. Click

Cancel and then click Boot Disk.)

1

2

2. Open My MP4Box GUI program inside the Video Converter folder on the boot disk.

Install the program. After running the program, click the Add button to select the language to be converted.

Select the award and set the Fps below to 30.

3
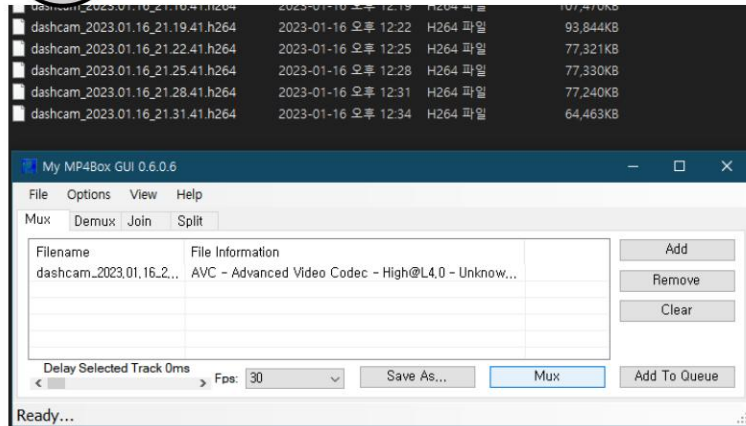
4
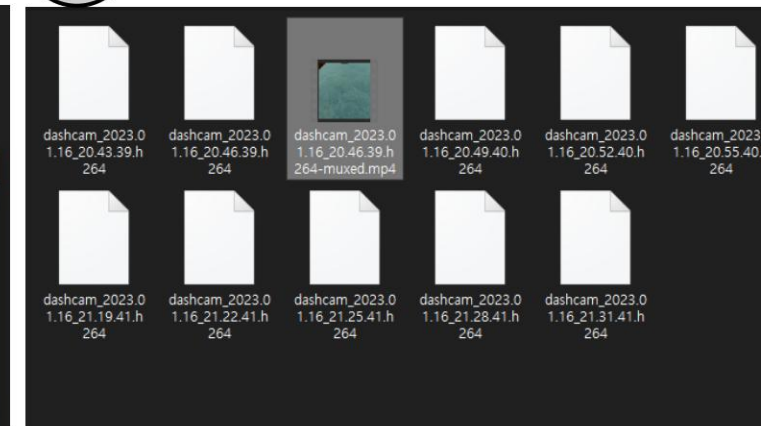
3. When you press the Mux button, the video will be converted to mp4 format in the same folder.

You can check it on your PC.

The converter program provided by default is only available for Windows, but

MP4Box or FFMPEG can be used on Windows as well as Linux and Mac.

Video conversion is also possible.

1. Inside the crankshaft folder of the boot disk, there are some software for operating the device.

2. The functions of each code are as follows:

• openauto_controller-cam.py: Camera, remote control key mapping

• remote_pairig.py: Pairing a remote • BT_detect.py:

Pausing the hotspot until a remote is connected at boot time

• Bootrun.sh: Automatically execute code

3. Modify the openauto_controller-cam.py file to change the video resolution, frame, and split recording length.

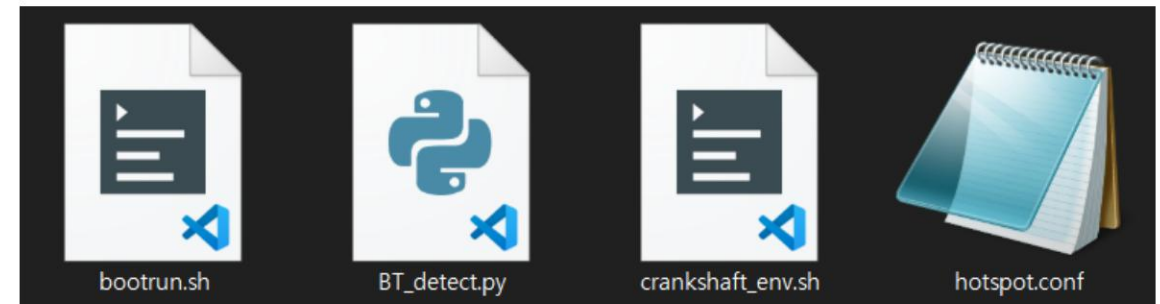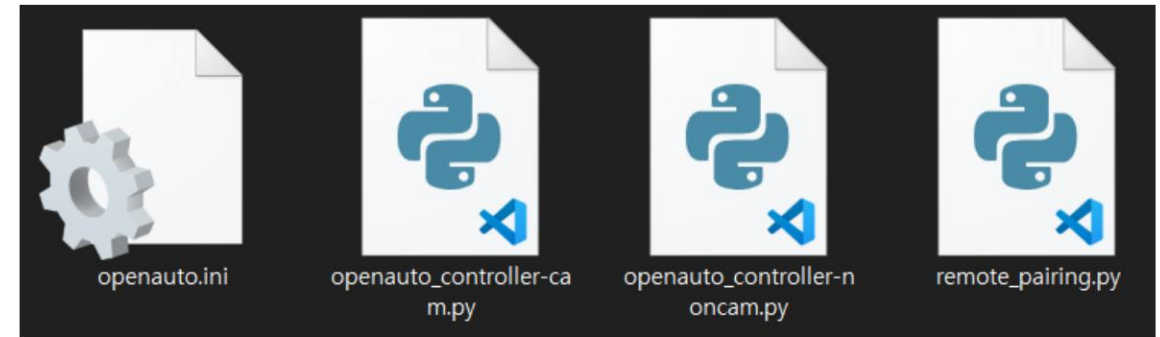Many parts of this can be freely modified. For more information, see vudev.net.

Please.

4. You can change your device's hotspot name and password by editing the Hotspot.conf file.

To change the name and password of your hotspot, open the file and type the desired characters inside the double quotes.

Please change it.

Back up the original file and make changes to it for restoration in case of problems.

3.1 Main body operation problem

• If the battery gauge light comes on but the display does not work, check the main body and the display.

Check the connection of the splay terminal.

• If the battery gauge light comes on but the boot screen does not appear, the memory card is not working properly.

Make sure it is inserted into .

• If the battery gauge light does not come on, check that the batteries are properly inserted.

Please do it.

• If video is saved/deleted continuously, the life of the memory card will end after a certain period of time.

The device may not work properly. In this case, replace the memory card and

Reinstall the software.

3.2 Remote control connection problems

• When the remote control is turned on, it automatically enters pairing mode until it connects to the main body.

When you turn on pairing mode on the main body, if another remote control is turned on and not

connected near you, a remote control other than your own may be connected.

When InBody's pairing mode is activated, check if there are other PI-SIGHT remote controls nearby.

oh.

• If video is saved/deleted continuously, the life of the memory card will end after a certain period of time.

There may be a problem with the program and the connection may not be established. In this case, the memory card

Replace it and reinstall the software.

3.3 Wireless Hotspot Issues

• If the remote control is not connected after booting the device, the hotspot will not turn on.

Check the power and connection.

• If the hotspot is turned off for a certain period of time because the remote control is not connected when the device boots up,

Even if you connect the remote control, the hotspot may not turn on again. In this case, reboot the device.

Ting it.

3.4 Android Auto startup issues

• If you have not started the Android Auto head unit server on your smartphone, on the entry screen

When I hold down the joystick, I get the following Connection refused error:

In case you start the Android Auto head unit server on your smartphone and press the joystick briefly.

Then Android Auto will start again.
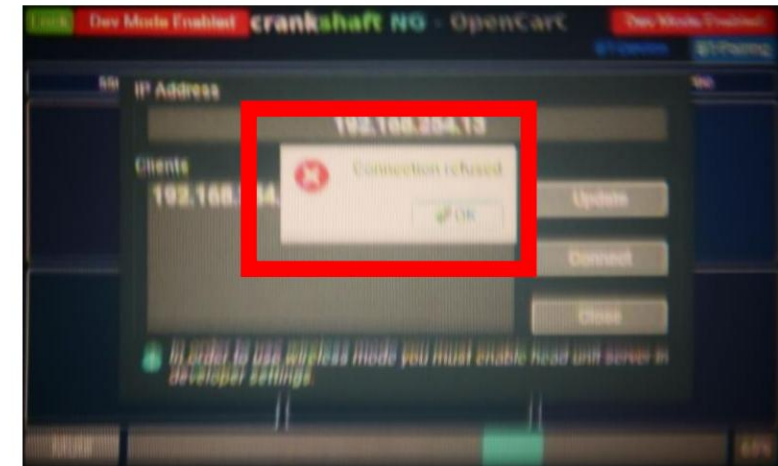
3.5 Smartphone data network issues

• When you connect your smartphone to the device's hotspot, an Internet connection notification may appear.

When you select the Connect button in the notification, your smartphone stops using cellular data.

The network connection is lost. In this case, erase the device's Wi-Fi from your smartphone and then reconnect it.

Connect to the city and press back on the Internet connection notification to ignore it.

3.6 Interruption issue while driving

• If the smartphone connected to the device is placed in close contact with the body, such as in a tight pants pocket, the device may be

Communication problems may occur in external pockets or bags that are not in close contact with the body.

Store your smartphone in it.

• If the device is used in a high-temperature environment where cooling by the wind is not provided, the device may

Heat may cause performance degradation. Avoid allowing the device to become overly hot.

Okay.

3.7 Video recording issues

• If video is saved/deleted continuously, the life of the memory card will end after a certain period of time.

The video may not be saved properly. In this case, replace the memory card.

Please reinstall the software.

3.8 Remote control charging light problem

• When the remote control is turned on and the battery is fully charged, the red and blue lights turn on at the same time,

An alternating on and off phenomenon may occur, but this is normal operation.

3.9 Format notification when connecting memory card to PC

• When you connect the memory card to your PC, a notification may appear asking you to format the memory card.

This is a normal notification caused by differences in memory formats. Click Cancel to ignore it.