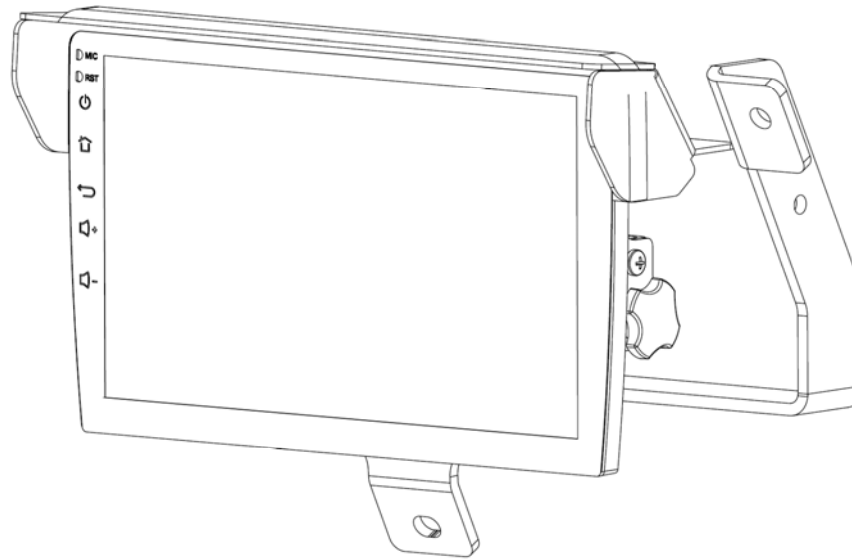


# KOIoT TRACTOR MANAGEMENT SYSTEM

user manual rev.01

**MODEL No.TS18**  
**PART No.TB35-0101**



**Manufacturer : MCA KOREA**  
**salesman : KOIoT**  
**고객센터 : 054-972-7531**



MODEL: TS18  
FCC ID: 2BNUC-TS18

Assembled form tested components

## FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

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.

## RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

## Thank you for purchasing a KOIOT product.

All KOIOT products are designed and manufactured to meet strict internal standards and international quality standards, and are manufactured through strict quality tests including reliability tests on appearance, performance, climate, power, and durability.

Please read the user manual before use for safe and correct use.

This manual includes a quality assurance certificate, so be sure to keep it in a safe place.

**This wireless device may cause radio interference, so it cannot provide services related to human safety.**

## Class A equipment (business broadcasting and communications equipment)

This device is a business-use (Class A) electromagnetic compatibility device, so sellers or users should be aware of this, and it is intended for use in areas other than home.

Device name (model name) Specific low-power wireless device (wireless device for wireless data communication system / TMS)

Certified person's name: KOIOT

Certification number: FCC ID: 2BNUC-TS18

Manufacturer: MCAKOREA

Country of manufacture: China OEM

## Before use

- Be sure to read the user manual before use and use the product correctly and safely.
- The user manual was created based on the current status and may contain technical or editing errors or omissions.
- Product changes to improve product performance may be made without notice to the user.
- This product is exclusively for Daedong tractors.
- Please read the safety precautions first and use the product correctly.
- If you install an application received through an unauthorized route, problems may occur in the operation and communication functions of the product.
- Daedong is not responsible for any data loss or personal information leakage caused by this.
- If you run programs and functions that use high CPU and RAM, it may affect the overall performance of the product.
- Functions and applications may vary depending on the product specifications and country of use, and Daedong is not responsible for any problems that occur when downloading any application.
- Applications or services provided by the product may be changed or discontinued without notice depending on the circumstances of the relevant application or service provider.
- Due to the nature of the product, icons and screen images used in the manual may differ from the actual contents due to firmware and version updates. The user manual may be subject to change without prior notice for product improvement or other reasons.
- The screens and pictures in the user manual may differ from the actual product.
- Important: This device is not guaranteed to be waterproof.
- We do not warrant damage caused by water immersion.



## Safety precautions

In order to protect the user's safety and use the product correctly, please be sure to read this content and use the product correctly. We are not responsible for any accidents that occur due to the user's failure to follow the precautions.



**WARNING** - Please follow these instructions to prevent damage to your life and property..

- **Do not operate the terminal while driving or working.**
  - - It can cause various accidents. If you need to operate the terminal, park the vehicle in a safe place and then operate it.
- **Avoid constantly looking at the screen while driving or working.**
  - - It causes various accidents.
- **Please refrain from watching videos while driving or working..**
  - Do not watch videos while driving or working
  - It can reduce your attention span and cause accidents..



**Caution** - If misused, it may result in injury to the user or damage to the product..

- **When driving or working, set the volume on the product to a level where you can hear sounds outside the vehicle..**
  - Setting the volume too loud can cause accidents.
- **Adjust the brightness of your screen appropriately.**
  - Adjust the screen brightness to suit your driving and working environment.
  - If it is too bright, your eyes will easily get tired and it can cause accidents due to glare.
- **No arbitrary disposal, disassembly, assembly, or modification is permitted.**
  - If you arbitrarily disassemble, assemble, or modify the terminal, you will not be eligible for free after-sales service.
  - Be sure to receive installation through an A/S center designated by KOIOT.
  - The user is responsible for any malfunctions, accidents, product damage, or vehicle damage caused by arbitrary disposal, disassembly, assembly, or modification.
- **Please maintain the appropriate temperature when using the product.**
  - Please maintain the proper temperature as problems may occur during cold winter or hot midsummer.

 **Caution** - If misused, it may result in injury to the user or damage to the product..

- **Do not impact the screen**
  - This may cause damage and malfunction.
- **Do not press the buttons or LCD screen of the product with excessive force**
  - This may cause malfunction.
- **Do not wash the product with chemicals, detergents, etc.**
  - Wipe gently with a soft cloth.

 **Prohibited** - In cases where incorrect use of the product may result in risk of accident or damage to the product.

- **Do not allow foreign substances to enter the product.**
  - If water, beverages, or other foreign substances enter the product, it may cause a malfunction.
- **If the product does not operate properly, stop using it immediately.**
  - If the product does not operate properly, stop using it immediately and contact the customer satisfaction center.
- **Do not modify/disassemble arbitrarily**
  - If you modify/disassemble or repair the product arbitrarily, the product may be damaged and you will not be eligible for free A/S.
- **Do not shock the product.**
  - Excessive shock may cause the product to malfunction.
- **Be sure to use only genuine parts.**
  - Use only the parts provided by our company.
  - If you connect the product arbitrarily other than genuine parts, the product may malfunction.
  - You will not be eligible for free A/S for malfunctions caused by failure to comply with the above.

| Composition of the product

## Basic components

Please make sure all of the following components are installed. Some items may be changed without prior notice for product improvement.

- TS18 terminal body
- TB310 connection cable
- Front and rear cameras (cables included)
- Product manual

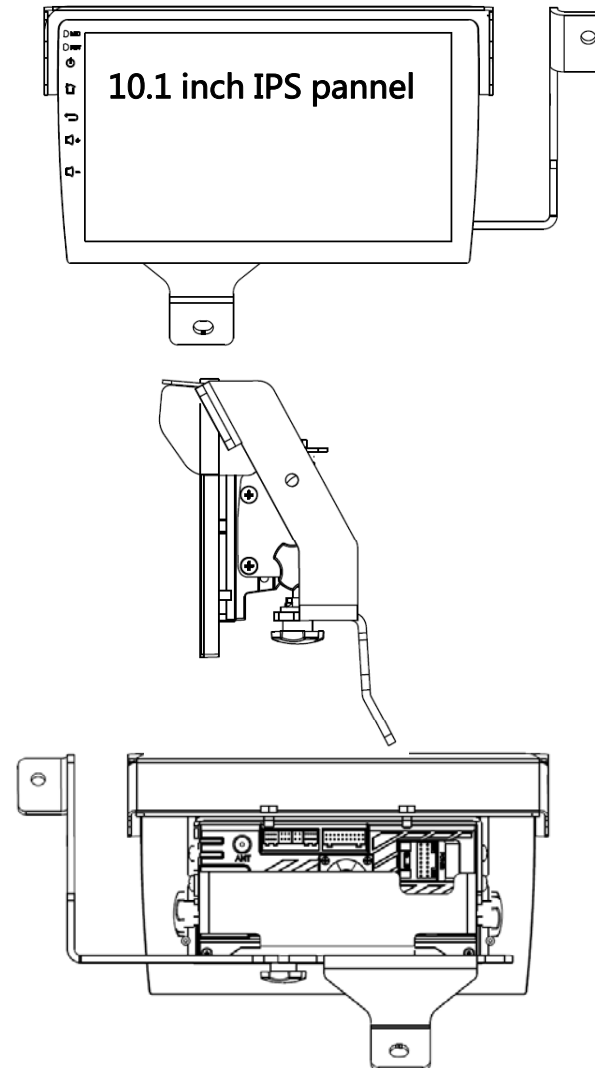
\*Components may vary depending on product specifications.

## Sold separately

When purchasing separately sold items, please make sure to check compatibility with this product.

- USB memory stick (up to 32Gb, supports USB 3.0)

## Names and specifications of each part





## Device specifications (body)

CPU	8Core ARM Cortex-A55, 1.6GHz,
GPU	PowerVR Fentale GE8322 (up to 550MHz) 3D , OpenGL ES 3.2,
RAM	4GB LPDDR4X (Hynix H9HCNNCPMMLXR-NEE)
ROM (Storage)	64GB eMMC (SiliconGo SGM8100C-S36BCG-64GB)
TFT-SIZE	10.1 inch IPS pannel
TFT PIXEL	720*3RGB(H)X1280(V)
REAR VIEW CAMERA	SUPPORT 720PIX / 1080PIX CAMERA
PHONE LINK	SUPPORT WIRELESS CARPLAY AND ANDROID AUTO (CLOSE)
RADIO	AM /FM /RDS (FM:64-108MHz, AM:520-1710kHz) (Silicon labs Si4755)
DSP	DSP: 32 BAND EQ
AMP	25W*4 channel (max 45W*4L+ 25w) (Toshiba TCB001HQ)
GPS	GPS+Glonass/ GPS+Glonass+Galileo.. (UNISOC UIS8581A)
multimedia	VIDEO INPUT 4WAY CVBS
	DVR SUPPORT
	AUDIO IN:AUX-L;AUX-R
	VIDEO OUT : NO SUPPORT
	AUDIO OUT : 2RCA OUT
	AUDIO FORMAT : MP3、WMA、AAC、RM、FALC、MP3、WMA、AAC、RM、FALC 、WAV
	VIDEO FORMAT : MPEG-1/2/4、H264、H263、VC1、RV、RMVB、DivX、Sorenson SparK、Spark、VP8、AVS Stream
	PIC FORMAT : JPG/BMP/JEPG/GIF/PNG
WIFI	FREQ : 2.4GHz/5G, 2.4G SUPPORT :IEEE802.11b/g/n, 5G SUPPORT : 20/40/80MHZ SUPPORT wifi hotspot, SUPPORT I EEE802.11B/g/n COMPATIBLE WLAN (UNISOC UWE5623DU)
BLUETOOTH	Bluetooth 5.1 Classic & Low Energy
OS	ANDROID 10
power supply	DC10-16V

## Monitor Control Panel Names



NO.	designation	explanation
1	MIC	Microphone during Bluetooth calls
2	RST	Physical Initialization
3	POWER	ON-OFF
4	HOME	Return to the main screen from the screen you are currently working on
5	Previous Menu	Return to full screen from current task
6	Volume +	Turn up the speaker volume.
7	Volume -	Reduce speaker volume.

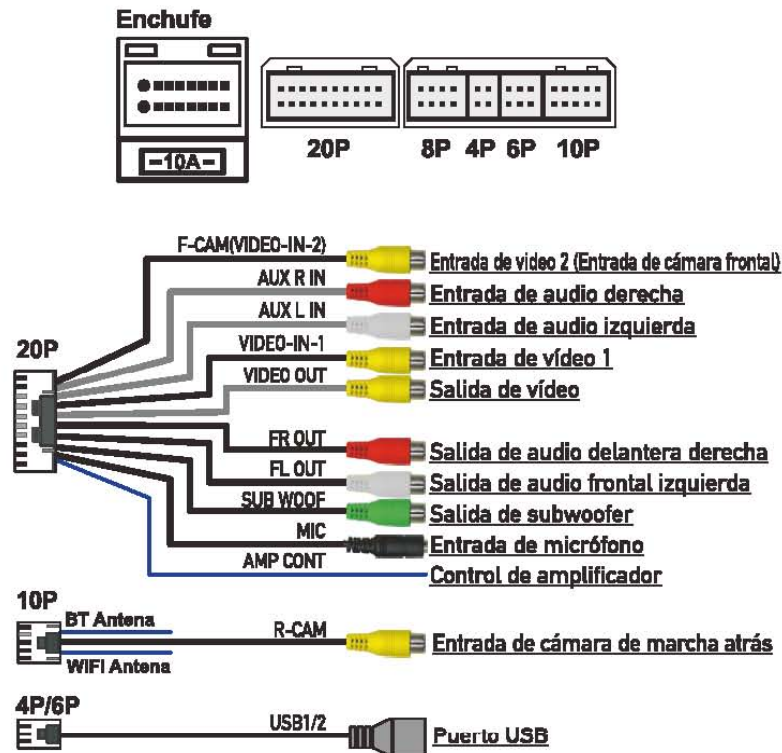
## Name of each part (integrated cable PIN configuration)

※ 헤드 유닛 및 각종 유닛의 손상을 방지하기 ※ To prevent damage to the head unit and various units, be sure to connect each connector according to the pin configuration below. The manufacturer is not responsible for any malfunctions, accidents, or damage to the product caused by arbitrary manipulation or modification by the user. 반드시 아래 핀 구성에 따라 각종 커넥터를 연결하여 주십시오.

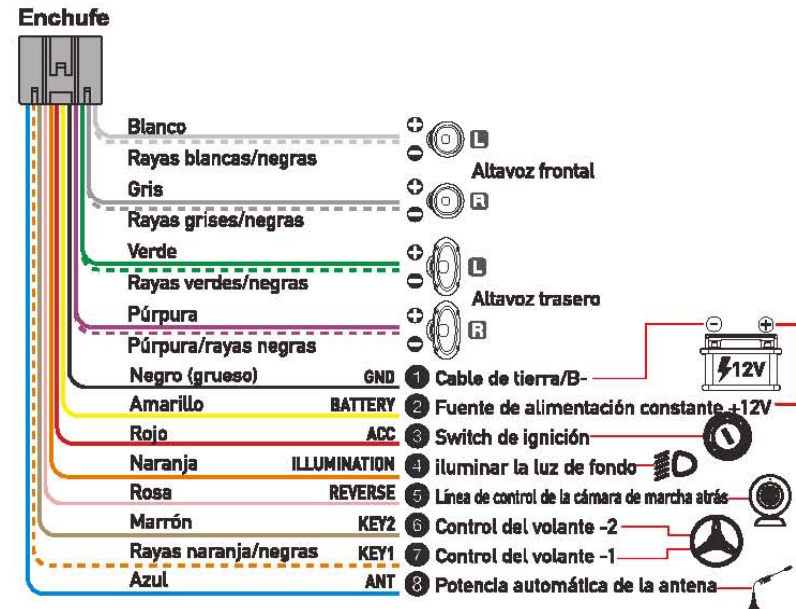
### ANTES DE LA INSTALACIÓN

Muchas gracias por comprar y usar nuestros productos. Cuando reciba el producto, no lleve el producto directamente al automóvil para instalarlo, ya que el producto está en el después de un largo viaje, puede afectar el producto. Pruebe la máquina antes de instalarla.

### DESCRIPCIÓN DE LA INTERFAZ TRASERA



### DESCRIPCIÓN DE LA INTERFAZ TRASERA



\* Cuando la línea amarilla B+ y la línea roja ACC tienen una potencia positiva de 12 V al mismo tiempo, la unidad se puede encender normalmente.

\* La línea amarilla B+ mantiene la alimentación y la máquina tiene una función de memoria.

\* 8 cables de altavoz, cada cable no se puede conectar a tierra, no se puede compartir, no se puede tocar la línea, de lo contrario no habrá salida de sonido, distorsión del sonido de salida, fiebre de la máquina, etc.

# How to operate the screen

Explains the tricks and operations of touching the screen.



## Screen Touch Tips

- The micro-touch screen recognizes and operates in a capacitive manner, so you must use your fingertips to operate it..
- **Caution**
  - Touch may not work if there are gloves or foreign substances.
  - Do not press the touch screen hard with your fingernails or a sharp object. (The touch screen may be damaged or malfunction.)
  - Be careful because the touch sensor may not work properly if there is an object applying pressure to the screen.

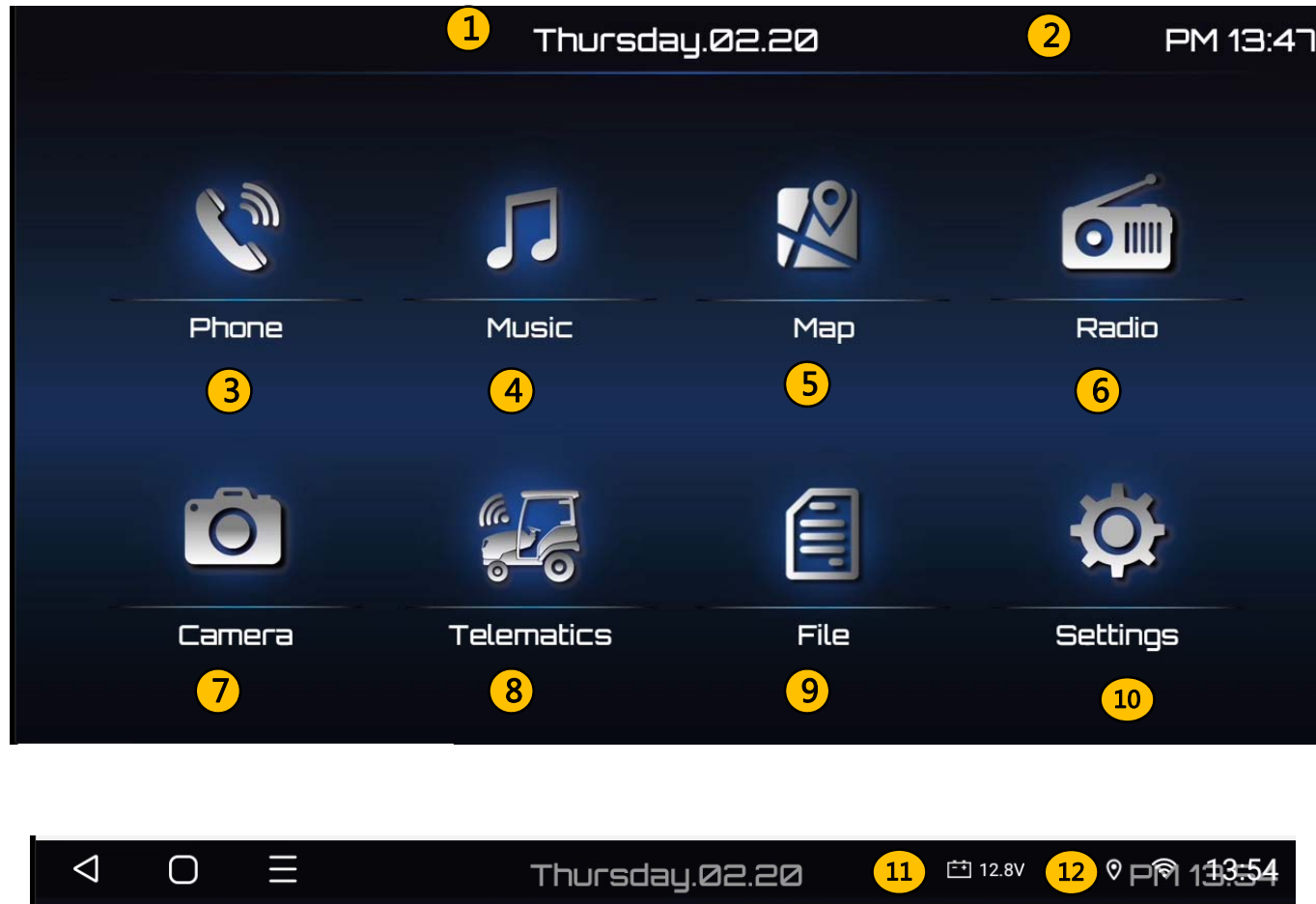


## How to run Touch

- **Touch 하기**
  - To select a desired function or item, simply tap the screen.
- **Touch Settings**
  - When you press a specific item or screen, a hidden function will be executed.
  - - If the touch location does not match the icon, please correct it in the settings..

# Main screen configuration items

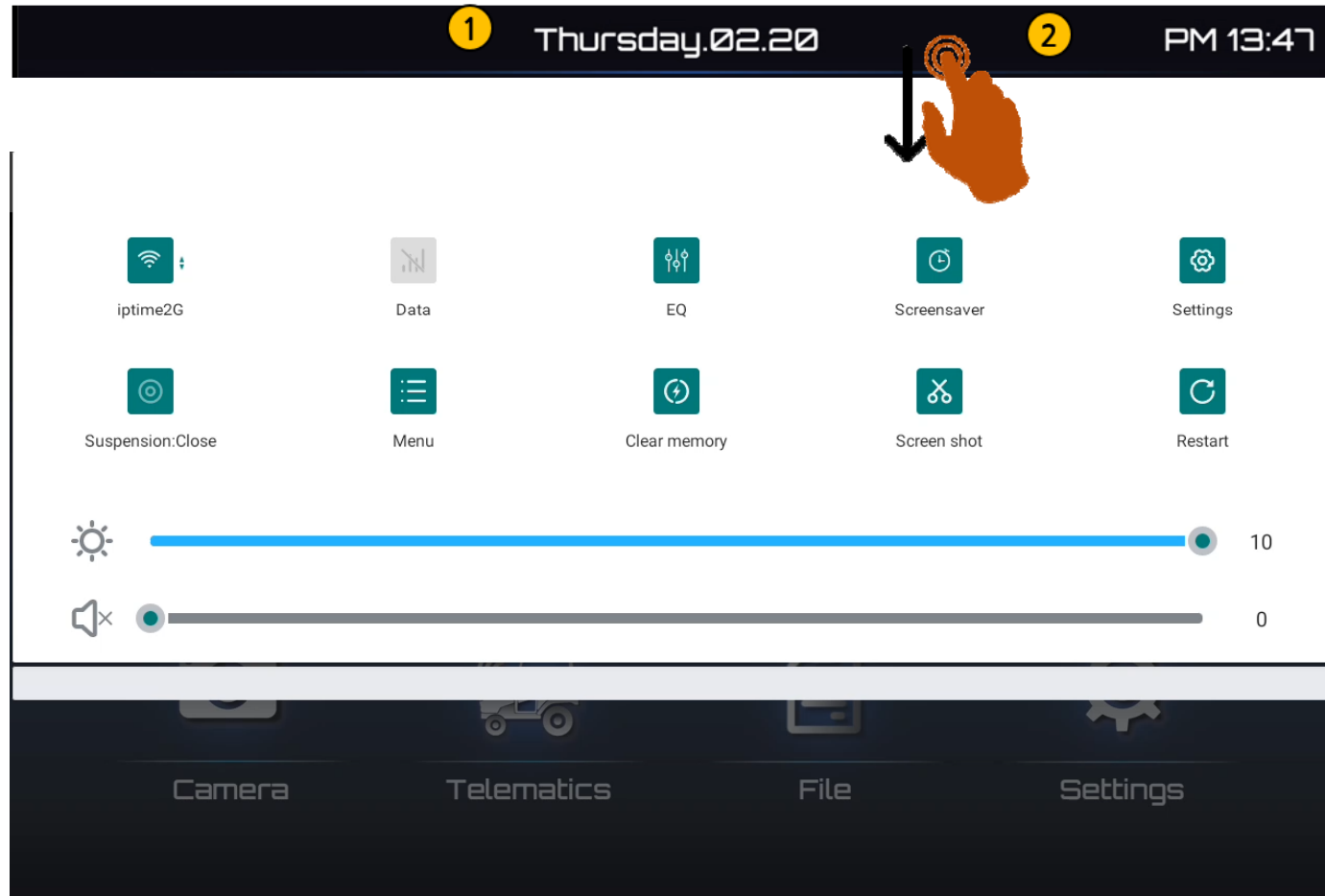
Organize on home screen



- ① Show current time
- ② date
- ③ Phone mode
- ④ Music running
- ⑤ Map
- ⑥ Running the radio
- ⑦ External camera
- ⑧ TELEMATICS
- ⑨ Run File
- ⑩ Preferences
- ⑪ Voltage status
- ⑫ Internet

## Main screen configuration items

Swipe down from the top of the main screen to bring up the quick menu.

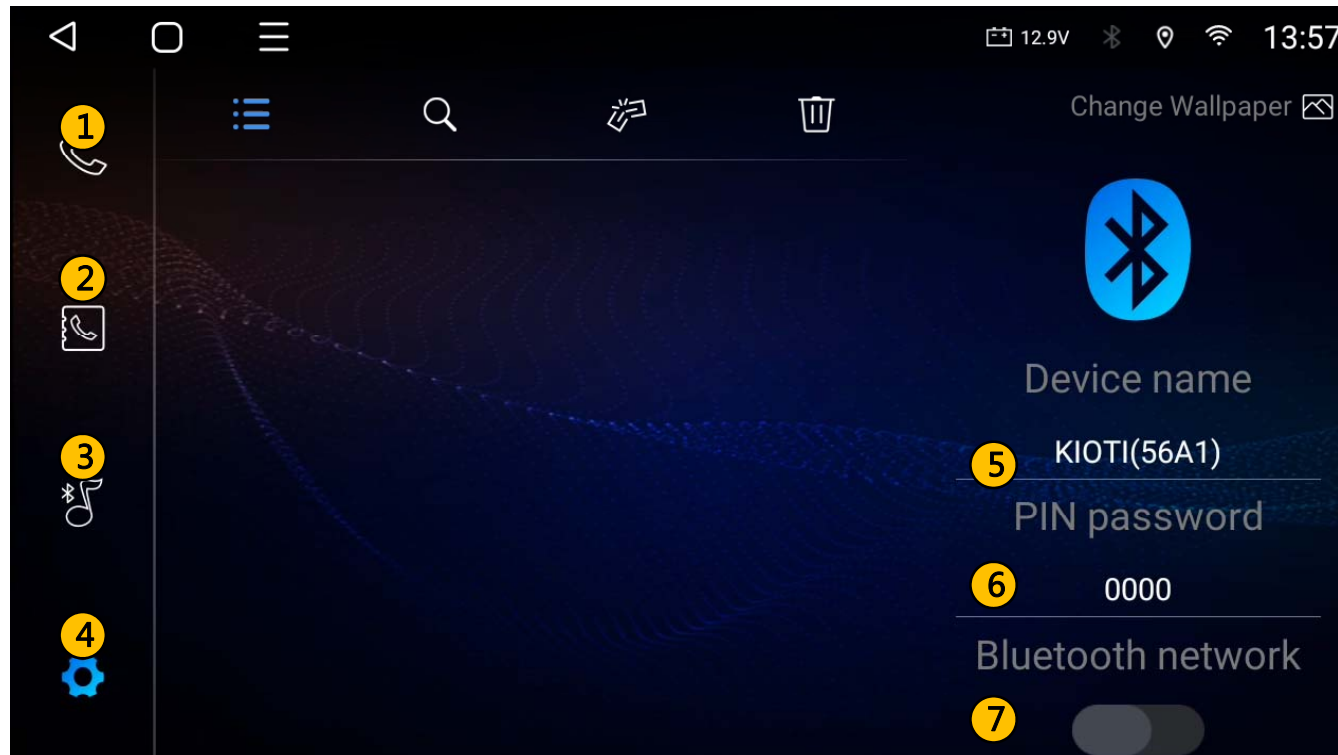


- Touch
  - You can intuitively select and use frequently used menus.

| Using the application

# Use your mobile phone 사용하기

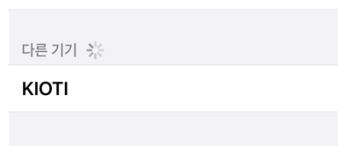
Use your mobile phone



- 1 Make a phone call
- 2 Phone memory
- 3 Play sound source
- 4 Phone settings
- 5 Bluetooth name
- 6 Pairing number
- 7 Network connection



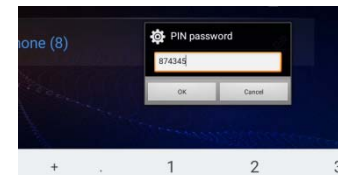
Turn Bluetooth ON on your smart device (phone).



Select KIOTI.



Pairing request.



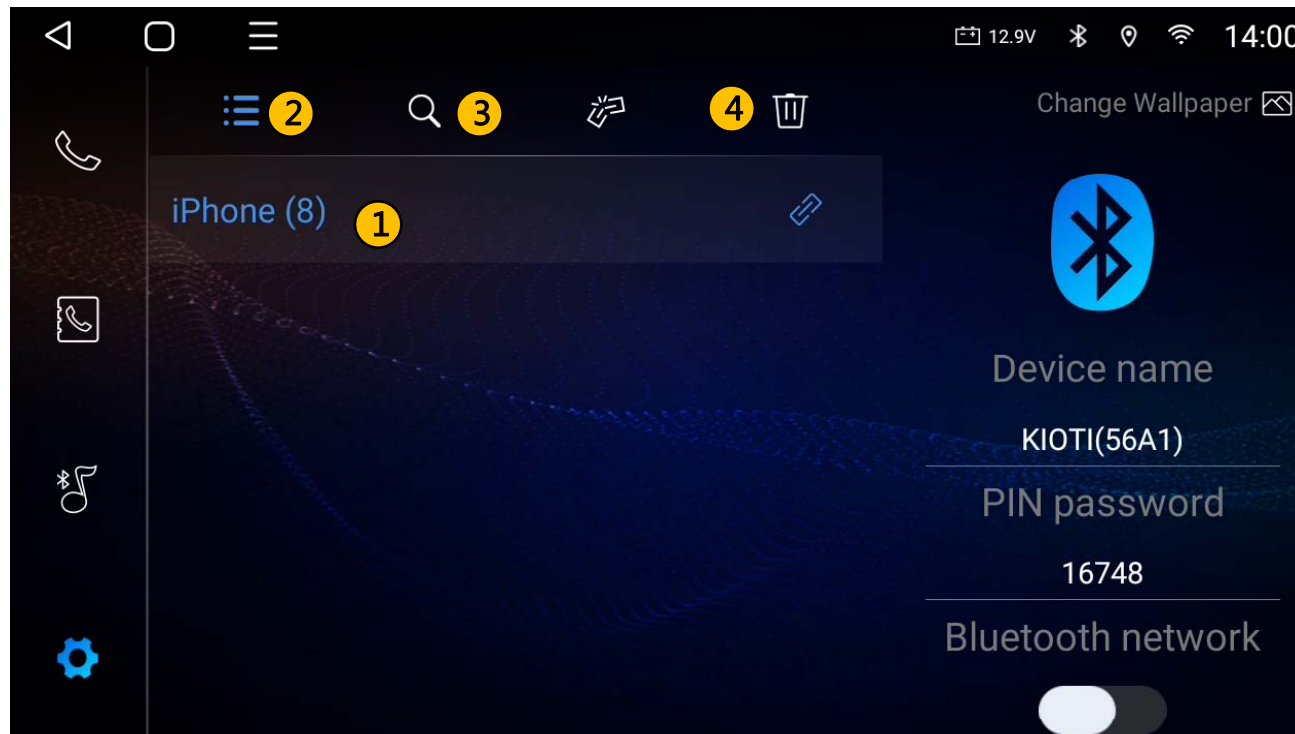
Select the PIN password for your device and enter the pairing number for your smart device



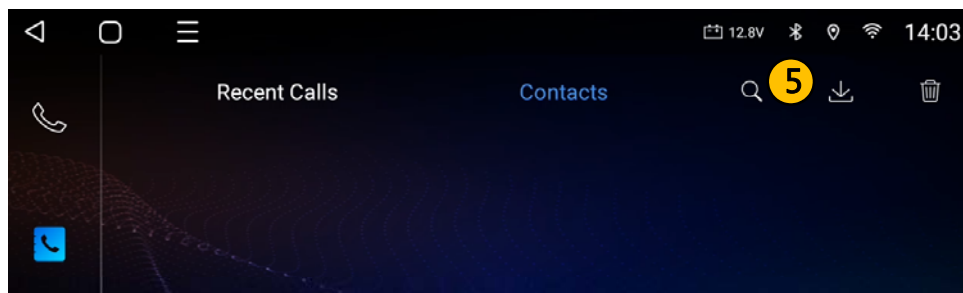
Activate item 7 on the device that uses the network via Bluetooth.



## Make a call 1



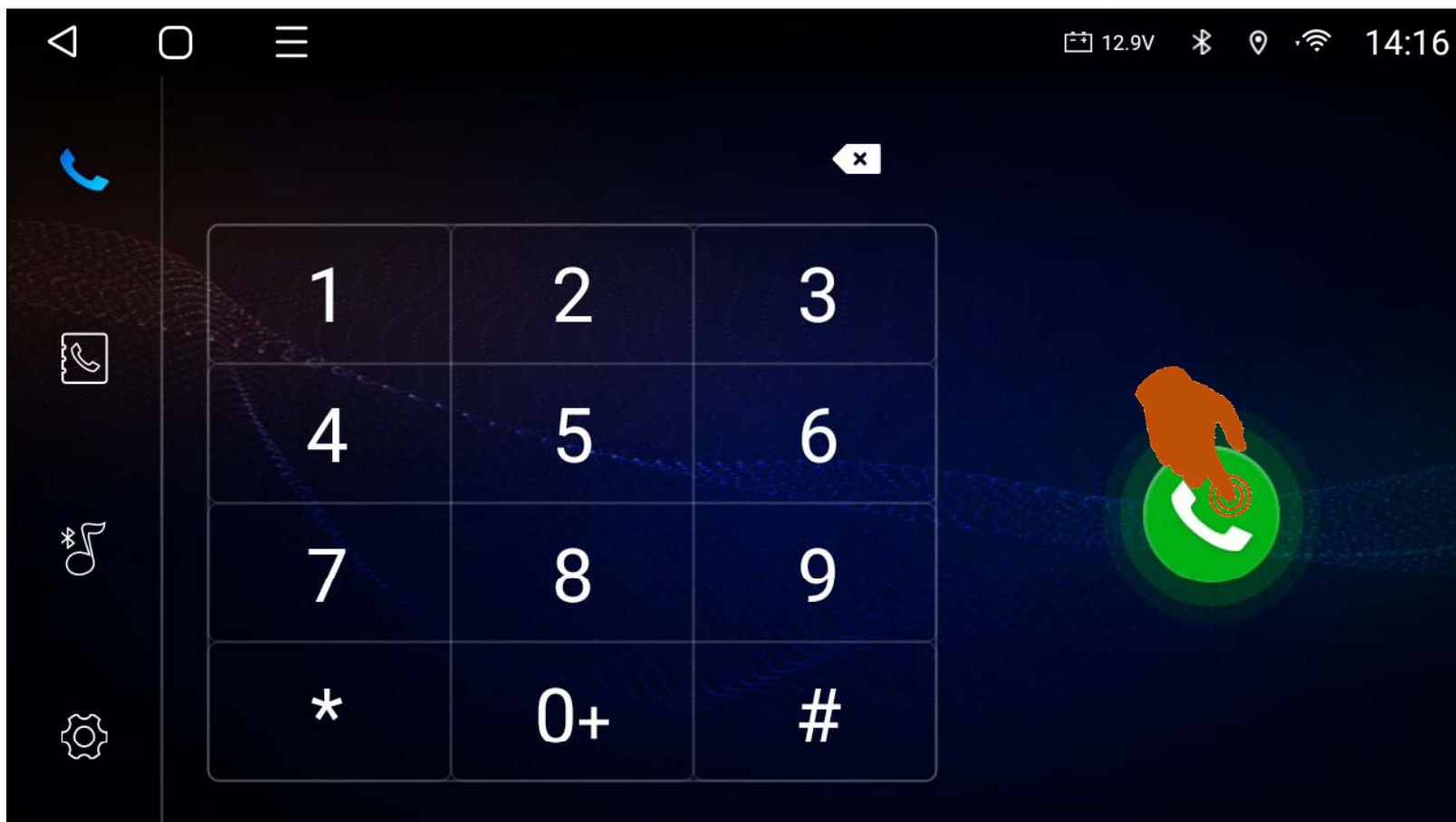
- ① Connected device name
- ② phone list
- ③ Search
- ④ Delete connected device
- ⑤ Save device contacts



The device is automatically connected after initial registration. If you sometimes cannot connect, please delete and reset the device using number

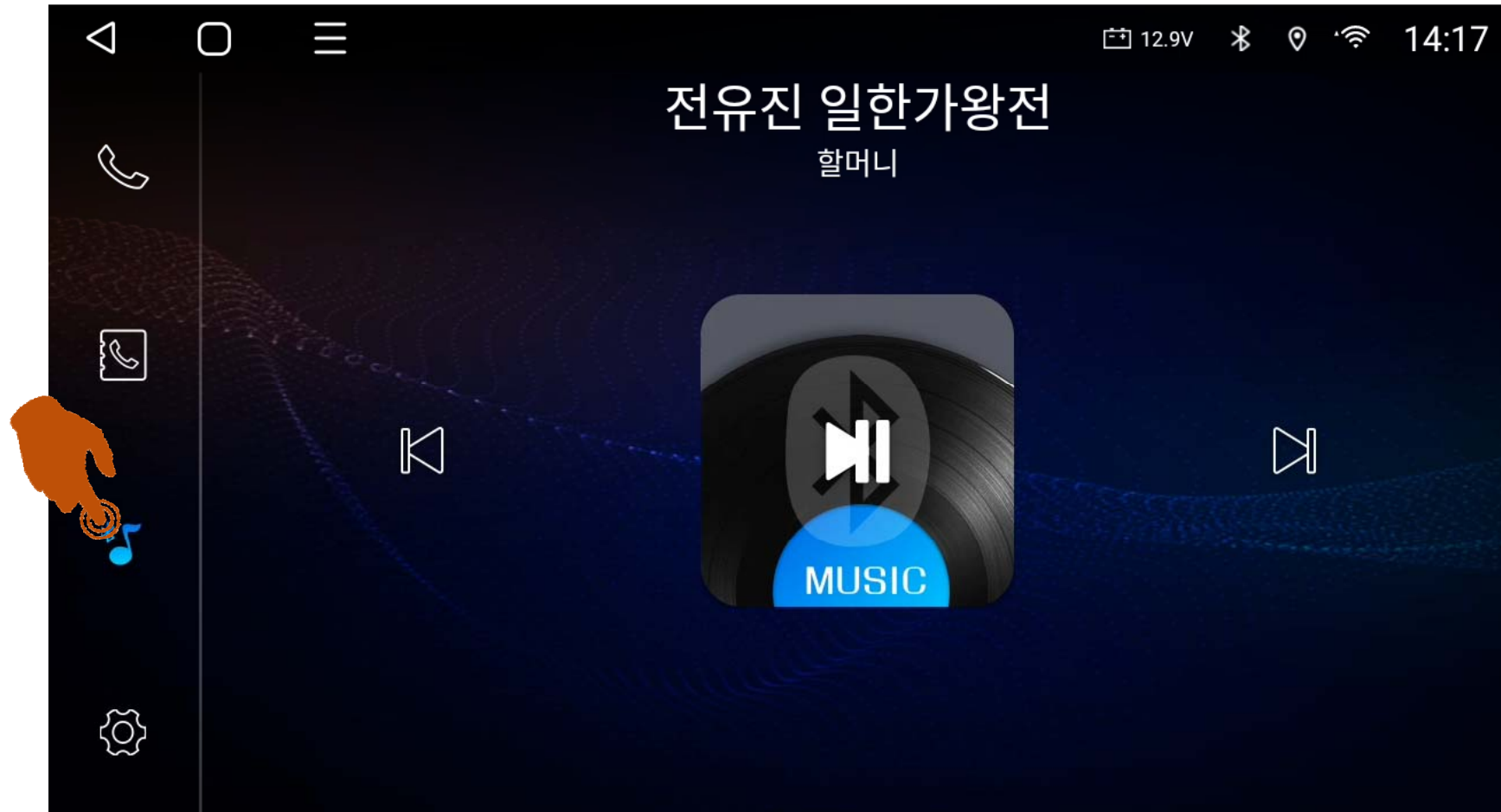
## Make a call and receive

You can connect a phone by dialing or by touching the address book list. When a call comes in, touch the electrification symbol to connect.



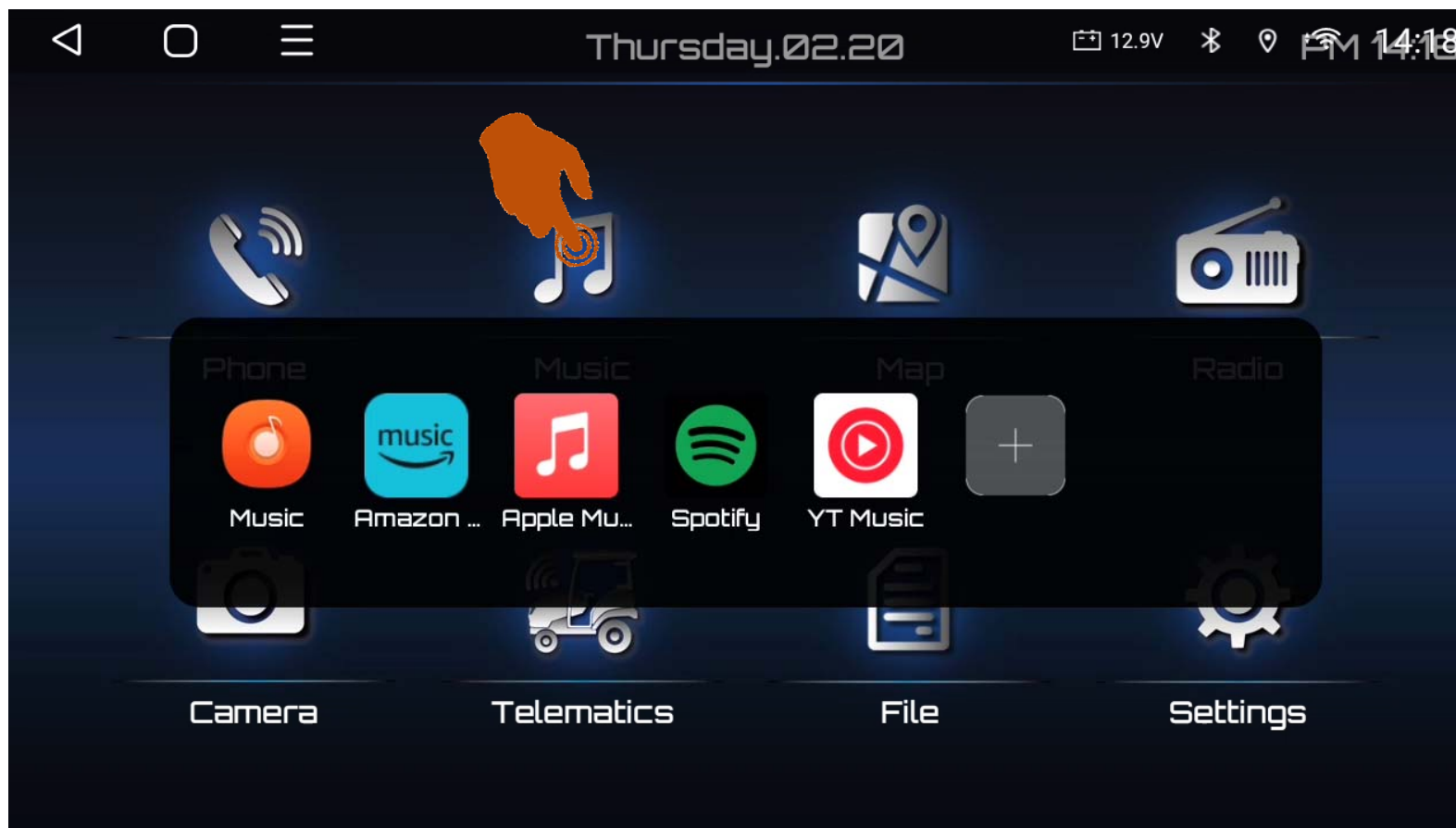
## Play music on your mobile device

You can watch music or videos on your mobile device.



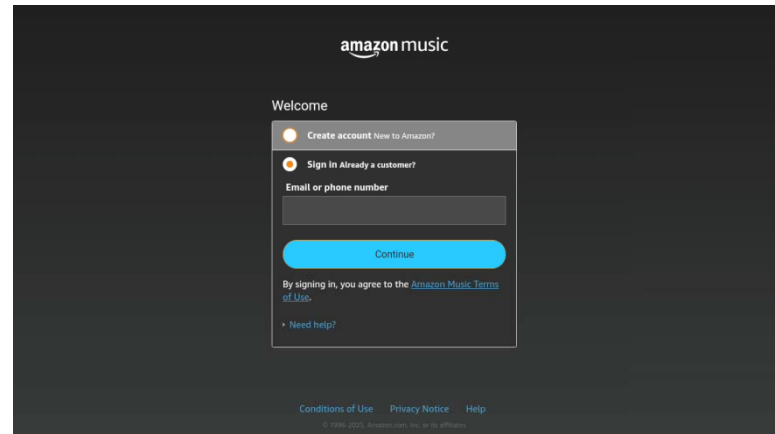
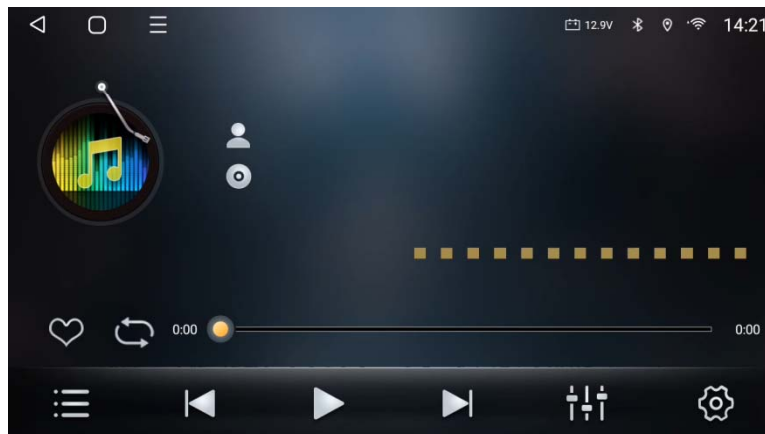
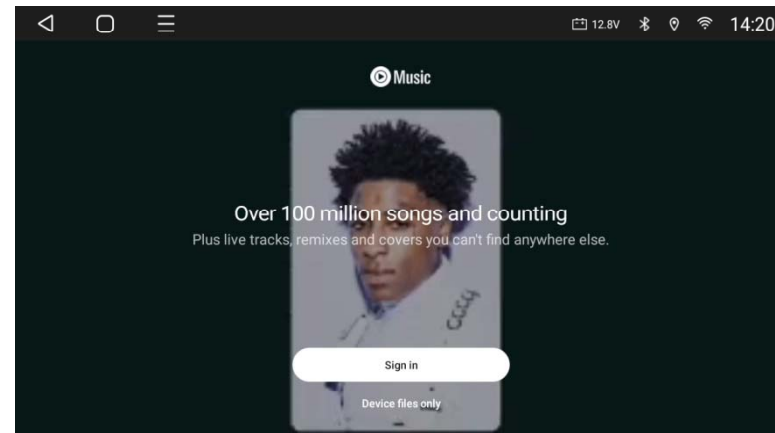
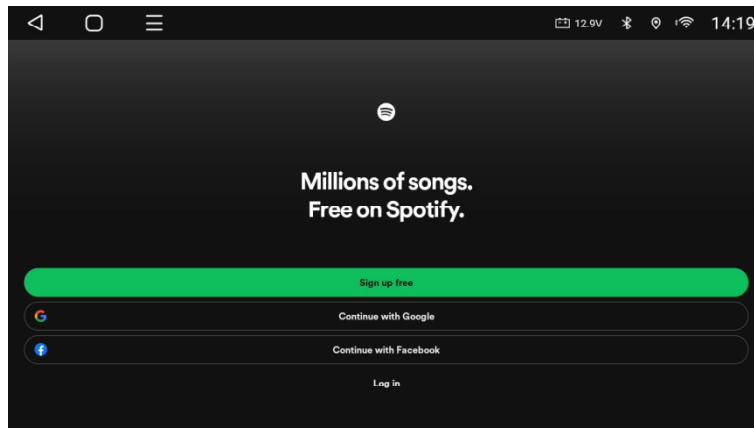
## Play music

You can play Internet music on this device.  
This music can be used for a fee after registering on the Internet.  
When you select the music icon, the basic app will be displayed.



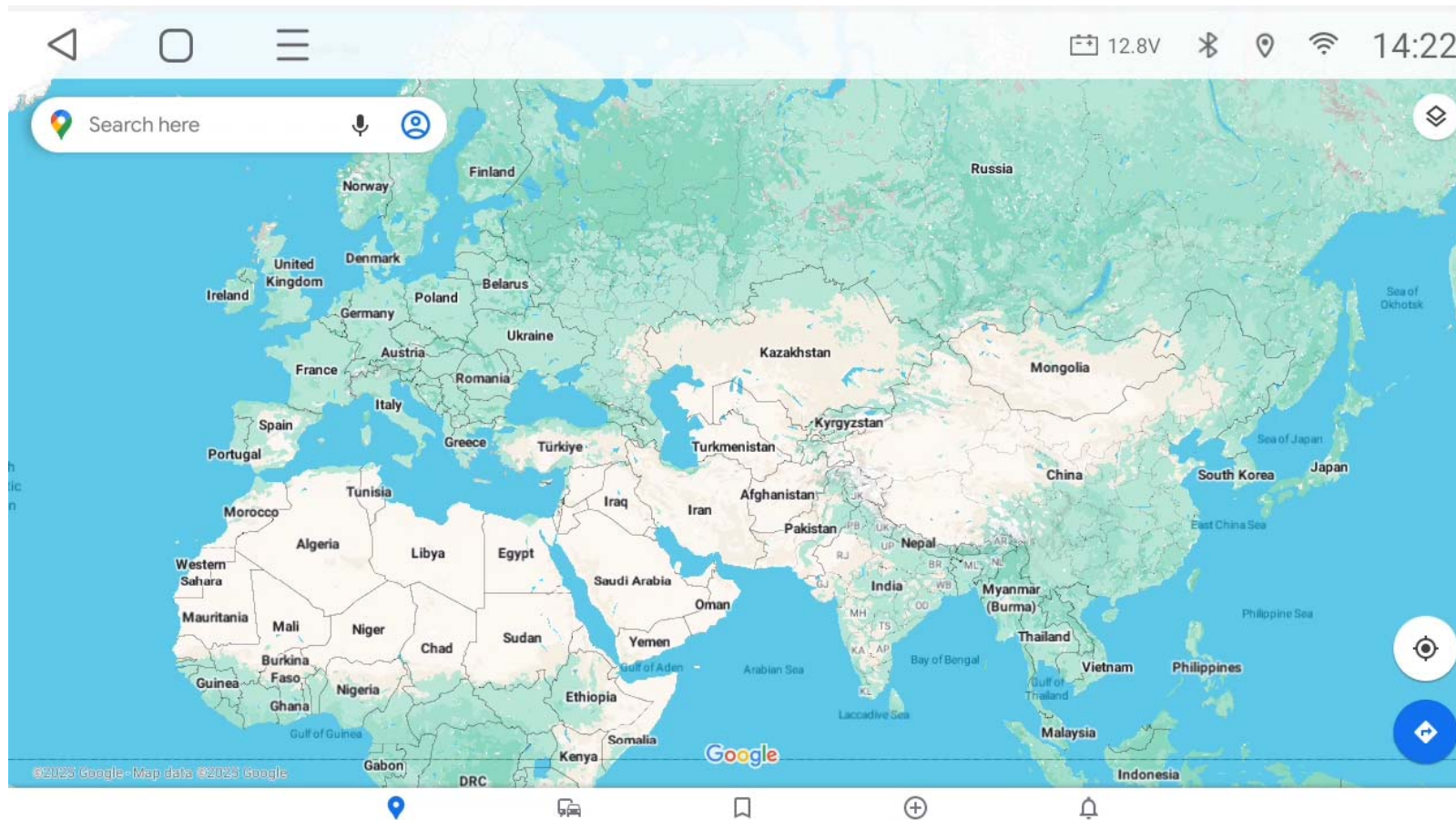
# Play music

This sound source can be used for euros after registering on the Internet.



## Using the map

The map uses Google Maps by default. It requires an Internet connection to be used.





## Using the radio

- The radio supports AM.FM1.FM2.
- The radio sensitivity may vary depending on the region.
- If there is a lot of noise from the radio, move to a different location and use it.

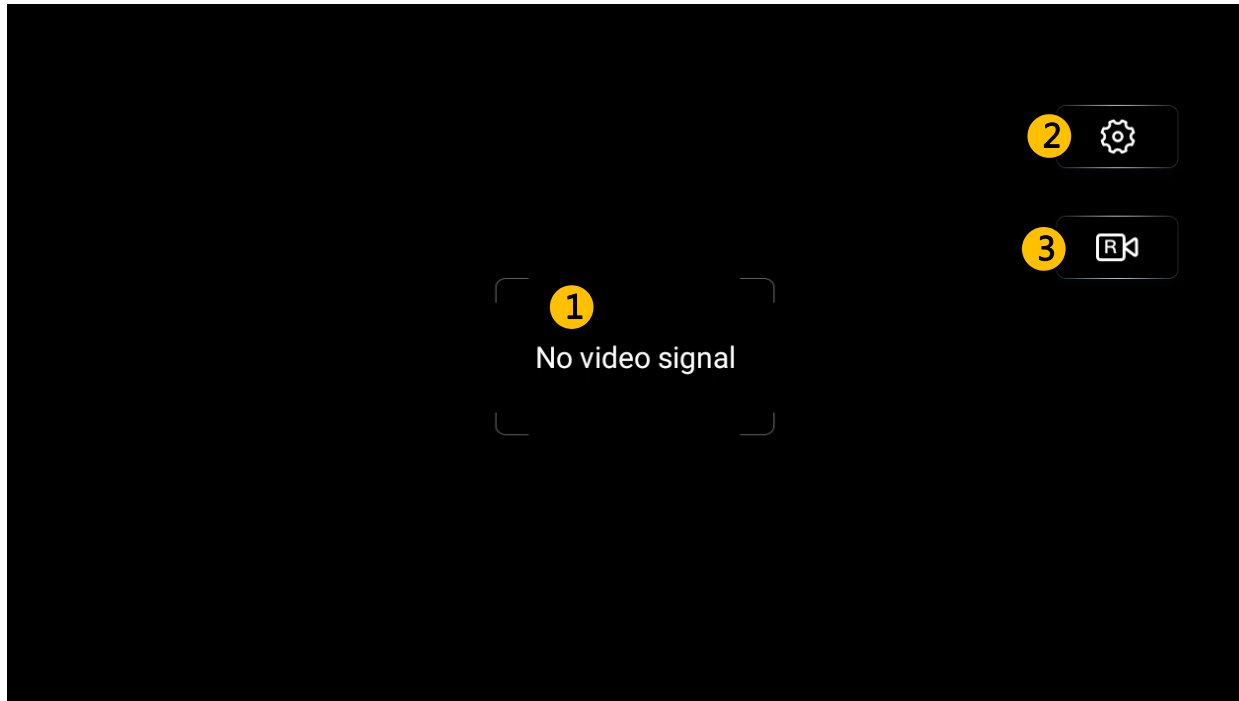


- ① Frequency
- ② AM/FM
- ③ Playback Frequency
- ④ Phone settings
- ⑤ Select sound
- ⑥ Frequency down
- ⑦ Bend selection
- ⑧ Frequency up
- ⑨ Equalizer
- ⑩ setting

- When changing the radio between AM, FM1, and FM2, touch BAND 7 for more than 2 seconds.
- Touch the icon 11 to automatically search and remember the frequency.
- You can manually change the frequency with 6 and 7.

## Using the rear camera

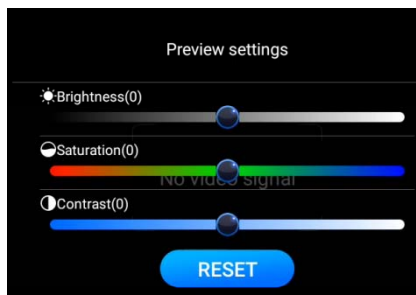
- This device supports 2 channels, front and rear.
- This specification is supplied with a rear camera as standard.



5 screen

6 setting

7 select



- The monitor supports 2 channels.  
- Currently only rear camera is supplied.  
- Please make sure that Enhanced R is displayed.

- You can adjust the brightness and color of your monitor.



## Using Connected


- KOIOT provides various connected information.
- You can use it after signing up.



12.9V Bluetooth Location Wi-Fi 14:27

English ▾




 Start with Google

Normal Registration

Did you sign up as general membership?

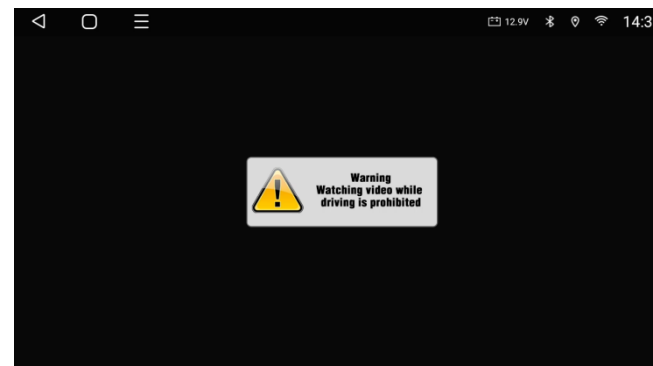
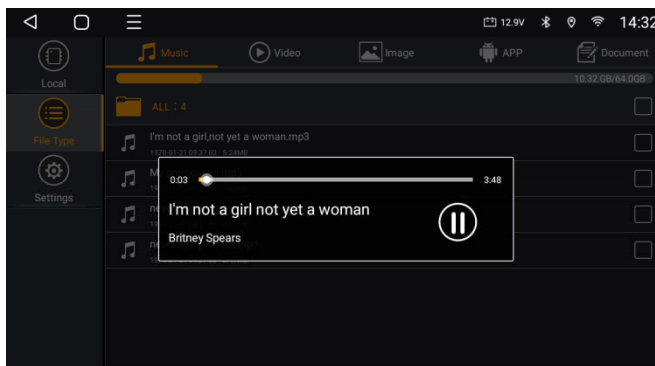
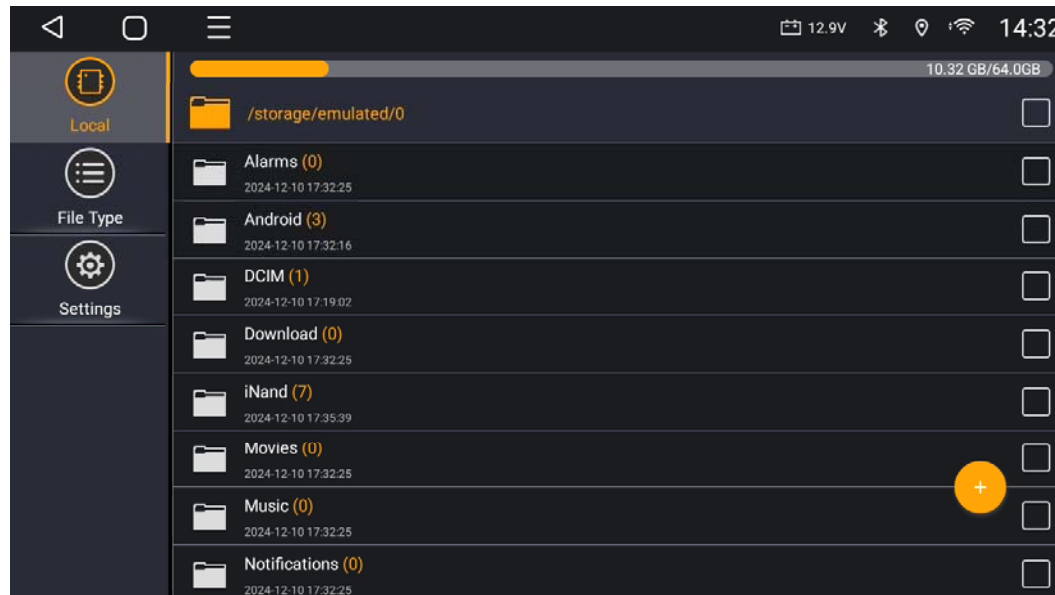
Login

  
Sign in  
Use your Google Account. The account will be added to this device and available to other Google apps.  
[Learn more about using your account](#)  
  
[Forgot email?](#)  
[Create account](#) [Next](#)

**This connection requires registration for the customer's personal information. Please consult with the KOIOT Customer Center for registration procedures.**

## Using FILE

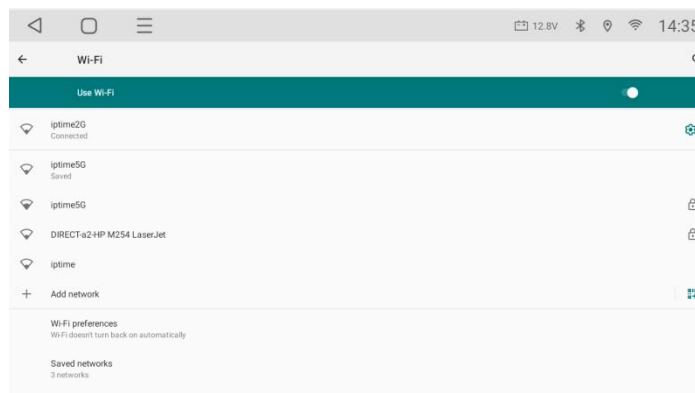
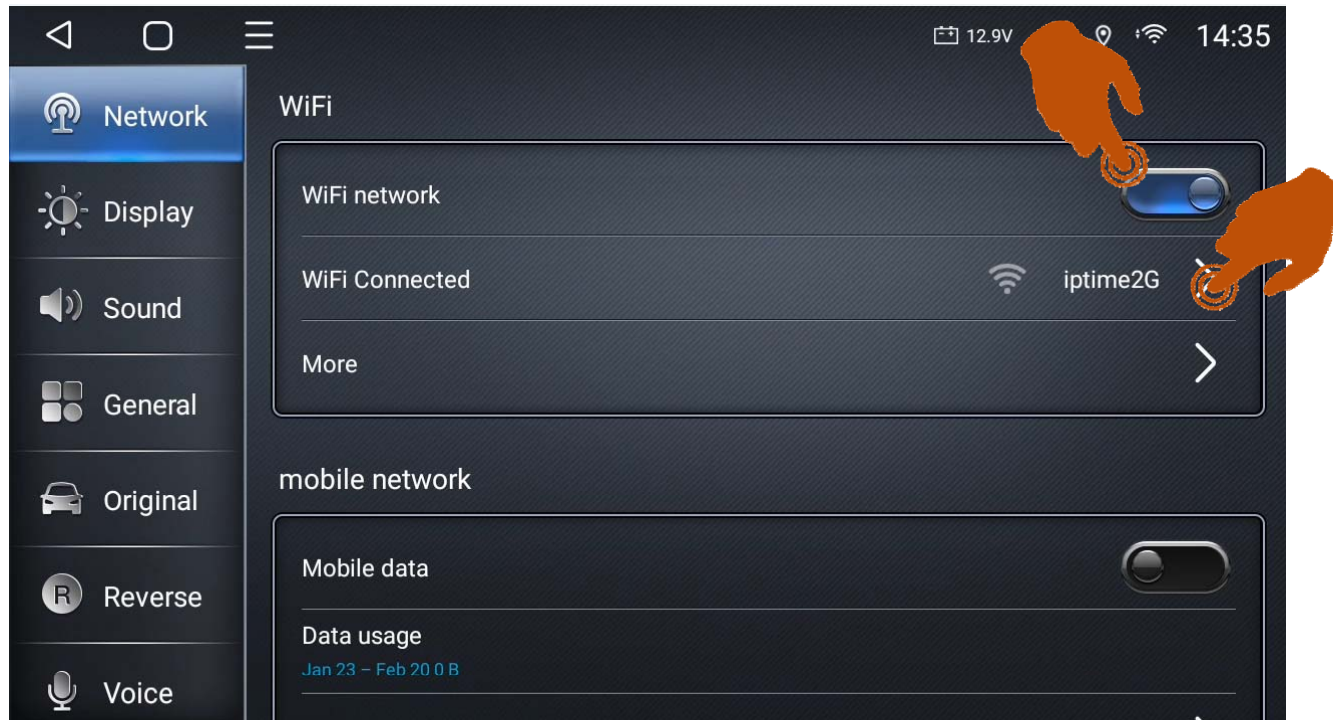
- This device has internal memory.
- You can watch files, music, and videos stored on the device.
- You need a separate device to store files on the device.



| Set up

# Using WiFi

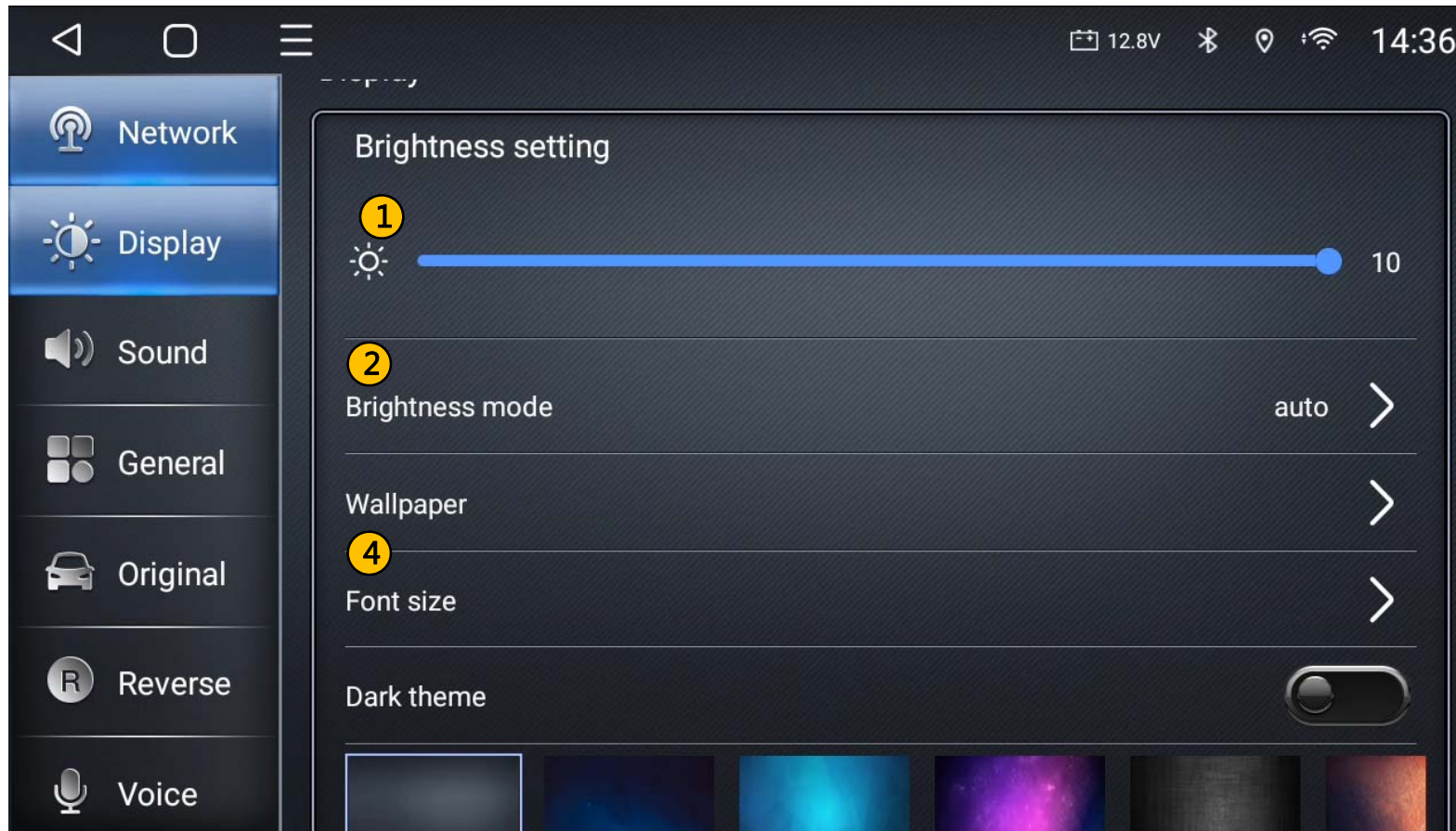
- Please enable network in settings



Select WiFi Connected  
Select an available WiFi

## Using screen settings

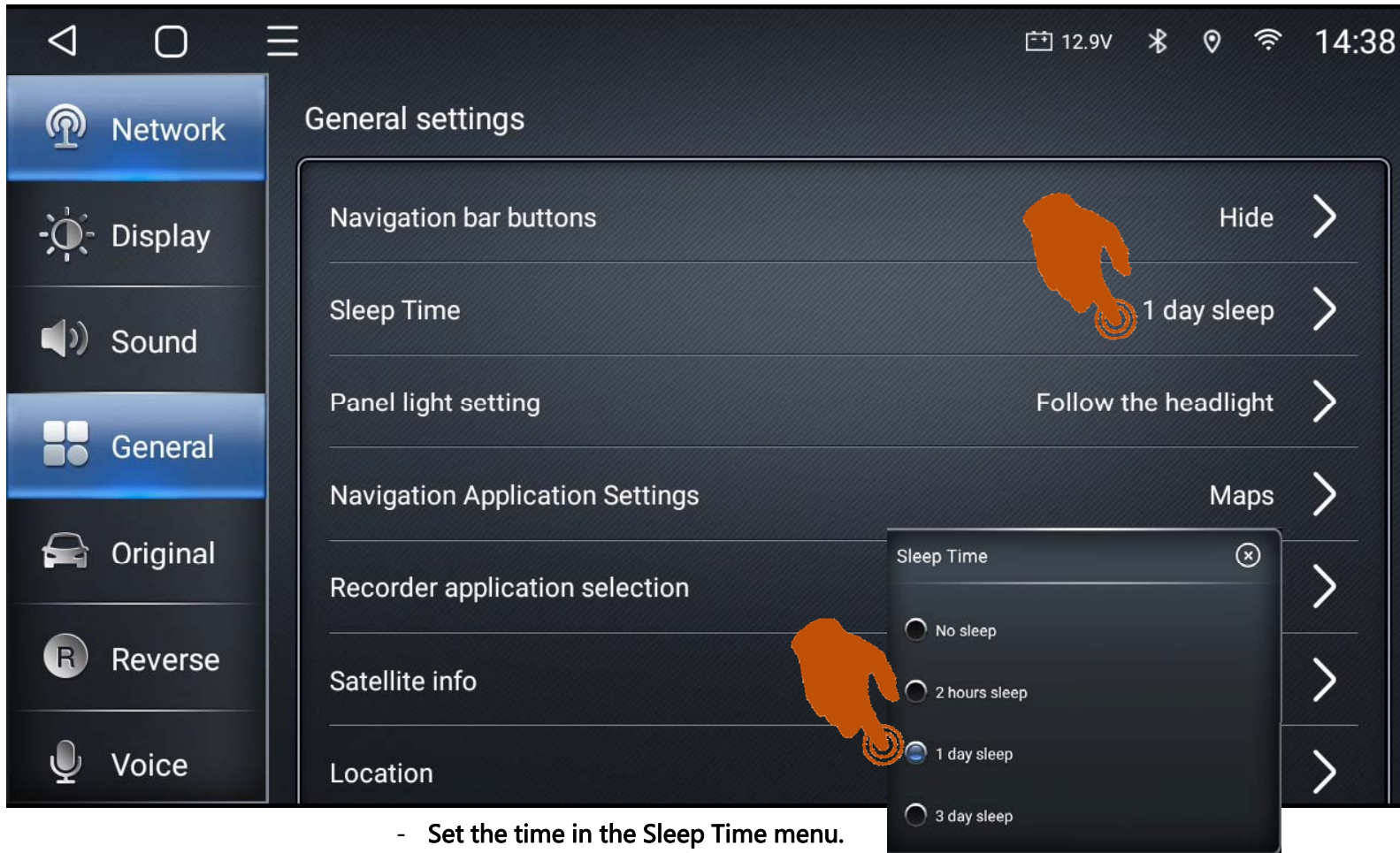
- 설정에서 네트워크를 활성화 하십시오



- Use item 1 to adjust the screen brightness.
- Use item 2 to change the night and day brightness.
- Use item 4 to adjust the screen font size.

## Use battery protection

- This device uses Android OS, so it takes a long time to boot up initially.
- Even if you shut down the device after booting once, the internal program runs for intuitive use.
- In this case, to prevent battery drain, it will be forcibly shut down after a certain amount of time.

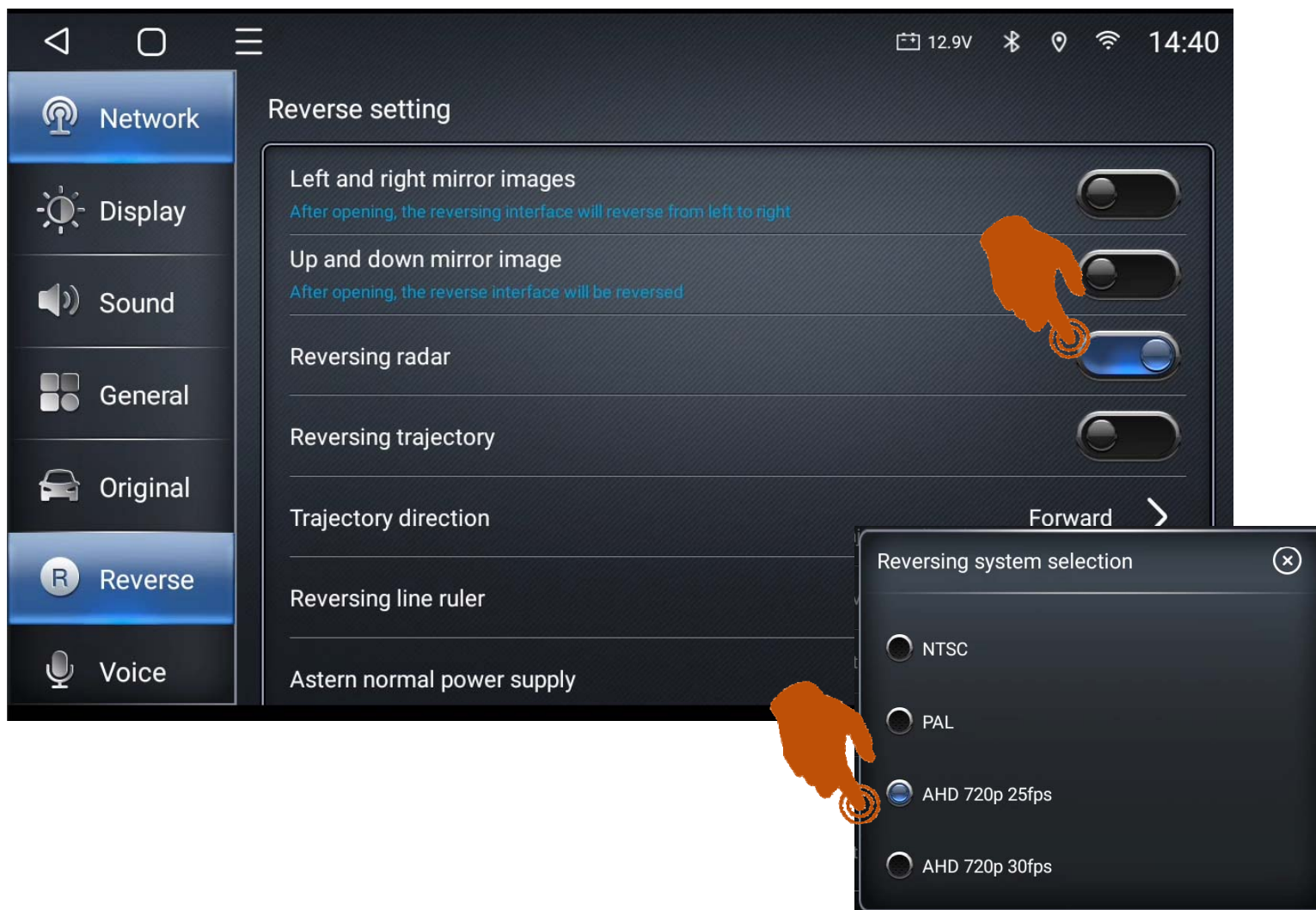


- Set the time in the Sleep Time menu.



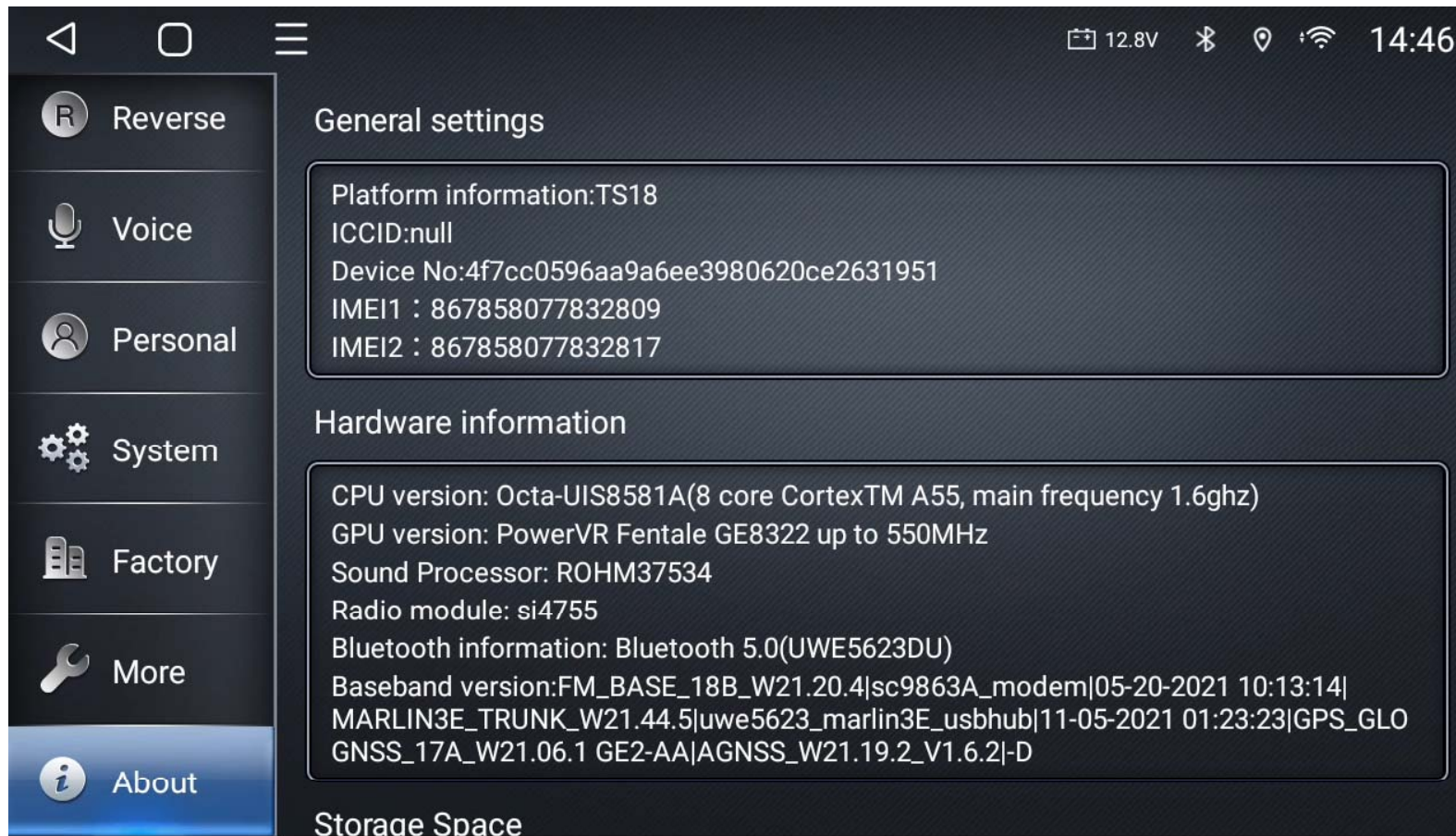
## Using the rear camera settings

- This device supports rear cameras in various formats.
- If the camera is changed or added, the camera resolution must be adjusted..



## Check device specifications

- This device may be upgraded to improve product performance.





| **Product Upgrade**

## Upgrade your terminal

This is a firmware upgrade method to improve the performance of your terminal. If possible, please do so through a repair shop or specialized company.

NO	explanation
1	Download the latest firmware (compressed file) from the KOIOT website or service center..
2	Copy the unzipped update.img file to the top level of the USB storage.
3	Insert the USB storage device into the terminal. (For separate connection devices, please contact the service center.)
4	After inserting the USB storage where the firmware is saved and running the device, the upgrade will be performed automatically. (It takes about 5 to 10 minutes)
5	Once the upgrade is complete, your device will automatically reboot.
6	Installation is complete. After installation is complete, please remove the USB.

※Caution! Please perform the upgrade in a stable system state with the engine turned on.  
An error will occur if the power is cut off during the upgrade.  
The manufacturer is not responsible for any errors that occur during the upgrade.

# | Frequently Asked Questions (FAQ)

## Frequently Asked Questions/Answers

If you have this symptom, please first check the following answers.

question	answer
Even though I turned on the ignition, the product does not power on.	<ul style="list-style-type: none"><li>- Normally, if the terminal does not turn on after turning on the ignition, there is a possibility that the power cable contact is poor.</li><li>- Contact a repair shop to check if there is poor contact between the terminal and the cable.</li></ul>
Where is the power switch?	<ul style="list-style-type: none"><li>- The terminal automatically boots up after the ignition is turned on, and there is no separate power switch. If you want to reboot the product for temporary errors or to ensure a smooth working environment, press the Home (house-shaped) button for more than 10 seconds.</li></ul>
When using the product, input does not work or the screen freezes.	<ul style="list-style-type: none"><li>- Please proceed with the reset.</li><li>- Press the reset button for more than 3 seconds.</li></ul>
LCD is off.	<ul style="list-style-type: none"><li>- Press the terminal power button. If it still does not work, press and hold the reset button for 10 seconds to reset.</li></ul>
I want to turn off the LCD for a while. Is there a separate way to do this?	<ul style="list-style-type: none"><li>- Short touch of the power button: LCD OFF    Touch the screen or power button again LCD ON</li><li>- Long touch of the power button: LCD OFF and close running applications    Touch the power button again    LCD on</li><li>- (If you long touch, the radio, video, or music that was playing will be forcibly terminated.)</li></ul>
The USB is not recognized properly.	<ul style="list-style-type: none"><li>- This device does not provide a USB connection cable.</li><li>- Please request a separate purchase option.</li></ul>
I'm curious about how to initialize.	<ul style="list-style-type: none"><li>- Go to Settings &gt; Reset &gt; Factory Reset &gt; Press the Execute Factory Reset button. All user settings (Bluetooth, Wi-Fi, etc.) and additional data saved in the internal storage will be reset. We are not responsible for any lost data.</li></ul>

## Frequently Asked Questions/Answers 질문 / 답변

question	answer
There is no sound.	<ul style="list-style-type: none"> <li>- Please check the mute and sound output mode.</li> <li>- Please check the wiring status of the terminal and speaker.</li> </ul>
Video and audio do not play.	<ul style="list-style-type: none"> <li>- If the terminal does not support a codec, it may not play.</li> <li>- Please purchase a separate cable for external playback.</li> <li>- Videos will not play while driving.</li> </ul>
I can't see the screen well.	<ul style="list-style-type: none"> <li>- Make sure the LCD screen brightness is set correctly.</li> <li>- Avoid exposing the terminal to direct sunlight as much as possible.</li> </ul>
The touch doesn't work well.	<ul style="list-style-type: none"> <li>- Please check if there is any foreign matter on the LCD screen.</li> <li>- The LCD of this terminal is designed to operate properly even under slight pressure as it is electrostatic.</li> <li>- Excessive pressure with a sharp object may cause damage to the product.</li> </ul>
Is it possible to root the terminal?	<ul style="list-style-type: none"> <li>- Adding features not supported by the manufacturer or operating system may cause the product to malfunction, stop, overheat, or break.</li> <li>- If a malfunction occurs due to rooting, the full repair cost will be charged and recovery may not be possible.</li> </ul>
I want to connect an external hard drive. How do I do that?	<ul style="list-style-type: none"> <li>- External hard drives are not supported.</li> </ul>
External hard drives are not supported.	<ul style="list-style-type: none"> <li>- The USB slot of this product does not support smartphone charging. The manufacturer is not responsible for any errors or malfunctions that occur when connecting a smartphone.</li> </ul>
Please tell me the specifications of the USB memory.	<ul style="list-style-type: none"> <li>- A separate cable is required.</li> <li>- Please contact KOIOT Service.</li> </ul>

## Product Warranty

**The warranty period for this product is 1 year.**

- A separate warranty period applies to peripheral components and accessories (consumables) other than the main body.
- The quality warranty for this product is provided according to the contents described in the warranty.
- The free warranty period is calculated from the date of purchase of the product, so the purchase date must be recorded.
- For detailed warranty information, please refer to the 'Consumer Damage Compensation Regulations' table.
- All replacement products will be replaced with genuine products or similar products if the functions of the replaced product are similar to those of a new product.
- Daedong is not responsible for repairs, replacements, or refunds until the defective product is returned.
- Please keep the provided product warranty and product number in a safe place, as they will not be reissued.
- Please be careful of similar products and counterfeit products, as products that are not genuine products manufactured by KOIOT cannot receive service..

Product Warranty			
Product Name	Connected terminal	model name	TS18
Verification number	FCC ID: 2BNUC-TS18	Manufacturing number	Displayed on the back of the product
Warranty period	1 year from date of sale		
customer	name		contact
	address		