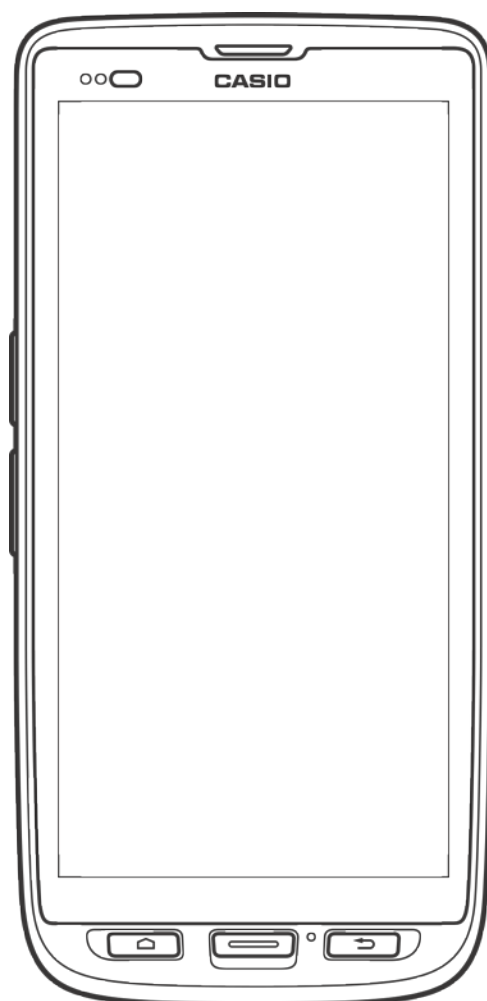


# ET-L10 Series

## Android 11 Software Manual

This manual describes software of the ET-L10 and specifications of installed applications.



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# **1. Preface**

The features and specifications described in this manual give an overview of the functional detailed specifications of the ET-L10 Android 11.

# 2. Basic Functions

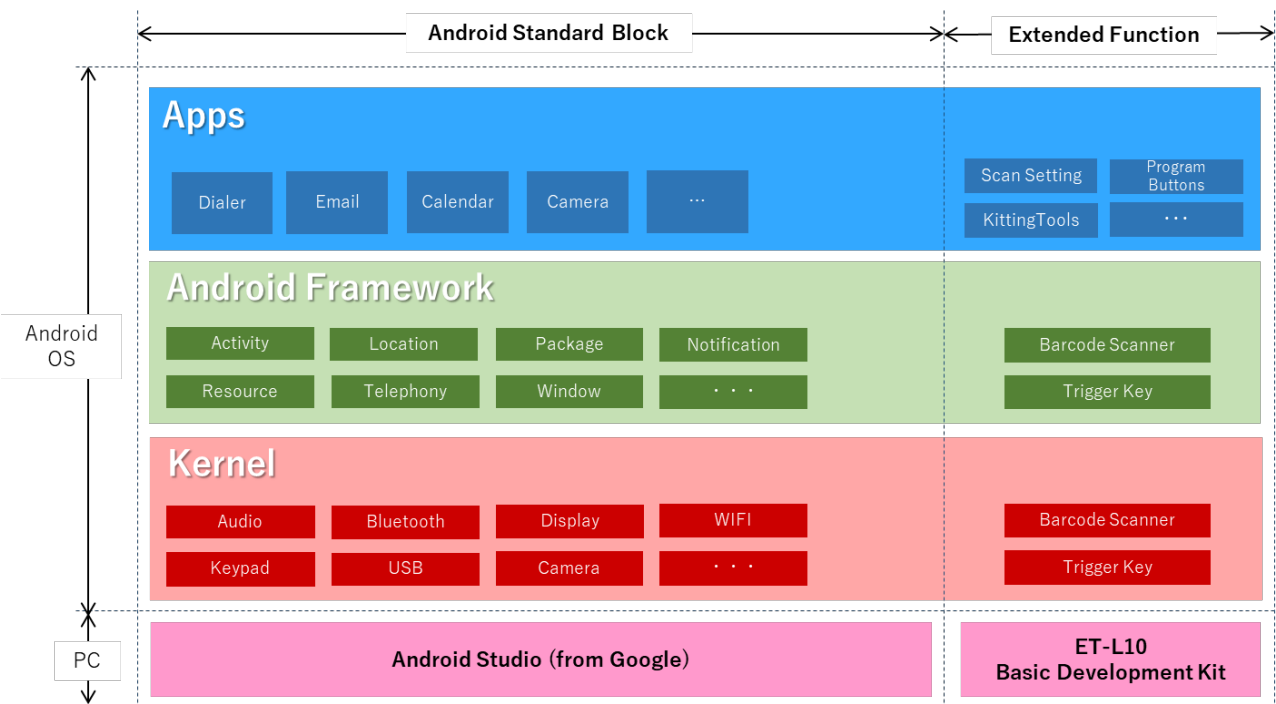
## 2.1 Android 11

The ET-L10 Android 11 is equipped with Android 11. (Hereafter, unless otherwise specified, ET-L10 Android 11 is referred to as ET-L10.)

### 2.1.1 Software Architecture

The software architecture of the ET-L10 is shown below. The ET-L10 has CASIO extended functions for business such as barcode scanner and trigger key, in addition to Android standard function.

Applications that use the Android standard function can be developed with Android Studio (Android SDK). And controlling the CASIO extended function, refer to "Barcode Scanner Control Manual".



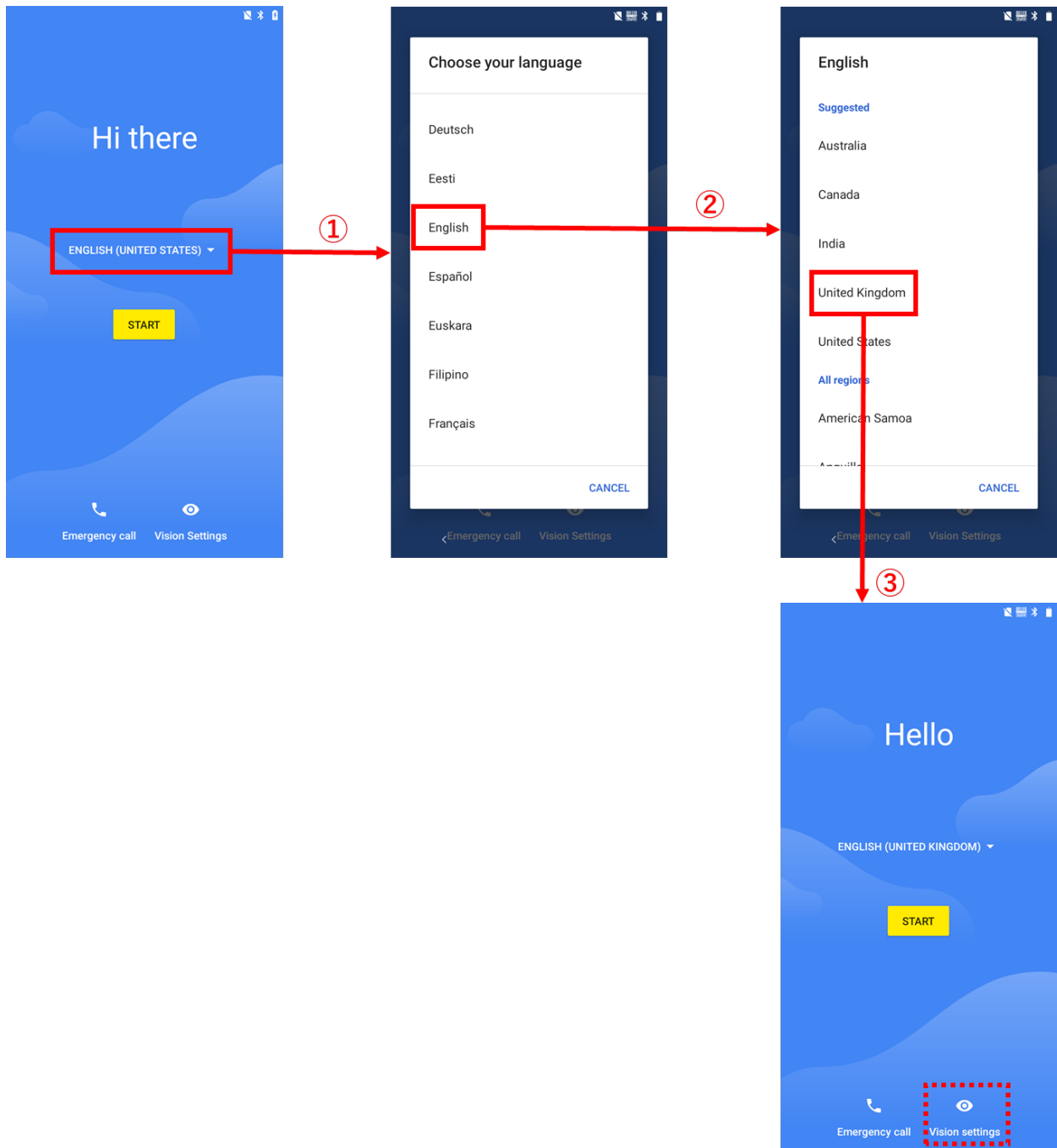
## 2.1.2 Languages

The ET-L10 supports these languages.

Afrikaans	Hausa	Latviešu	Suomi	कोंकणी
Aghem	Hibena	Lea fakatonga	Svenska	नेपाली
Akan	Hornjoserbšćina	Lëtzebuergesch	Tamaziɣt n laɣlaɣ	बड़ो
Anarâškielâ	Hrvatski	Lietuvių	Taqbaylit	मराठी
Asturianu	‘Ōlelo Hawai‘i	Lingála	Tasawaq senni	हिन्दी
Asụsụ Igbo	Ichibemba	Luganda	Thok Nath	অসমীয়া
Azərbaycan (latin)	Ikirundi	Luluhia	Tiếng Việt	বাংলা
Bamanakan	Indonesia	Maa	Tshiluba	ਪੰਜਾਬੀ (ਗੁਰਮੁਖੀ)
Bosanski (latinica)	Ishisangu	Magyar	Türkçe	ગુજરાતી
Brezhoneg	IsiNdebele	Makua	Walser	ଓଡ଼ିଆ
Bàsàa	IsiZulu	Malagasy	Zarmaciine	தமிழ்
Català	Íslenska	Malti	Ελληνικά	తెలుగు
Čeština	Italiano	Melayu	Азәрбајҹан (Кирил)	ಕನ್ನಡ
Chimakonde	Joola	Meta’	Беларуская	മലയാളം
ChiShona	Kabuverdianu	Nda’a	Босански (ћирилица)	සිංහල
Cymraeg	Kako	Nederlands	Български	ไทย
Dansk	Kalaallisut	Norsk bokmål	Ирон	ಎಗ
Davvisámegiella	Kalenjin	Nuasue	Кыргызча	འདྲ་སྐད་
Deutsch	Kernewek	Nynorsk	Қазақ тілі	ཨྲ་ཁྲ་
Dholuo	Khoekhoegowab	O’zbek (lotin)	Македонски	မြန်မာ
Dolnoserbšćina	Kĩembu	Olusoga	Монгол	ᠪᠣᠮᠣᠭᠤᠯ
Duálá	Kihorombo	Oromoo	Нохчийн	GʷY
Èdè Yorùbá	Kikamba	Polski	Русский	한국어
Eesti	Kimachame	Português	Саха тыла	ᠰᠠᠬᠤ ᠲᠤᠯᠠ
Ekegusii	Kĩmĩrũ	Pulaar	Српски (ћирилица)	简体中文
English	Kinyarwanda	Rikpa	Ўзбекча (Кирил)	粤语 (简体)
Español	Kipare	Română	Українська	粵語 (繁體)
Euskara	Kiruwa	Rukiga	ქართული	繁體中文
Evegbe	Kisampur	Rumantsch	Հայերեն	日本語 (日本)
Ewondo	Kishambaa	Runasimi	עברית	
Filipino	Kiswahili	Runyankore	ئۇيغۇرچە	
Føroyskt	Kitaita	Sängö	اردو	
Français	Kiteso	Schwiizertüütsch	اوزبیک (عربی)	
Frysk	Kĩlaangi	Sena	پښتو	
Furlan	Kölsch	Shqip	پنجابی (عربی)	
Gaeilge	Koyra ciini	Shwóŋò ngiemboon	العربية	
Gaelg	Koyraboro senni	Slovenčina	فارسی	
Gàidhlig	Kreol morisien	Slovenščina	مازرونی	
Galego	Kyivunjo	Soomaali	ቶጫደዋተ	
Gikuyu	Lakǎól'iyapi	Srpski (latinica)	გოგუჯ	

### 2.1.3 Startup

In the factory default state, the language selection screen is displayed in English (UNITED STATES).



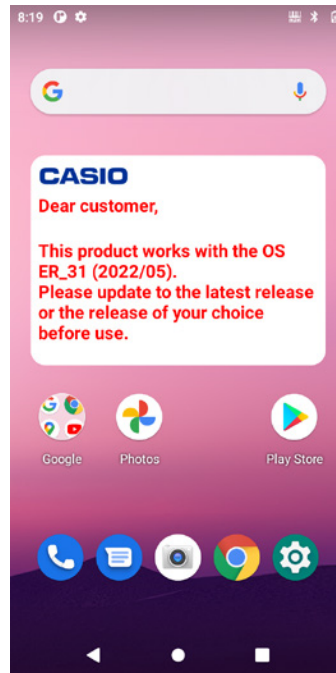
When ① is pressed, a list of selectable languages is displayed, so select the language to use. This ensures that the initial settings after that will be displayed in the language selected.

Cautions!

Can change the visual settings when touch the [Vision Settings]. These settings can be changed in [Settings] -> [Accessibility] later.



After completing the Android setup wizard, a message asking to update OS will be displayed by the widget on the home screen.



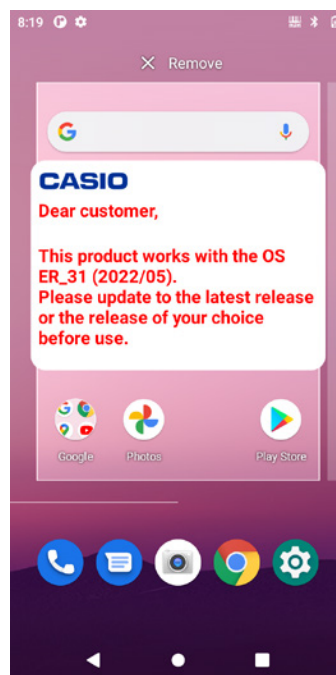
Refer to "2.20 OS update (p.42)" for the detail of OS update.

The above widget can be deleted.

If pressing and holding the widget, "Remove" will be displayed.

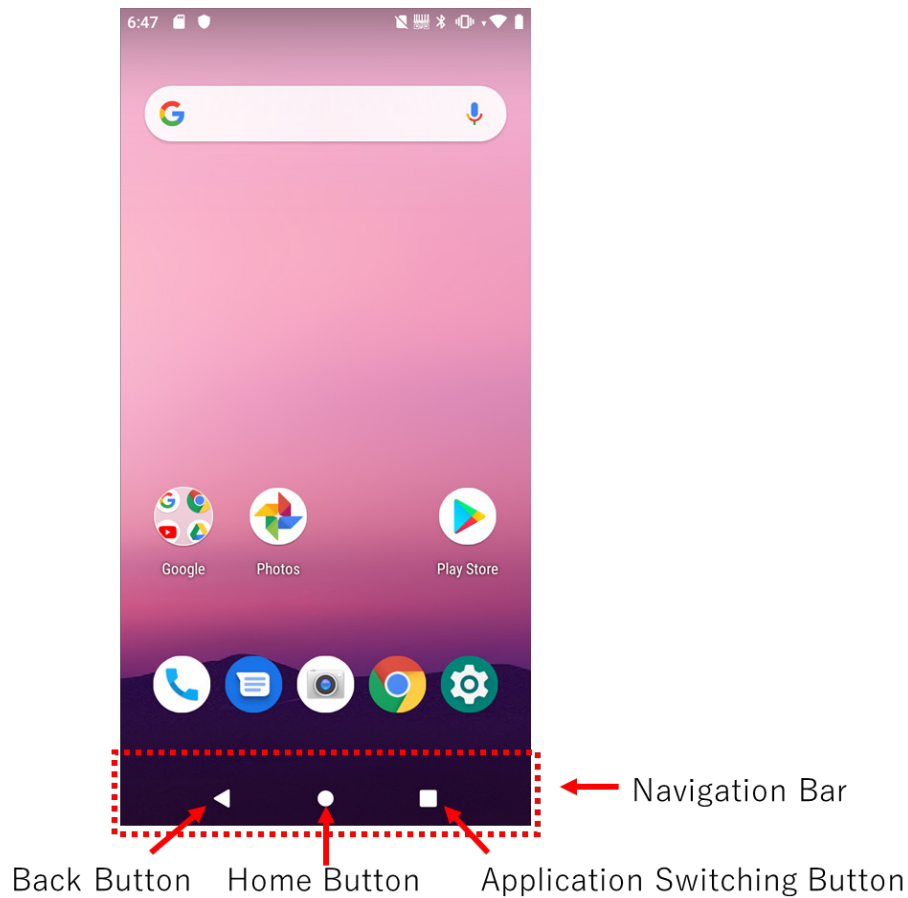
Hold it down and move the widget to "Remove".

Even if updating OS after removing the widget, the widget remains removed.



## 2.1.4 Navigation bar

The area displaying navigation buttons (back button, home button, application switching button) is called the Navigation bar. The ET-L10 displays a navigation bar at the bottom of the screen like a smartphone.



Button	Function
	Back button Touch to go back to the previous screen, or to close a dialog box, options menu, the notification panel, etc. The hardware "Back key" below the display has same function.
	Home button From any application or screen, touch to return to the Home screen. Touch and hold to open "Google Assistant". The hardware "Home key" below the display has same function.
	Application Switching button Touch to switch to the recent used applications. Pushing the hardware "Home key" twice has same function.

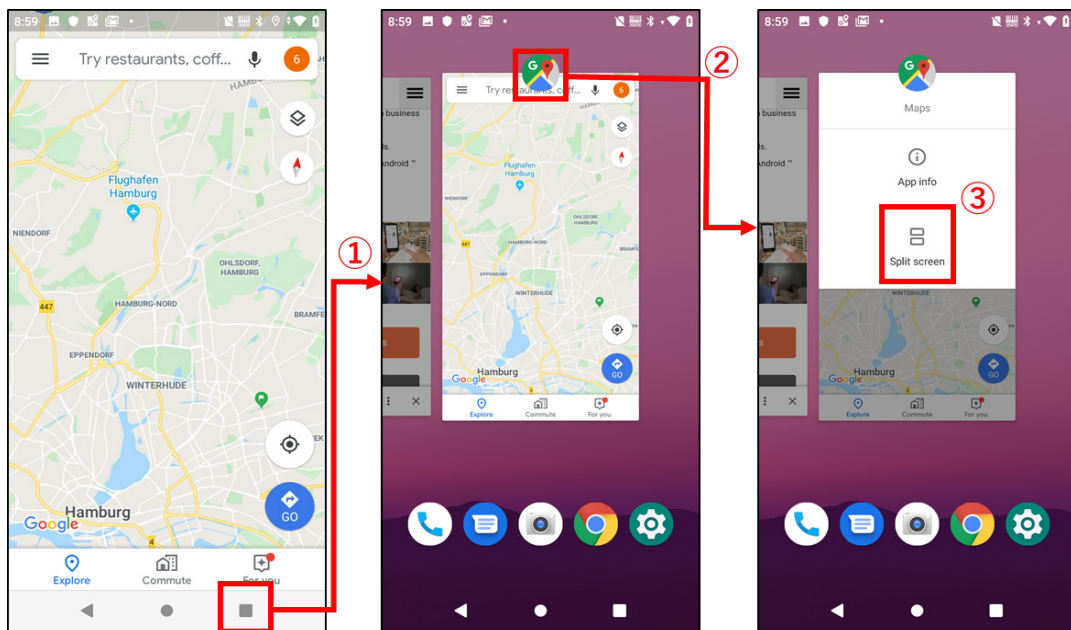
## 2.1.5 Split screen

Split screen is a function that displays two applications simultaneously.

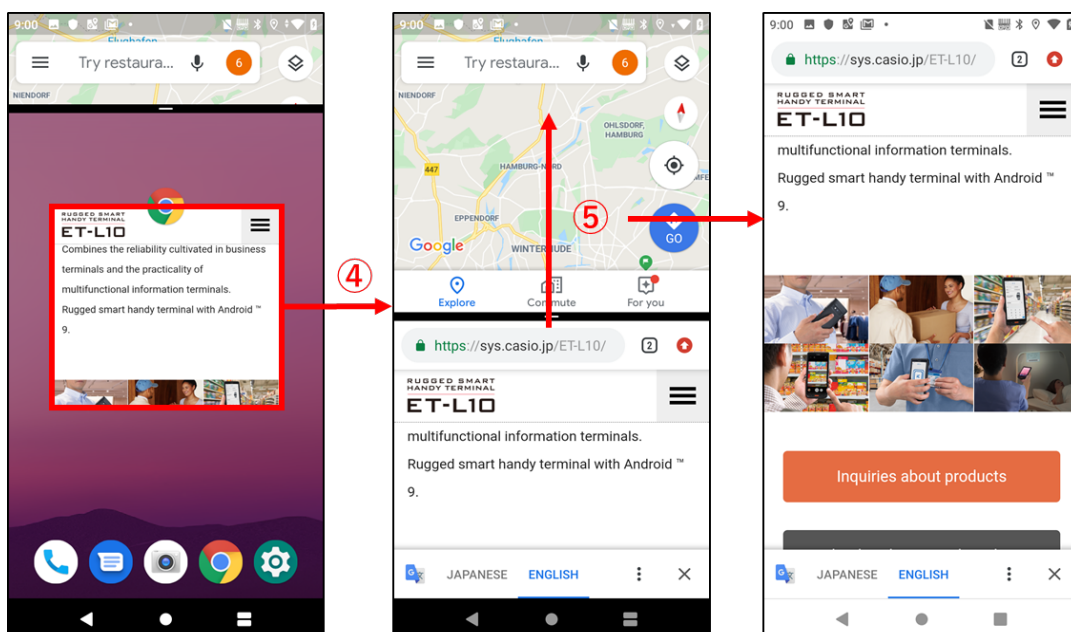
To execute the split screen, by touching the icon to use from the application list by pressing the application switching button.

To cancel, swipe up or down the border of the split screen.

- ① Touch the application switching button.
- ② Touch the icon of the application which you want to display on the split screen.
- ③ Touch the "Split screen".

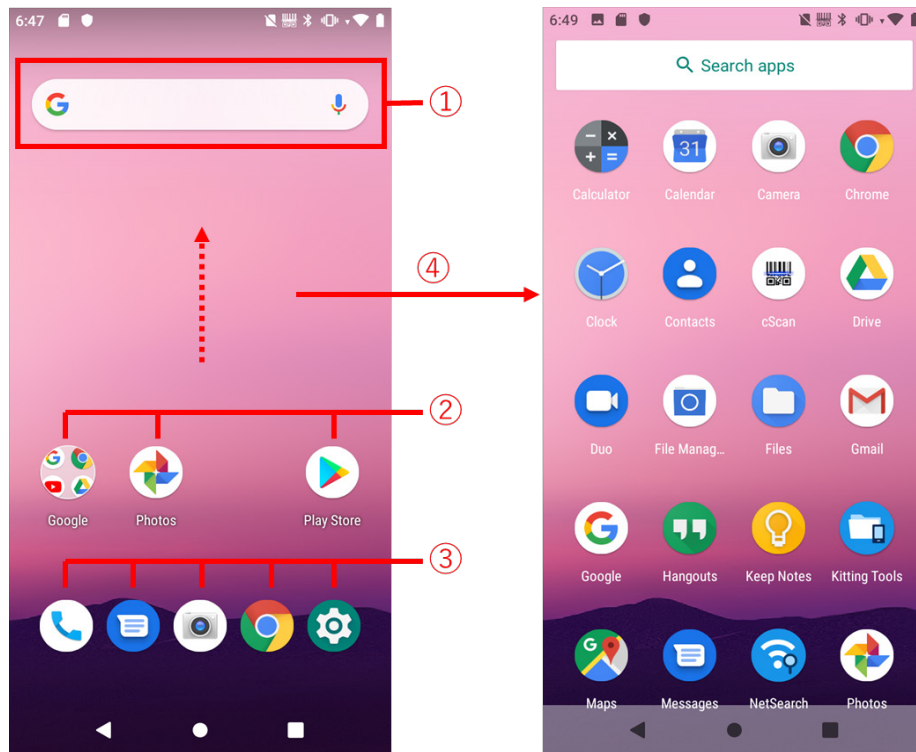


- ④ Touch the other application which you want to display on the split screen.
- ⑤ If you want to cancel the split screen mode, swipe the border line on the screen.



## 2.1.6 Home screen

When turn on the ET-L10, the lock screen will be displayed. Sliding this lock screen will bring up the home screen for selecting and starting the application. Also, move to the Home screen by pressing Home button or Home Key.



- ① Search panel
- ② Shortcut
- ③ Favorite tray
- ④ Application list

Swipe up any where on the home screen to display the application list.

## 2.1.7 Status bar and icons

A bar with icons at the top of the screen is called a status bar. The status bar displays various "Status icons" indicating the status of the system, and "Notification icon" indicating the notification to the operator.













① Status icons

② Notification icons

### Status icons

	GPRS connected		Battery is partially drained
	EDGE connected		Battery is low
	3G connected		Battery is very low
	4G connected		GPS is on
	No signal		Alarm is set
	Signal strength		Bluetooth is on
	Roaming		Connected to a Bluetooth device
	WLAN connected		Speakerphone is on
	WLAN connected (Wi-Fi 5)		No SIM card inserted
	WLAN connected (Wi-Fi 4)		Vibrator mode / mute
	Airplane mode		Microphone is mute
	Battery is charging		Barcode scanner is enabled
	Battery is full		

## Notification icons

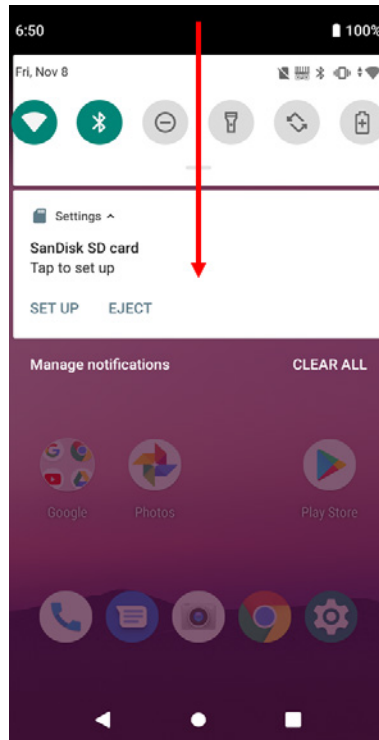
	New Gmail™ message		Missed call
	New Gmail™ messages		Connected to VPN
	New text or multimedia message		More notifications are hidden
	Problem with SMS or MMS delivery		microSD is mounted
	Screenshot saved		Notify application update ※1

## 2.1.8 Notification panel and Quick setting panel

Drag the status bar downward to open the notification panel. Drag further downward in this state to open the quick setting panel.

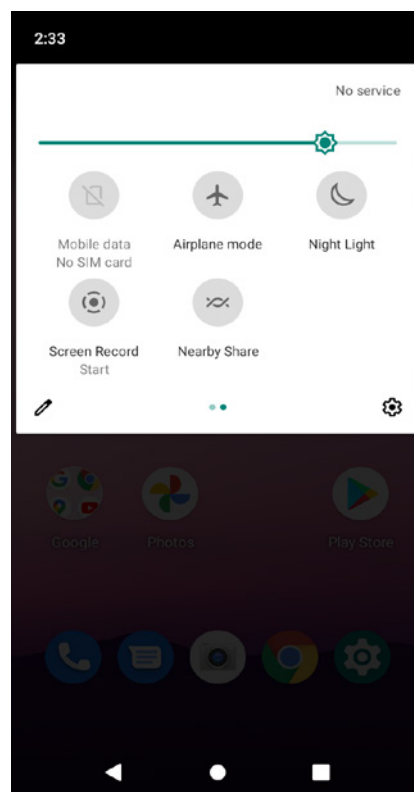
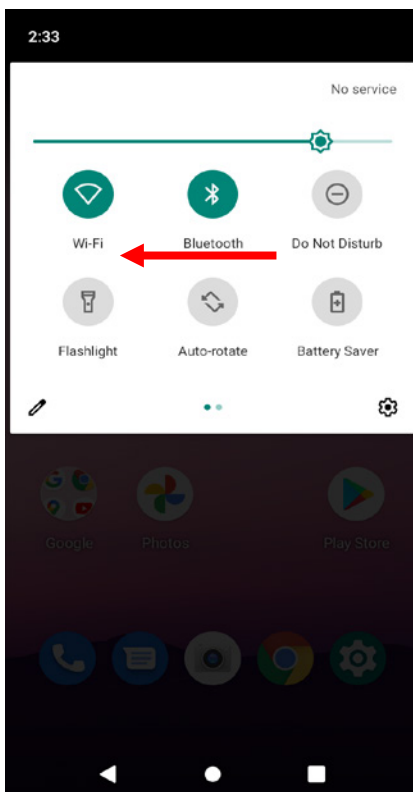
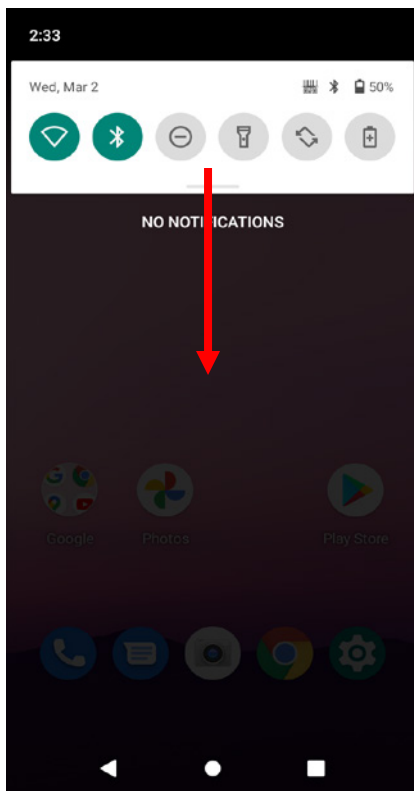
### Notification panel

Notification panel uses to read details of the notification. Touch the status bar and drag it downward to open it.



## Quick setting panel

Quick setting panel provides easy access to settings. Touch the notification panel and drag downward to open the quick setting panel. By touching the icon displayed on the quick setting panel, you can enable / disable the function and change the mode.





## 2.1.9 Media format

The ET-L10 carries all encoders and decoders supported by standard Android 11. For detail, refer to the Android official website such as "Android Developers".

### Audio

Supported audio encoders and decoders are as follows.

Format	Encoder	Decoder	Container Formats
AAC LC	Yes	Yes	3GPP (.3gp) MPEG-4 (.mp4, .m4a) ADTS raw AAC (.aac) MPEG-TS (.ts)
HE-AACv1 (AAC+)	Yes	Yes	
HE-AACv2 (enhanced AAC+)		Yes	
AAC ELD (enhanced low delay AAC)	Yes	Yes	
AMR-NB	Yes	Yes	3GPP (.3gp)
AMR-WB	Yes	Yes	3GPP (.3gp)
FLAC	Yes	Yes	FLAC (.flac) only
GSM		Yes	GSM(.gsm)
MIDI		Yes	Type 0 and 1 (.mid, .xmf, .mxmf) RTTTL/RTX (.rtttl, .rtx) OTA (.ota) iMelody (.imy)
MP3		Yes	MP3 (.mp3)
Opus		Yes	Matroska (.mkv)
PCM/WAVE	Yes	Yes	WAVE (.wav)
Vorbis		Yes	Ogg (.ogg) Matroska (.mkv)

Libraries related to this function are as follows. For details of the Android standard library, refer to the Android official website such as "Android Developers".

#### Android Standard library

android.media

This class provides various interfaces related to audio and video.

android.media.MediaPlayer

This class plays audio / video / still images.

## Image

Encoders and decoders of supported images are as follows.

Format	Encoder	Decoder	Container Formats
BMP		Yes	BMP (.bmp)
GIF		Yes	GIF (.gif)
JPEG	Yes	Yes	JPEG (.jpg)
PNG	Yes	Yes	PNG (.png)
WebP	Yes	Yes	WebP (.webp)
HEIF		Yes	HEIF (.heic, .heif)

Libraries related to this function are as follows. For details of the Android standard library, refer to the Android official website such as "Android Developers".

Android standard library

android.media

This class provides various interfaces related to audio and video.

android.media.MediaPlayer

This class plays audio / video / still images.

## Video

Encoders and decoders of supported videos are as follows.

Format	Encoder	Decoder	Container Formats
H.263	Yes	Yes	3GPP (.3gp) MPEG-4 (.mp4)
H.264 AVC Baseline Profile (BP)	Yes	Yes	3GPP (.3gp) MPEG-4 (.mp4) MPEG-TS (.ts)
H.264 AVC Main Profile (MP)	Yes	Yes	
H.265 HEVC		Yes	MPEG-4 (.mp4)
MPEG-4 SP		Yes	3GPP (.3gp)
VP8	Yes	Yes	WebM (.webm) Matroska (.mkv)
VP9		Yes	WebM (.webm) Matroska (.mkv)

Libraries related to this function are as follows. For details of the Android standard library, refer to the Android official website such as "Android Developers".

Android standard library

android.media

This class provides various interfaces related to audio and video.

android.media.MediaPlayer

This class plays audio / video / still images.

android.widget.VideoView

This class plays video.

## 2.2 Power management

### 2.2.1 Power status

The ET-L10 has following power states. The change of state from 4 to 1 is called "BOOT", and the state change from 2 or 3 to 1 is called "RESUME".

No	State	Display	RAM	CPU	Description
1	ON	ON	ON	ON	Terminal is in operation
2	Early suspend	OFF	ON	ON	Only the screen is OFF.
3	Suspend (Sleep)	OFF	ON	OFF	Nearly all devices except RAM are in OFF state. OS and applications remain in RAM, but application programs are stopped except some.
4	OFF (Shutdown)	OFF	OFF	OFF	All devices are in the OFF state.

### 2.2.2 Suspend and Resume

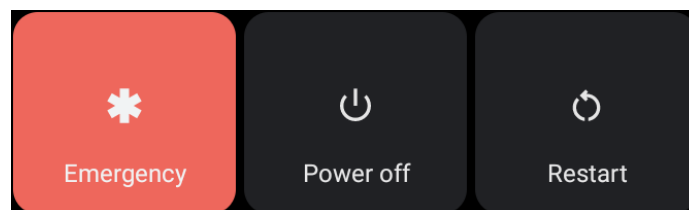
When the device is in ON state, short pressing power key suspends the device.

Conversely, when the device is in Suspend or Early Suspend state, pressing immediately power key resumes the device.

### 2.2.3 Power on / off

When the device is in the OFF state, to turn it on, power key must be pressed for several seconds.



Press and hold the power key for 1 second, then power menu pops up. If select "Power off", it goes into OFF (Shutdown) state. Also, this operation is called as "Shutdown".









## 2.2.4 Remaining battery level and Operation restriction

The table below summarizes the relationship between remaining battery level, notification, and operation restriction.

For example, if the remaining battery level is 20% or less, "the battery level is low" notification is issued. When the battery level drops below 10%, the LED will change to blinking orange. Also, a notification of "The battery is very low" is issued and LED lights and cameras are disabled.

Remaining battery level	Status	Notification (LED)	Notification (Notification)	Operation restriction
100%	Full charge	Lit green	none	none
99% - 16%	Regular use	OFF	none	none
15% - 6%	Battery low warning (Low)	Blinking red	 Settings ^ Battery may run out soon 15% remaining <b>TURN ON BATTERY SAVER</b>	none
5% -	Very low warning (Critical)	Blinking red	 Settings ^ Battery may run out soon 5% remaining <b>TURN ON BATTERY SAVER</b>	none
0%	Empty	Blinking red	<b>battery low!</b> battery too low and will shutdown automatically after 30 seconds	Shutdown after 30 seconds
16% - 100%	Charging (Over Critical)	Lit red	none	none
- 15%	Charging (Critical)	Blinking red	none	none

The table below summarizes the relationship between remaining battery level and battery icon.

Remaining battery level	Icon
100% - 16%	
15% - 6%	
10% -	
Unknown	
Charginig (32% - 100%)	
Charging (- 31%)	

#### Cautions!

In order to avoid deterioration of the battery, the charging operation when the battery is almost fully charged (remaining battery level is about 90%) is restricted as follows.

1. When the terminal is off and the battery level is about 90% or more, charging will not be performed even if an AC adapter etc. is connected. The LED indicating the charging status lights up in red.
- 2, Charging will not be performed even if the terminal is turned from off to on with the remaining battery level is about 90% or more and the AC adapter etc. connected. Even if the battery is not fully charged, the LED indicating the charging status lights up in green.

### 2.2.5 Reset and Restart

Try reset (restart) when the ET-L10 stops functioning properly due to an erroneous operation etc. There are two ways to reset the ET-L10.

Resetting with the reset switch can cause inconsistency of the file. Therefore, if you want to restart the terminal, recommend that try 1 first. If the ET-L10 still does not restart, please try 2.

1. Press the power key for 1 second and select "Restart" from the pop-up power menu.
2. Press and hold the power key for 12 seconds.

## 2.3 Storage management

### 2.3.1 Partition

The ET-L10 has a 16GB eMMC (Embedded MultiMediaCard).

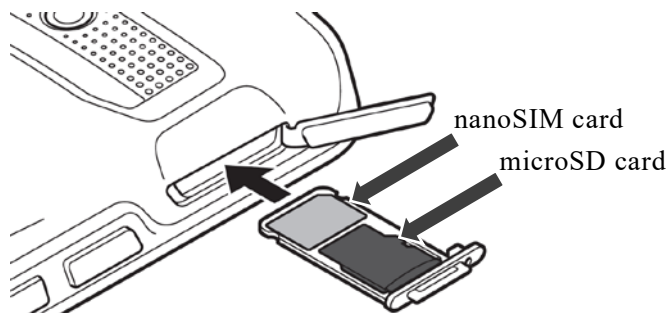
The inside of the eMMC is divided into a boot area to be used at booting, a system area used by the OS, and a user area to be used as Internal Storage.

boot area: Approx. 100MB
System area: Approx. 6GB
User area: Approx. 9GB

### 2.3.2 External storage

#### microSD Card


A microSD card can be used as an external storage. It supports microSD and microSDXC.



Insert the microSD card in the correct location as shown in the picture.

Be sure to insert / remove a microSD card in shutdown state (refer to "2.2.3 Power on / off (p.17)"). Insert it with the contact terminal face down.

When removing, follow the procedure below.

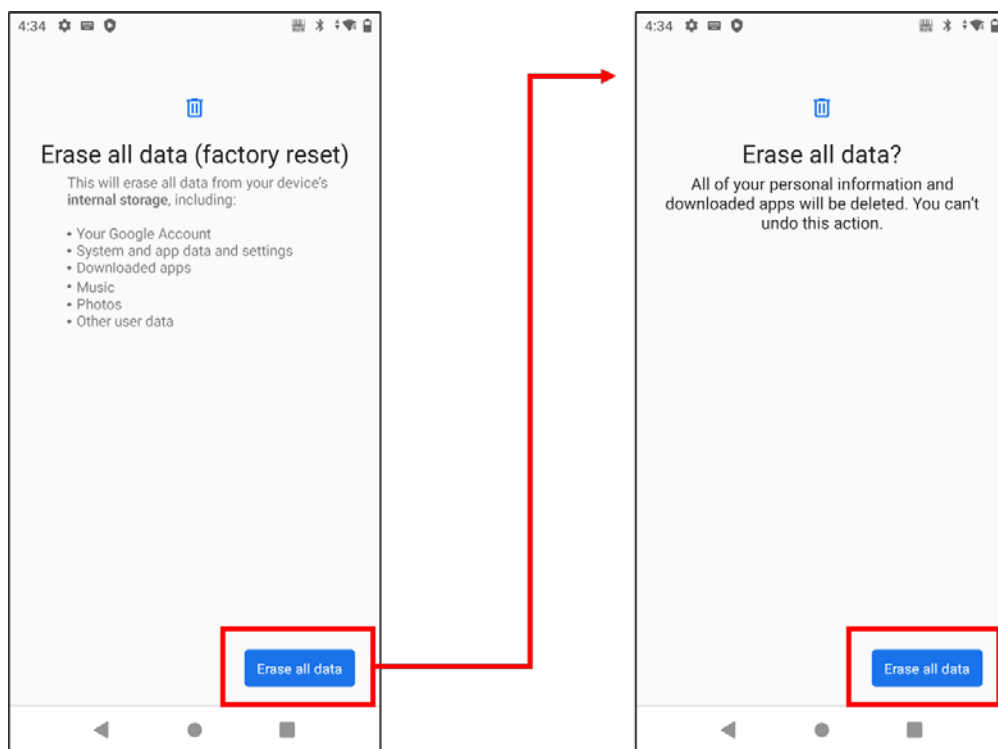
- ① Unmount the microSD card by touching the eject button  on the [Settings] -> [Storage]
- ② Shutdown the device
- ③ Remove the nanoSIM/microSD card slot and remove the microSD card

## Specification

Mount point	Storage
/storage/emulated/0	Internal storage
/storage/XXXX-XXXX	microSD card XXXX-XXXX is determined by the inserted microSD and the timing of insertion. To access the file on the microSD by application, use the Android API such as "DocumentFile" class, not specify the mount point name.

### 2.3.3 Factory reset

To initialize the ET-L10, use [Settings] -> [System] -> [Reset options] -> [Erase all data (factory reset)].



Since this operation erases all data in the terminal, please be careful not to accidentally erase important data.

#### Cautions!

When reset the device, the calendar will also be reset on January 1st. However, the year of that depends on the timing of reset, and it does not necessarily become a fixed value.

## 2.4 Display

### 2.4.1 Specification

Type	TFT
LCD Size	5.7 inch
number of dots	W 720 x H 1440
Color	16 M Colors
Backlight	LED backlight

### 2.4.2 Detect the resolution







To obtain the screen resolution from the application program, use DisplayMetrics. For details of the Android DisplayMetrics, refer to the Android official website such as "Android Developers".

```
DisplayMetrics metrics = new DisplayMetrics();  
getWindowManager().getDefaultDisplay().getMetrics(metrics);
```



## 2.5 Touch panel

The ET-L10 equips with a pressure sensitive touch panel. Define terms related to touch panel operation as follows.

<b>Touch</b> 	It means touching the screen. Used to access the application.
<b>Touch and Hold</b> 	It means to keep touching the screen.
<b>Drag</b> 	It means moving from the touch and hold state while touching the screen. Use it to move the object to another position by moving it while it is in contact.
<b>Slide / Swipe</b> 	It means moving from the touch state while touching the screen. It is used to scroll application screens, images, WEB pages, etc. (Slide operation for releasing the lock screen is especially called swipe.) The device also supports one finger zoom (Messaging, Browser, Email, Camera and Gallery) by double tapping the screen then sliding with one finger to zoom in/out).
<b>Flick</b> 	It means moving quickly away from the screen from the state of the touch.
<b>Pinching / Spread</b> 	Touch and hold the screen with two fingers to enlarge or reduce the object on the screen.

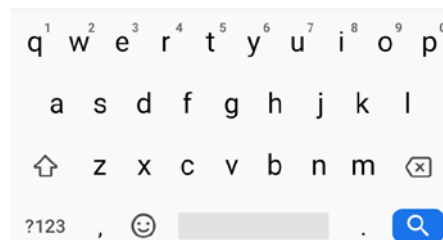
## 2.6 Keyboard

### 2.6.1 Software Keyboard

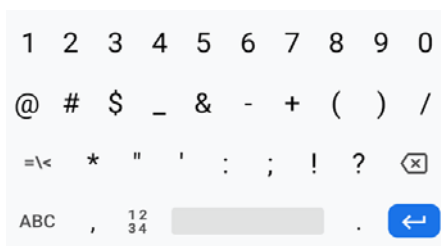
Software keyboard is what Android 11 standard supports.



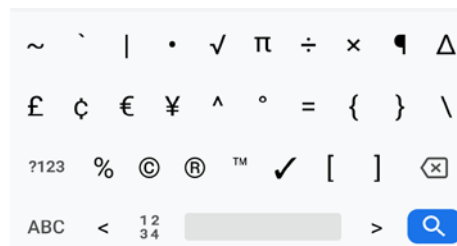
Alphabet input pad (uppercase)



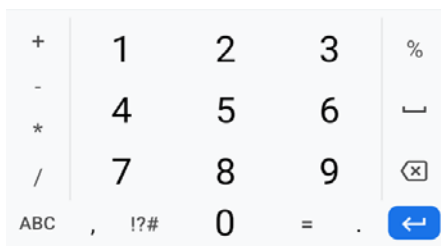
Alphabet input pad (lowercase)



Numerical input pad



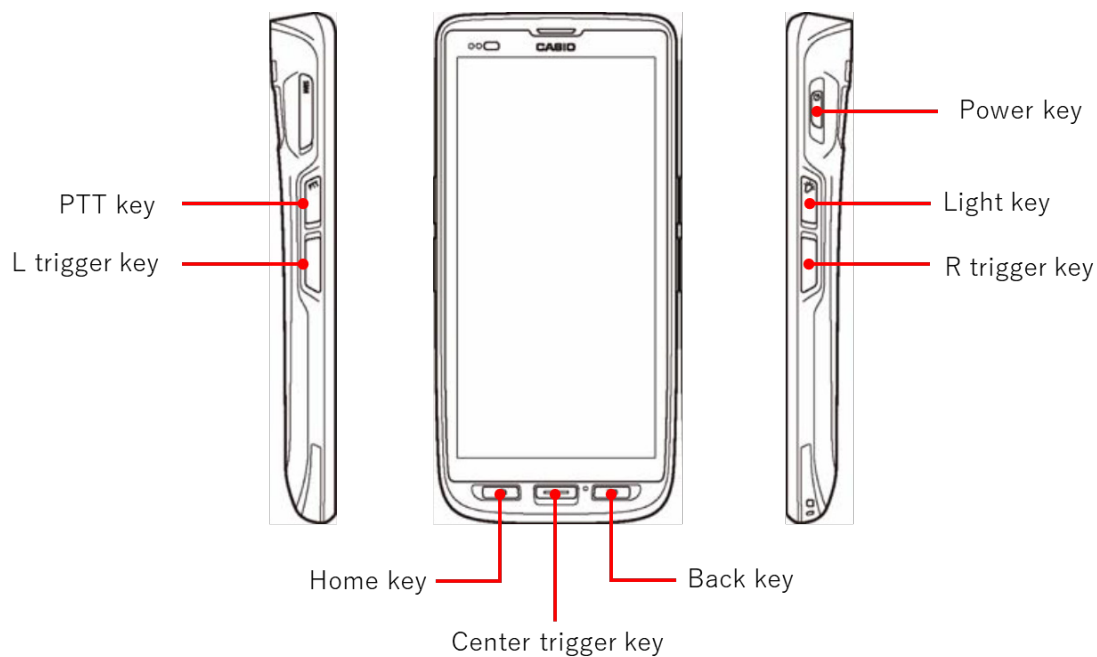
Symbol input pad



Numerical only input pad

### 2.6.2 Hardware Keyboard

The ET-L10 has a follow hardware keyboard. The generating key code of the "Light key" and "PTT key" can be changed on the "User Definition" of the "Settings". Refer to the "User Define (p.61)" for details.



Key Name	How to use
Power Key	Short click to suspend and resume. Long press to open the power menu.
Light Key	Turn the light on the top of this device on and off. Double click to turn it on and single click to turn it off. The key code of "KeyEvent.KEYCODE_PROG_BLUE" is generated.
PTT Key	Application can use this key for any function. The key code of "KeyEvent.KEYCODE_PROG_RED" is generated.
Home Key	Home key of Android standard. Double click to view the recent task list. It can be disabled by "Accessibility" of "Settings".
Back Key	Back key of Android standard. Back to previous display.
L Trigger Key	Trigger key to scan a barcode. This key is used only for scanning. The function and generating key code can not be changed.
R Trigger Key	Trigger key to scan a barcode. This key is used only for scanning. The function and generating key code can not be changed.
Center Trigger Key	Trigger key to scan a barcode. This key is used only for scanning. The function and generating key code can not be changed.

## 2.7 LED

The ET-L10 has two LEDs, one for charging status and other one for the barcode scanner.

## 2.8 Vibrator

The ET-L10 equips vibrator. Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library android.os.Vibrator	Class for vibrating the vibrator.
---	-----------------------------------

## 2.9 Speaker

The ET-L10 equips speaker. Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library android.media.AudioManager	Classes that control volume etc For the audio function, refer to "2.1.9 Media format (p.15) ".
--	---

## 2.10 Microphone

The ET-L10 equips microphone. Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library android.media.MediaRecorder	Class for using recording and recording functions. For the audio function, refer to "2.1.9 Media format (p.15) ".
---	---

---

## 2.11 Clock

### 2.11.1 Overview

The smartphone ensure the clock accuracy by synchronizing the time with the mobile phone network (NITZ synchronization). However, in the case of model without a telephone function, it is common to use the Internet and time synchronization (NTP synchronization) because there is no function to connect the mobile phone network. On the other hand, it is not unusual to operate without connecting to the Internet when using terminal for business use.

So, we recommend that install an NTP server inside the company if the operation is as follows.

- ① Not use telephone function
- ② Using WLAN, but not connecting to the Internet
- ③ Clock accuracy is important

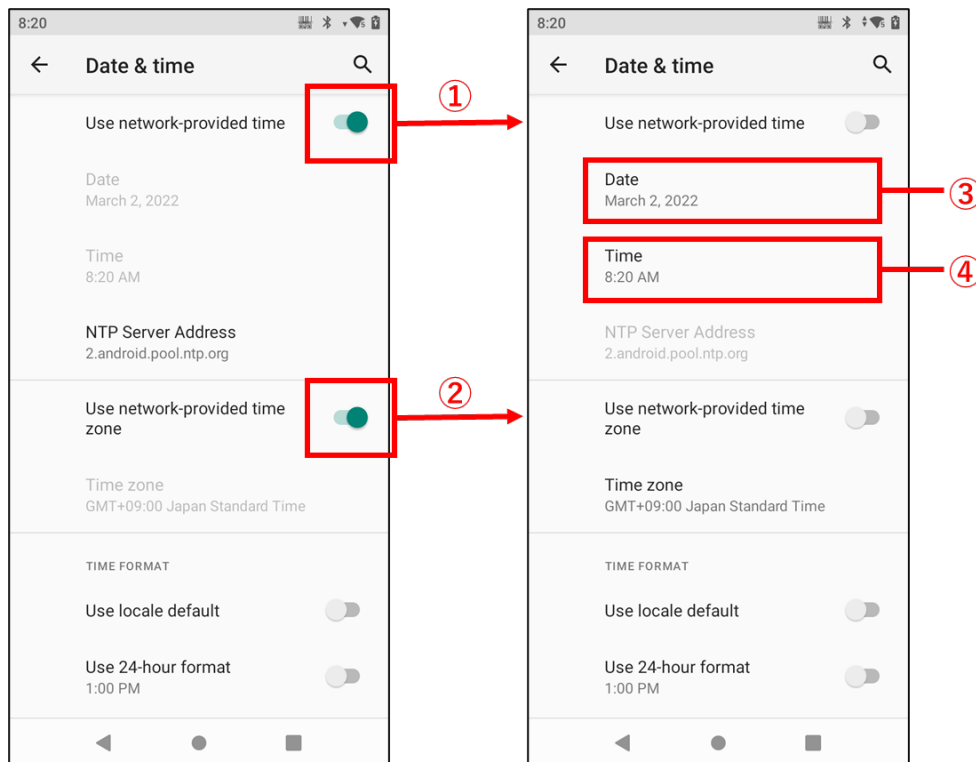
In case not possible to connect to the internal NTP server, set clock manually.

## 2.11.2 Time synchronization

Since the setting of "Synchronize time with network" is enabled in the default of the ET-L10, it is not necessary to change this setting if you use the mobile phone network or the Internet.

However, if set up the NTP server inside the company and synchronize time, set the NTP server address. The NTP server address can be set to [Settings] -> [System] -> [Date & time] -> [NTP Server Address].

If do not synchronize the time using the network, disable "Use network-provided time " and "Use network-provided time zone " from [Settings] -> [Date & time].



- ① Disable "Automatic date & time"
- ② Invalidate "Automatic time zone"
- ③ Open [Set date] and adjust the date manually.
- ④ Open [Set time] and adjust the clock manually.

## 2.12 Sensors

The ET-L10 has following sensors.

Illuminance sensor

Proximity sensor

Acceleration sensor

By using each sensor, the ET-L10 supports the following functions.

Automatic screen brightness adjustment

Automatic screen rotation

Touch panel invalidation during call

Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library

`android.hardware.Sensor`

`android.hardware.SensorManager`

`android.hardware.SensorEvent`

Class that provides sensor information.

Class used to access sensor devices.

Class that provides sensor event and information according to the type of sensor.

## 2.13 Barcode scanner

### 2.13.1 Barcode reading specification

The barcodes that can be read by the barcode scanner are shown below. For other barcode scanner controls, refer to the "Barcode Scanner Control Manual".

#### 1D barcode

Barcode	Reading digits	Check Digit Calculation	Check Character Output	Other functions
EAN8/JAN8	8 (+2/5)	Always enabled	Enable/Disable	2 digits / 5 digits add ons
EAN13/JAN13	13 (+2/5)	Always enabled	Enable/Disable	2 digits / 5 digits add ons
UPC-A	12 (+2/5)	Always enabled	Enable/Disable	2 digits / 5 digits add ons Add output character Extend EAN13
UPC-E0 / UPC-E1	6 (+2/5)	Always enabled	Enable/Disable	2 digits / 5 digits add ons Add output character
Code39	1 - 48	Enable/Disable	Enable/Disable	Start/Stop code output Full ASCII conversion
Codabar (NW7)	2 - 60	Enable/Disable	Enable/Disable	Start/Stop code output
ITF (Interleaved 2 of 5)	2 - 80	Enable/Disable	Enable/Disable	
Code93	1 - 80	Always enabled	Always disabled	
Code128	1 - 80	Always enabled	Always disabled	
GS1 128 (EAN128)	1 - 80	Always enabled	Always disabled	
MSI	4 - 48	Always enabled	Enable/Disable	
GS1 DataBar (RSS)	1 - 80 ※1	Always enabled	Always disabled	GS1 DataBar 14 reading GS1 DataBar Limited reading GS1 DataBar Expanded reading

※1 GS1 DataBar-14 and GS1 DataBar Limited are fixed to 14 digits of reading digits.



## 2D code (Stacked code)

Barcode	Reading digits	Check Digit Calculation	Check Character Output	Other functions
PDF417	1 - 2750	Always enabled	Always disabled	
MicroPDF	1 - 2750	Always enabled	Always disabled	
Composite	1 - 300	Always enabled	Always disabled	Composite compatibility (EAN8/EAN13/UPC-A/UPC-E/GS1 DataBar/GS1 128)
GS1 DataBar(RSS) Stacked type ※1	1 - 80 ※2	Always enabled	Always disabled	GS1 DataBar-14/GS1 DataBar Expanded

※1 Standard Omnidirectional type is included.

※2 GS1 DataBar-14 stacked type is fixed to 14 digits of reading digits.

## 2D barcode (Matrix code)

Barcode	Reading digits	Check Digit Calculation	Check Character Output	Other functions
Aztec	1 - 3832	Always enabled	Always disabled	
QR Code / Micro QR Code	1 - 7089	Always enabled	Always disabled	Model2 only ※1
Maxicode	1 - 150	Always enabled	Always disabled	
DataMatrix	1 - 3166	Always enabled	Always disabled	ECC000/050/080/100/140/200
Han Xin (Chinese Sensible Code)	1 - 6000	Always enabled	Always disabled	

※1 Model 1 is not supported.

### Note!

The Readable digits are changed depends on the print quality of the barcode and environmental conditions. Please check the barcode to be used.

## 2.14 USB

The ET-L10 can be connected to a PC.

Libraries related to this function are as follows. For details of the Android standard library, refer to the Android official website such as "Android Developers".

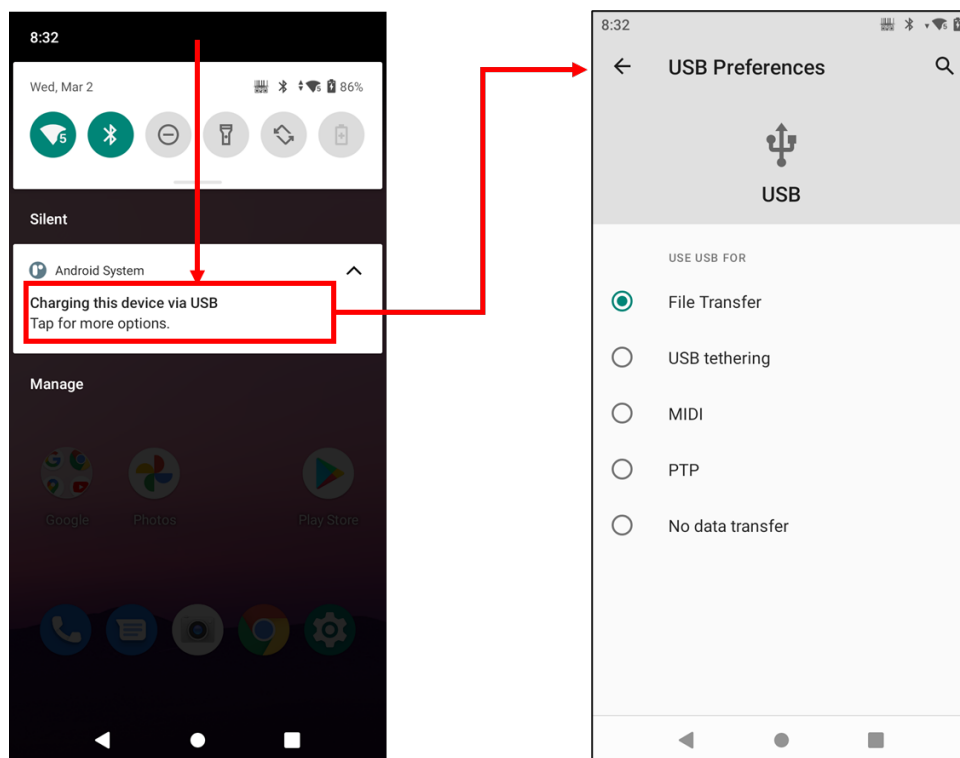
Android standard library  
android.hardware.usb

Class for accessing USB device.

The ET-L10 is assumed to use a network such as WLAN or WAN for business data exchange (transmission and reception) with PC (server). Meanwhile, the ET-L10 storage access from PC may be necessary for development and maintenance purposes. USB connection using USB cable is available for such use.

When the ET-L10 is connected to the PC via cradle or USB cable, charging starts.

Open the notification panel "2.1.8 Notification panel and Quick setting panel (p.13)", then, touch "USB charging this device".



By selecting "File Transfer" from the pop-up menu, you can access the files in the ET-L10 file from PC.

### Cautions!

That the default is "charging" is a security specification of Android 11.

## 2.15 WLAN

The ET-L10 equips WLAN module. Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library

android.net.wifi

android.net.wifi.p2p

Class for accessing WLAN network

Class for creating P2P connection in Wi-Fi Direct.

### Cautions!

When using static IP setting, don't forget to set Gateway and DNS addresses correctly. If these addresses are hard to set because of small local network, set "0.0.0.0" to them.

Otherwise, WLAN connection will be unstable.

In a network environment without the Internet, it might take some time to connect to an access point. In this case, to avoid this phenomenon by disabling "Internet Access Checking" in [Settings] -> [Network & internet] -> [Wi-Fi] -> [Wi-Fi preferences].

## 2.16 Bluetooth

### 2.16.1 Communication profile

The ET-L10 supports the following Bluetooth profiles.

Function	Purpose
A2DP (SRC)	Profile for streaming delivery of audio data of stereo sound quality used between digital audio player and headphone.
AVRCP (TG)	Profile for remotely operating the operation target device from the remote control used between the digital audio player and the remote controller.
GAP	Profile for device connection / authentication / encryption
GAVDP	Profiles that serve as the basis for A2DP and VDP
HFP (AG)	A profile used to make and receive calls and calls, used between a mobile phone and a headset.
HSP (AG)	Profile for voice input / output, used between mobile phone and headset etc.
OPP (Client/Server)	Profile used for exchanging objects between the mobile phone and the mobile phone e.g.) phone book data and schedule data.
PAN (PANU/NAP)	Profile for a plurality of PCs (slaves) to make radio connection with one PC (master) as the center.
PBAP (PCE/PSE)	Profile for transferring phone book data.
SPP (DevA/DevB)	Profile used to create virtual serial port and connect devices.
GATT	Profile used for exchanging attribute information with power saving Bluetooth.
HID (Host)	Provides support for devices such as mice (pointing device), keyboards.
SDP	Protocol for searching services supported by the other device

The following table shows correspondence between Bluetooth communication devices and usage and profiles.

However, operation of all Bluetooth communication devices is not guaranteed. Use certified Bluetooth device.

Bluetooth device	Usage	Profile and application
Bluetooth access-point (PAN-NAP Profile compatible)	LAN connection Tethering device	PAN-PANU Profile ※1 OS standard settings app + TCP/IP app
PAN-PANU Profile compatible PDA, PC, etc.	LAN connection Tethering master	PAN-NAP Profile OS standard settings app
Bluetooth printer	Print to printer	SPP Profile Application for printing
Bluetooth compatible PDA, Bluetooth compatible PC etc	File transfer among Bluetooth devices	OPP Profile OS standard photo app
Bluetooth headset	Voice communication	HFP Profile OS standard phone app
Bluetooth headphone	Play music	A2DP Profile OS standard music app

※1 When PAN-PANU Profile is used, it's not possible to communicate via Proxy.

Libraries related to this function are as follows. For details of the Android standard library, refer Android official website such as "Android Developers".

Android standard library  
android.bluetooth  
android.bluetooth.le

Class for controlling Bluetooth function.  
Class for controlling Scan function and advertise  
function.

## 2.17 NFC

The ET-L10 equips NFC module. By communicating with the contactless IC card or RFID tag, it is possible to read and write them.

### 2.17.1 Useable card

The types of supported NFC cards relate android class in the follow tables. For details of the Android standard library, refer to the Android official website such as "Android Developers".

The formats and confirmed NFC cards are as follows.

#### ISO/IEC14443 TypeA

Card Type	Android Class	Confirmation
MIFARE Classic 1k/4k	Ndef, NdefFormatable, NfcA, MifareClassic	Yes ※1
MIFARE Classic EV1 1k/4k	Ndef, NdefFormatable, NfcA, MifareClassic	Yes ※1
MIFARE Ultralight	Ndef, NdefFormatable, NfcA, MifareUltralight	Yes
MIFARE Ultralight nano	Ndef, NdefFormatable, NfcA, MifareUltralight	Yes
MIFARE Ultralight C	Ndef, NdefFormatable, NfcA, MifareUltralight	Yes
MIFARE Ultralight EV1	Ndef, NdefFormatable, NfcA, MifareUltralight	Yes ※2
NTAG203	Ndef, NdefFormatable, NfcA, MifareUltralight	Yes
MIFARE Plus S&X	Ndef, NdefFormatable, NfcA, IsoDep	
MIFARE Plus EV1	Ndef, NdefFormatable, NfcA, IsoDep	
MIFARE Plus SE	Ndef, NdefFormatable, NfcA, IsoDep	
MIFARE DESFire	Ndef, NdefFormatable, NfcA, IsoDep	
MIFARE DESFire EV1	Ndef, NdefFormatable, NfcA, IsoDep	
MIFARE DESFire EV2	Ndef, NdefFormatable, NfcA, IsoDep	

#### ISO/IEC14443 TypeB

Card Type	Android Class	Confirmation
ISO14443 Type B	Ndef, NdefFormatable, NfcB	

#### FeliCa

Card Type	Android Class	Confirmation
SONY FeliCa Standard	Ndef, NdefFormatable, NfcF	Yes ※3
SONY FeliCa Light	Ndef, NdefFormatable, NfcF	Yes

## ISO15693

Card Type	Android Class	Confirmation
NXP ICODE SLI	Ndef, NdefFormatable, NfcV	Yes
NXP ICODE SLI-S	Ndef, NdefFormatable, NfcV	Yes
NXP ICODE SLI-L	Ndef, NdefFormatable, NfcV	Yes
my-d V 10 Plain	Ndef, NdefFormatable, NfcV	Yes
my-d Light	Ndef, NdefFormatable, NfcV	Yes
Tag-it HF-I Plus	Ndef, NdefFormatable, NfcV	Yes
Tag-it HF-I Pro	Ndef, NdefFormatable, NfcV	Yes
Tag-it HF-I Standard	Ndef, NdefFormatable, NfcV	Yes

※1 Only MifareClassic function

※2 Only MifareUltralight function

※3 "Read Without Encryption" and "Write Without Encryption" commands are supported.

(The command required IC card authentication is not supported.)

---

## 2.18 GPS

The ET-L10 equips GPS module. GPS function can be used only with models with telephone function. Libraries related to this function are as follows. For details of the Android standard library, refer to the Android official website such as "Android Developers".

Android standard library

`android.location.GpsStatus`

`android.location.GpsSatellite`

Class that provides GPS engine function.

Class that gets the current state of GPS satellites.

Used in conjunction with `android.location.GpsStatus`.

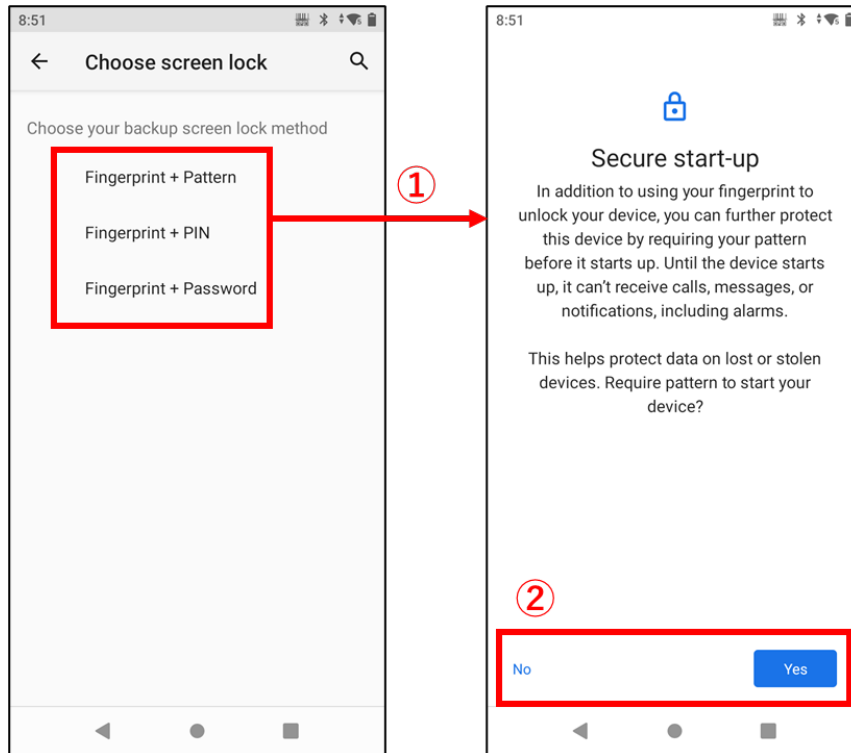


## 2.19 Fingerprint

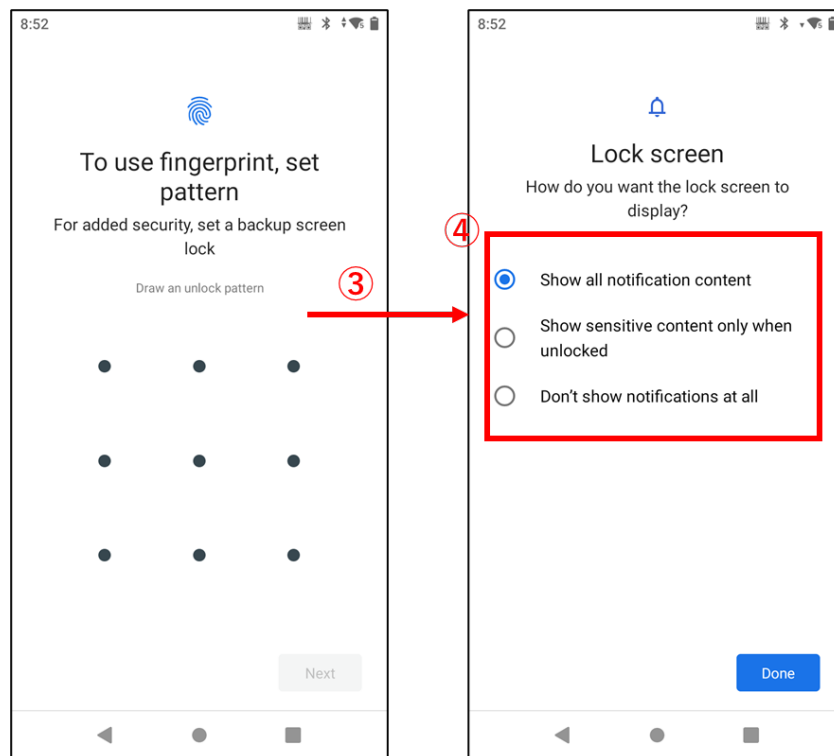
The ET-L10 equips fingerprint sensor. By registering a fingerprint, can unlock the device by simply touching the fingerprint sensor.

To register a fingerprint, go to [Settings] -> [Security] -> [Fingerprint].

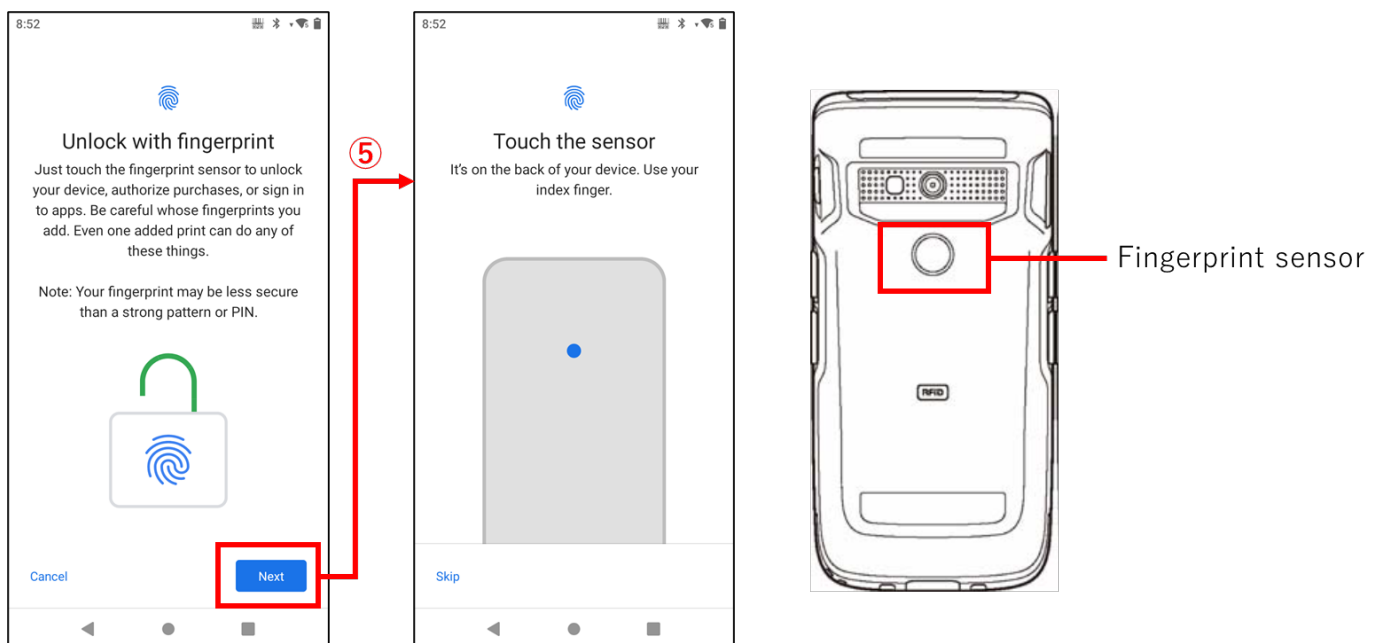
- ① Choose your backup screen lock method.
- ② Choose if protecting this device by a lock screen before it starts up.



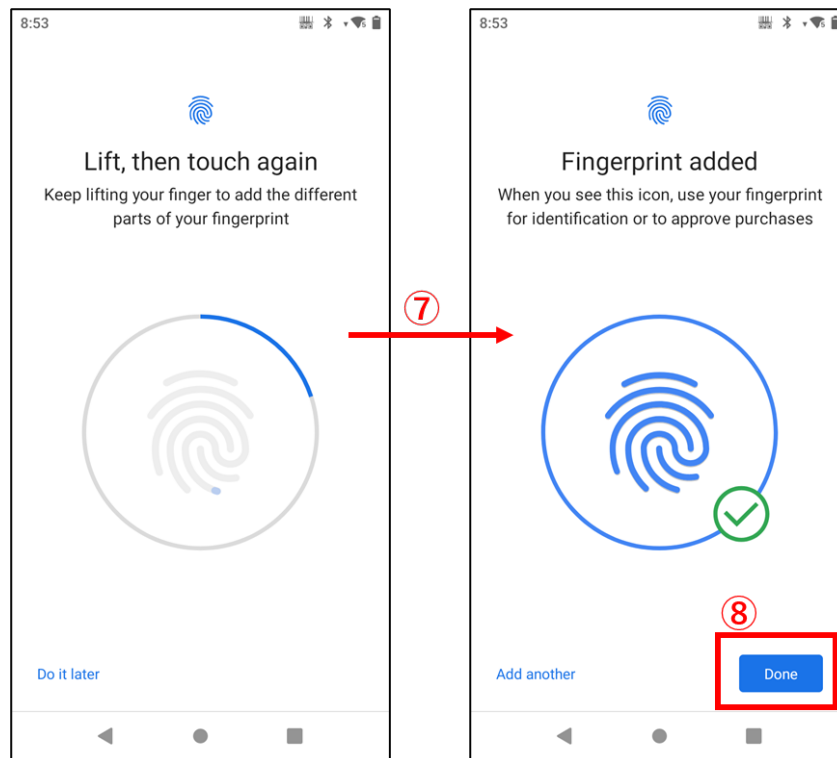
- ③ Set the backup screen lock.
- ④ Choose notifications to show when your device is locked.



- ⑤ Touch [NEXT] on the [Unlock with fingerprint].
- ⑥ Touch the fingerprint sensor.



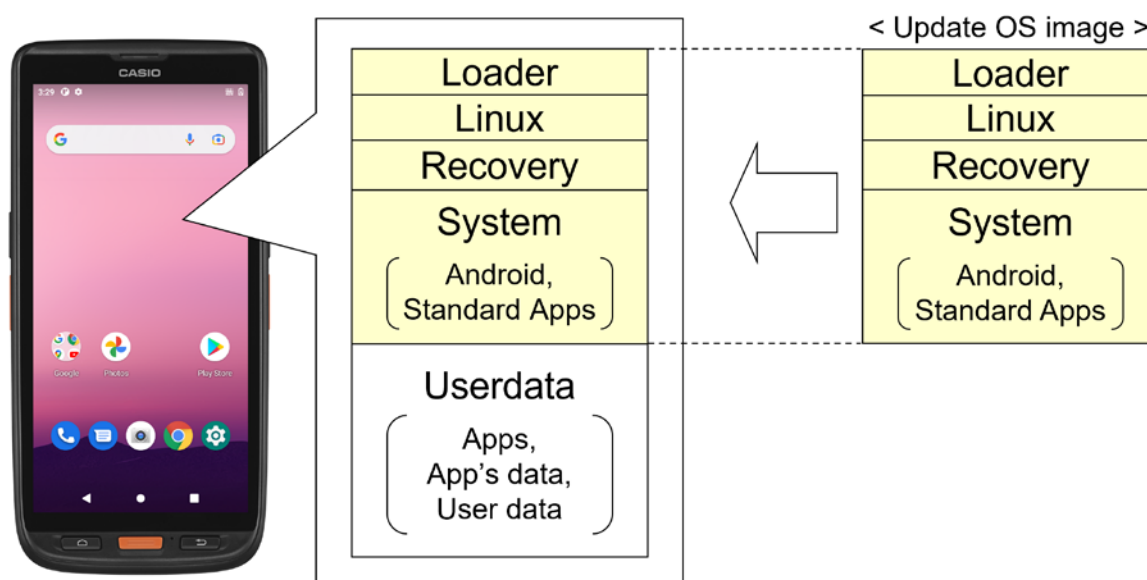
- ⑦ Lift and touch the fingerprint sensor again.
- ⑧ Touch [DONE] button when the registration of the fingerprint is completed.



## 2.20 OS update

The software (Android, Linux, driver, standard installed application) written at shipment from the factory of the ET-L10 is called "OS", and the place where it is written is called "system area".

On the other hand, the application installed by the user, its data area, and the internal memory area are collectively called "user data" or "user area".



If it is necessary to modify the OS due to security correspondence etc., CASIO may provide a modified an "OS image". The function of rewriting the OS is called "OS update". There are the following 4 methods for OS update.

OS update methods	Version up	Downgrade	Remarks
System updates	Yes		These are explained in this chapter.
OSUpdateService	Yes		
KitCopy	Yes		Refer to the "Kitting Manual" for details.
OS Writer	Yes		

### Cautions!

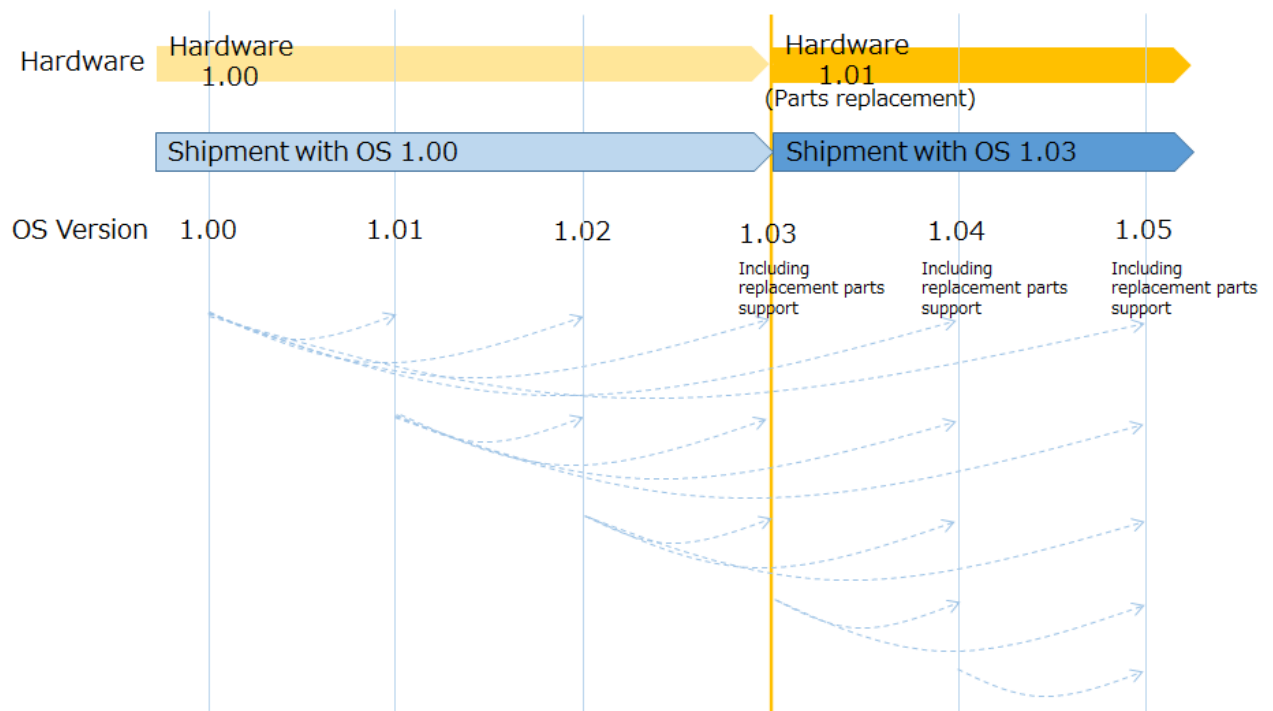
For an upgrade from Android 9 to Android 11, refer to the "Upgrade from Android 9 to Android 11 (p.53)".

Android 11 cannot downgrade the OS.

In OS version up, since only the system area is rewritten, it does not affect the user data. However, in preparation for unexpected circumstances, recommend that backup data before updating the OS.

#### OS updates to the customer's verified OS

The terminal preinstalled Android 11 OS will be shipped with the fixed OS so that the terminal can be updated to the version of the OS verified by the customer (verified OS). However, after the OS will be modified to support EOL hardware parts replacement, the terminal will be shipped with the OS modified to support EOL hardware parts replacement.



#### Cautions!

OS update is automatically restarted, so make sure that all applications are stopped.

## OS image

There are two types of the OS images: Full image and Differential image.

The full image is used when updating the OS regardless of the OS version.

When updating the OS from the current version to one newer version, use the differential image.

The OS image file name includes the OS release number and OS version. The structure of the file name is as follows.

Full image filename

ETL10A11-V002-ER\_31\_SP20220505.ota

|① |② |③ |⑦ |⑧

Differential image filename

ETL10A11-V002-ER\_31-from-V001-ER\_29.ota

|① |② |③ |④ |⑤ |⑥ |⑧

- ① ETL10A11 : This is the fixed device name.
- ② V002 : This is the OS release number. It changes for each OS image.
- ③ ER\_31 : This is the OS version number. It changes for each OS image.
- ④ from : This is a fixed character means the differential OS image.
- ⑤ V001 : This is the OS release number of the update source. It changes for each OS image.
- ⑥ ER\_29 : This is the OS version number of the update source. It changes for each OS image.
- ⑦ SP20220505 : This is a security patch level.
- ⑧ ota : This is a fixed extension.

To check the current OS version, refer to "Build number" in [Settings] -> [About device].

The last 5 digits of the displayed build number is the current OS version.

## System updates

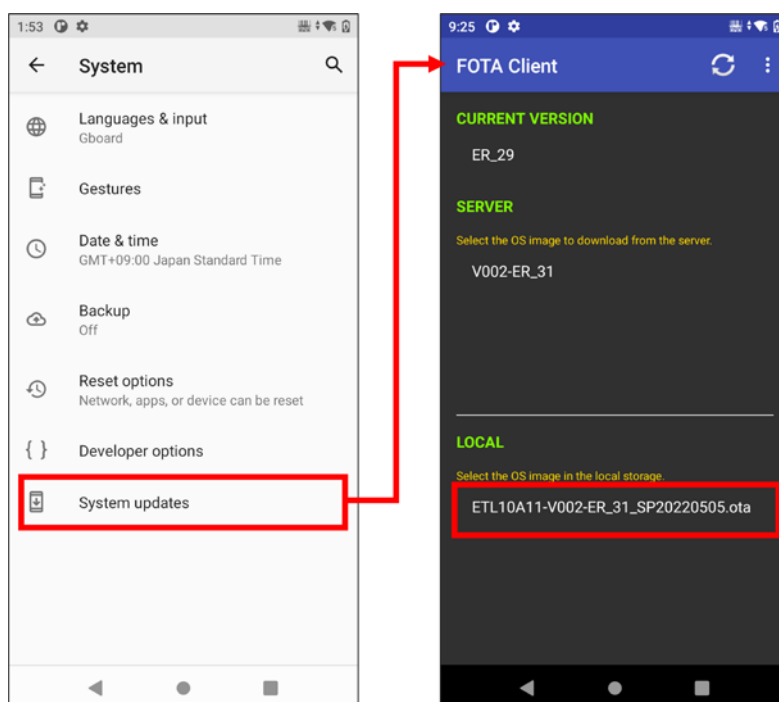
There are two ways to update the system: "Local Updating" and "FOTA Updating". Each update method is described in the following sections.

### Local Updating

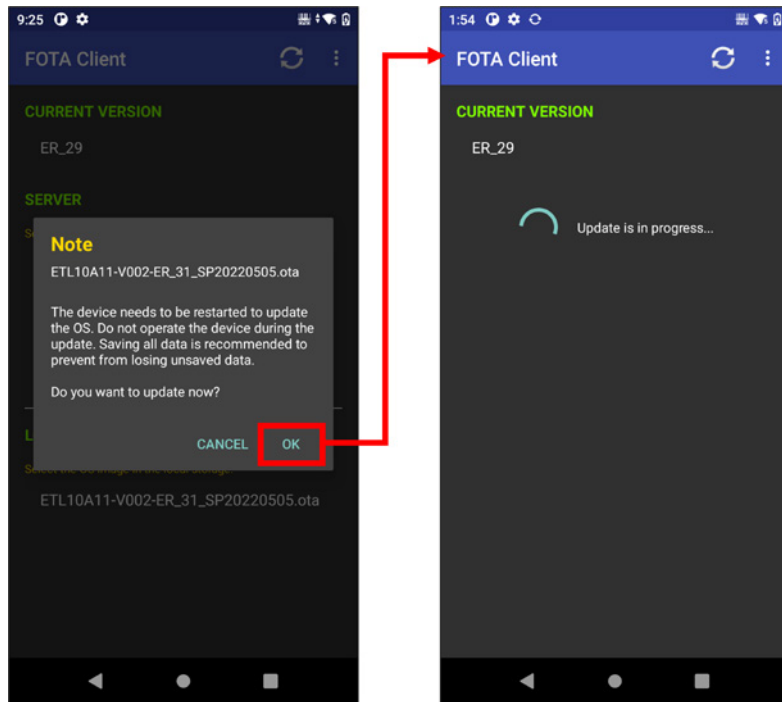
OS image is stored the root folder in the internal storage or in the external storage (microSD card) for System updates.



Select [Settings] -> [System] -> [Advanced] -> [System updates], "FOTA Client" is launched and a list of updatable OS images will be displayed in the local area at the bottom of the screen.



Select the target OS image, confirmation dialog will be displayed. If select [OK], OS updating will start. When update is completed, it will restart automatically.



#### Cautions!

Updating with the OS image of the internal storage, the OS image is automatically deleted.

Updating with the OS image of the external storage, the OS image is not deleted.

Updating with the OS image of the internal storage, free space for the OS image file size is temporarily required in the internal storage. Update after free up space.

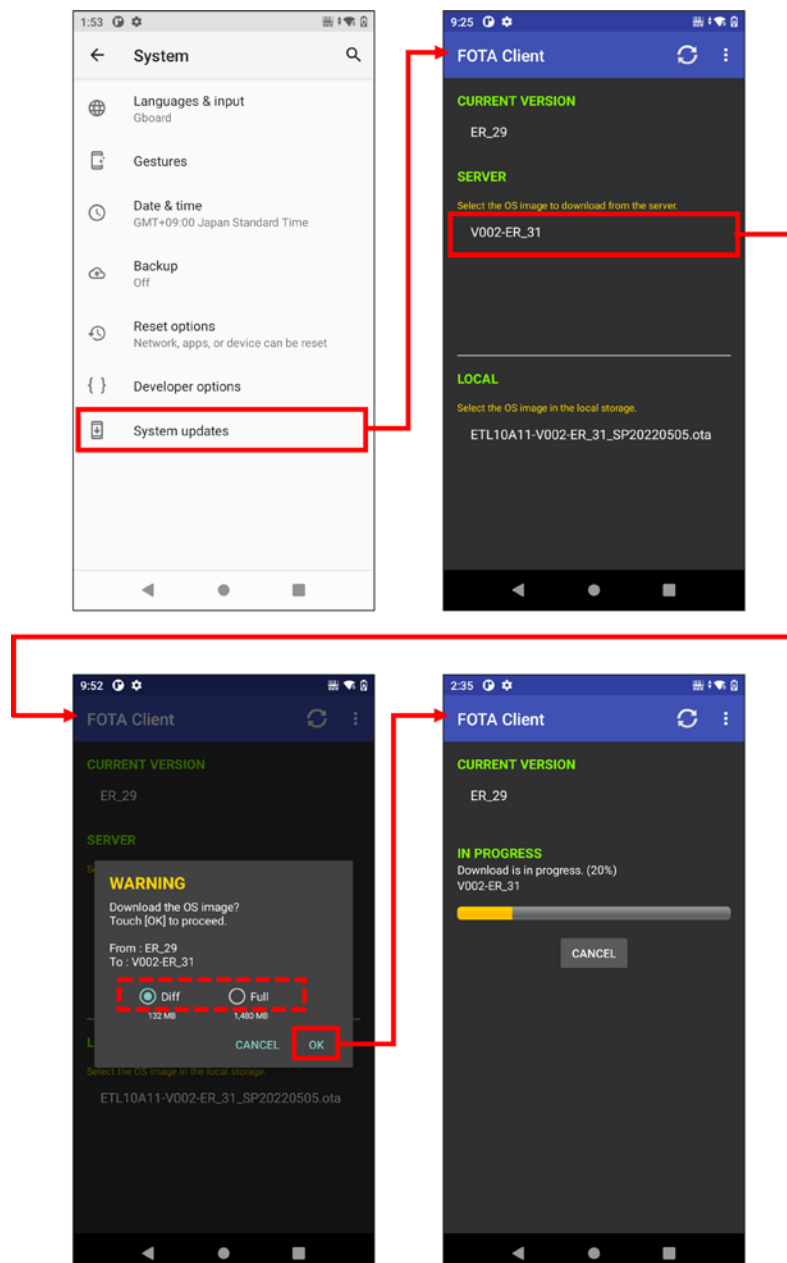


## FOTA Updating

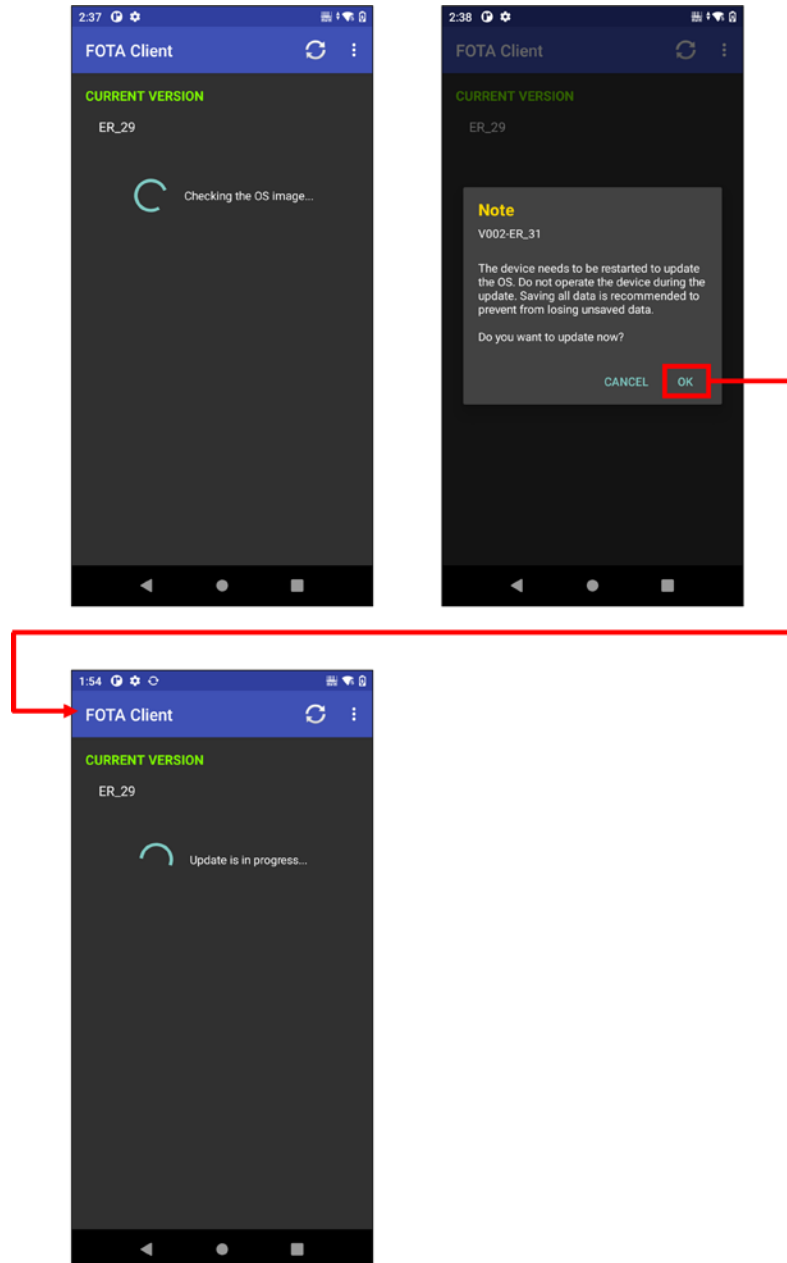
OS image is downloaded from the FOTA (Firmware Over The Air) server for System updates.

While WLAN connection is available, select [Settings] -> [System] -> [Advanced] -> [System updates], then "FOTA Client" is launched and a list of OS versions that can be updated from the FOTA server will be displayed in the server area at the top of the screen.

When OS version is touched and select the OS image, confirmation dialog will be displayed. When performing a differential update from the current OS version to one newer OS version, select "Diff" and touch [OK] to start downloading the differential image. When "Full" is selected, start downloading the full image starts. If no difference image is provided, "Diff" cannot be selected. In this case, select "Full".



After downloading is completed, "Checking the OS image..." message is displayed, and after a while, confirmation dialog will be displayed. If select [OK], OS updating will start. When update is completed, it will restart automatically.



#### Cautions!

The FOTA server does not acquire any personal information, do not worry.

The use of FOTA function is free of charge. But data fees may apply from user's communications service provider.


Downloading may take long time depending on the user's network environment since the size of the full image is about 1.5GB and the difference image is several hundred MB. And the free space is required in the user area of the internal storage to save the OS image.

Depending on the user's network environment, the message of "Download paused. The network connection is unstable" will be displayed. But any operation is necessary since download will resume automatically.

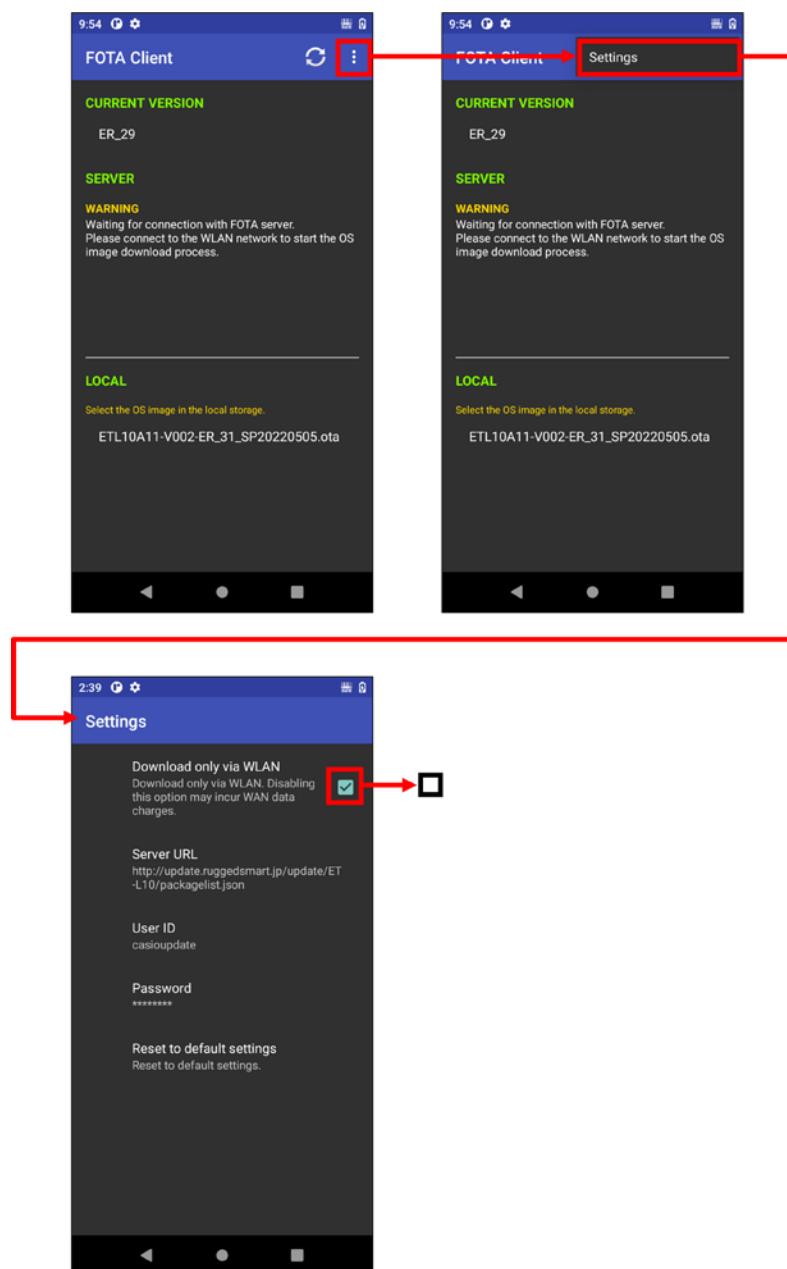
Downloading may not start via WLAN depending on the user's network environment. For example, if going through an Android smartphone with Wi-Fi tethering enabled, downloading will not start. In this case, uncheck the [Download only via WLAN] shown below and start downloading.

By default, the FOTA client downloads the OS image only via WLAN.

If download the OS image over the Mobile network (3G/4G), change the setting as follows.

[FOTA Client] ->  -> [Settings] -> uncheck the [Download only via WLAN]

The server URL is confirmed on the [Settings] screen. The port number is 80.



## OSUpdateService

This is a method to update the OS from user's application.

OS update is a premise to be done by human operation. This is based on the idea that "Since OS update is a dangerous act such as the terminal does not start when failing, wish people to check progress".

By this method, it is possible to update the OS at night when the device is not used.

Therefore, when using this service, sufficient verification is of course necessary, and furthermore it is necessary to prepare for "Measures to be taken if OS update fails, such as preparation of alternative terminal".

First, application issues "START intent" together with the PATH to the "OS image".

The OSUpdateService invoked by the intent above will check the integrity of the specified the OS image, update will start and the terminal restart.

### START intent

Package name:  
Class name:           jp.casio.ht.osupdateservice.StartUpdate  
Extra:

#### How to start

```
Intent intent = new Intent();
intent.setFlags(Intent.FLAG_ACTIVITY_NEW_TASK);
intent.setClassName("jp.casio.ht.osupdateservice", "jp.casio.ht.osupdateservice.StartUpdate");
Uri uri = Uri.parse("PATH to the OS image");
intent.setData(uri);
startActivity(intent);
```

#### Specify the file path

When deploy the OS image for internal storage, specify the file path from the internal storage.  
When deploy the OS image for external storage, specify the file path from the root folder of the external storage.

e.g.)

When deploy the OS image "ETL10A11-V002-ER\_31\_SP20220505.ota" in the root folder of the internal storage, "/storage/emulated/0/ETL10A11-V002-ER\_31\_SP20220505.ota"

When deploy the OS image "ETL10A11-V002-ER\_31\_SP20220505.ota" in the root folder of the external storage, "/ETL10A11-V002-ER\_31\_SP20220505.ota"

It is possible to get the result of OS update by checking "ERROR intent" or log file.

The results that can be obtained with the "Error intent" or log file are as follows.

Value	Description
-2	Cannot update because the battery level is less than 20%.
-1	OS update image file is not valid.
0	Update was completed normally.
1	Specified update has already been applied.
2	Update was applied, but the OS version was not the desired version.

## ERROR intent

Package name:

Class name:       jp.casio.ht.osupdateservice.finishupdate

Extra:

```
FinishBroadcastReceiver receiver = new FinishBroadcastReceiver();
IntentFilter intentFilter= new IntentFilter("jp.casio.ht.osupdateservice.finishupdate");
registerReceiver(receiver, intentFilter);

...

class FinishBroadcastReceiver extends BroadcastReceiver {
@Override
public void onReceive(Context context, Intent intent) {
    Bundle bundle = intent.getExtras();
    String result: = bundle.getString("result");
}
}
```

## Log specification

OS update execution results are saved in a log file. The same result is saved in the following two locations.

① /storage/emulated/0/Android/data/jp.casio.ht.osupdateservice/files/result.xml

② /storage/emulated/0/CASIO/OSUpdateService/result.xml

On Android 11, the location ① cannot be accessed from the user application. In this case, access the location ②.

This is an XML format document, the layout shown below.

```
<?xml version='1.0' encoding='utf-8'?>
<update>
<file>OS image file path passed from the application</file>
<apply>Applied OS image file name</apply>
<start>Update starting time and date</start>
<finish>Update finished time and date</finish>
<prevver>OS version before updating</prevver>
<postver>OS version after updating</postver>
<result> System updates result</result>
</update>
```

e.g.)

```
<?xml version="1.0" encoding="utf-8"?>
<update>
<file>/storage/emulated/0/ETL10A11-V002-ER_31_SP20220505.ota</file>
<apply>ETL10A11-V002-ER_31_SP20220505.ota</apply>
<start>2022/06/02 10:36:26</start>
<finish>2022/06/02 10:40:30</finish>
<prevver>ER_29</prevver>
<postver>ER_31</postver>
<result>0</result>
</update>
```

## Upgrade from Android 9 to Android 11

"OS Writer" can be used for upgrading from Android 9 to Android 11.

However, when upgrading from Android 9 to Android 11, the factory reset is inevitably performed. Please note that all data will be erased when the factory reset is performed.

OS update methods	Upgrade from Android 9 to Android 11	Remarks
System updates	No	Refer to the "Kitting Manual" for details.
OSUpdateService	No	
KitCopy	No	
OS Writer	Yes	

Upgrades from Android 9 to Android 11 are only possible with Android 11 full images that are at or above the current Android 9 security patch level. After upgrading to Android 11, cannot revert to Android 9.

To check the security patch level of the current OS, refer to "Security patch level" in [Settings] -> [Security & location] -> [Security update]. For the security patch level of Android 11 full image, refer to the OS image filename structure above.

## 3. Applications







### 3.1 List of applications

The table below shows a list of applications installed in the ET-L10.

The following sections describe applications that require explanation ("Settings" and CASIO additional applications).

#### Cautions!

Since installed standard Android applications are frequently updated via the Google Play Store, understand that the explanation in this manual is an overview of each application.

Icon	Application Name	Description
	Calculator	Calculator for numerical calculation and function calculation.
	Calendar	Manages events with Google Calendar. You can synchronize, display, and register schedules.
	Camera	Shoot still images and movies.
	Chrome	Browse web pages.
	Clock	Set clock display and alarm setting.
	Contacts	View and edit contacts, and sync with Google contacts.
	cScan	cScan is a demonstration tool for checking the operation of a barcode scanner.
	Drive	Accesses Google Drive, then search, view, edit photos and files on it.
	Duo	Duo is the video chatting mobile app.
	File Manager	Managing files and directories. Copy, move, delete and create files and directories.
	Files	Download files by request of mailer or browser. And refer to the downloaded file.
	Gmail	Send and receive Google and other emails.
	Google	Searches what you need on the web and on your Android devices.



	Google Play Movies & TV	Play movies and TV shows purchased or rented on Google Play.
	Keep Notes	Creating text files, photos and videos and keep them on the web.
	Kitting Tools	Installs various applications and set the setting to the terminal and make it available fo business. Refer to "Kitting Manual".
	Maps	Display map and navigate to the destination.
	Messages	Sending and receiving SMS.
	NetSearch	NetSearch is a tool to display and record WLAN status. It is useful to check the WLAN environment before installation and to analyze WLAN trouble during development.
	Phone	Make and receive phone calls.
	Photos	Managing service your photos and videos.
	Play Store	Installing applications from Google Play store.
	Settings	Configure various Android settings
	Sound Recorder	Recording voice memos, talks, music and songs.
	YouTube	Play, create and upload YouTube videos.
	YT Music	Music streaming services by YouTube. You can listen to the musics and browse music videos.

### 3.1.1 Settings

This is the outline of setting items.

#### Network & Internet

You can manage the network using Wi-Fi, mobile network and connection settings to the device.

In addition, used for setting up the connection between the terminal and the virtual private network (VPN), for connecting to the Internet with another device via the data communication of the terminal, and for turning off all wireless communication by switching to flight mode.

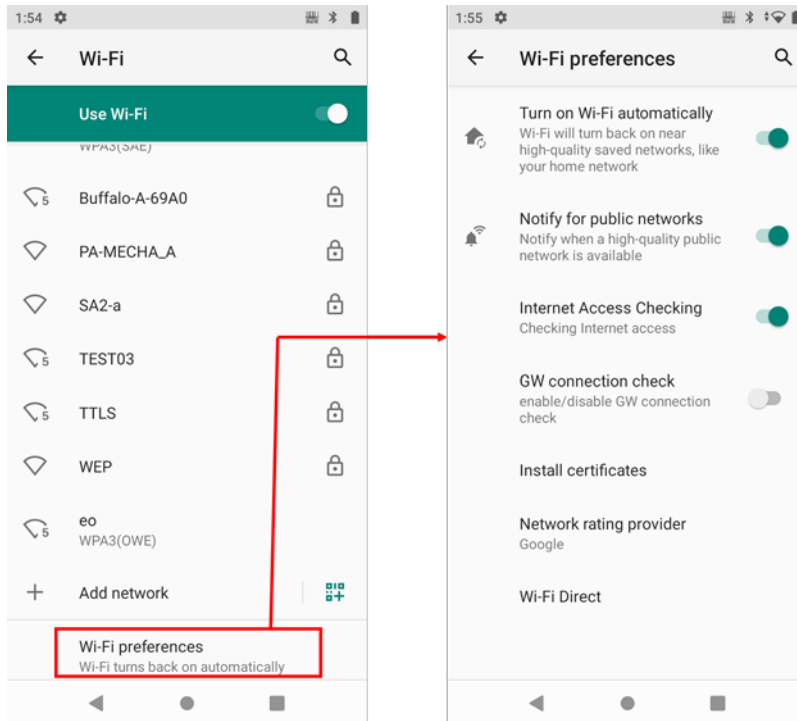
Item	Description
Wi-Fi	Setting WLAN enabled / disabled, selecting Access point to connect.
Add Network	
Wi-Fi preferences	
Saved networks	
Wi-Fi data usage	
Mobile network	Configure mobile network settings.
Mobile data	
Roaming	
Data warning & limit	
Advanced	
Airplane mode	Enable / disable Airplane mode
SIM cards	Setting of SIM cards. Do not change this setting.
Wi-Fi data usage	
Network restrictions	
Hotspot & Tethering	Enable / disable of Tethering
Wi-Fi hotspot	
USB tethering	
Bluetooth tethering	
Data Saver	Setting of Data Saver
VPN	Setting of VPN connection
Private DNS	Setting of private DNS

## Wi-Fi

Set the Wi-Fi settings.

To make detailed settings, select "Wi-Fi settings".

The surrounding access points are scanned. Touch the access point that want to connect and set the connection setting.



### Internet Access Checking

If the access point does not connect the internet, this setting should be disabled to prevent the system from unnecessary connection checking.

### GW connection Check

Set whether to disconnect / reconnect WIFI when communication with the default gateway or DNS server is not possible.

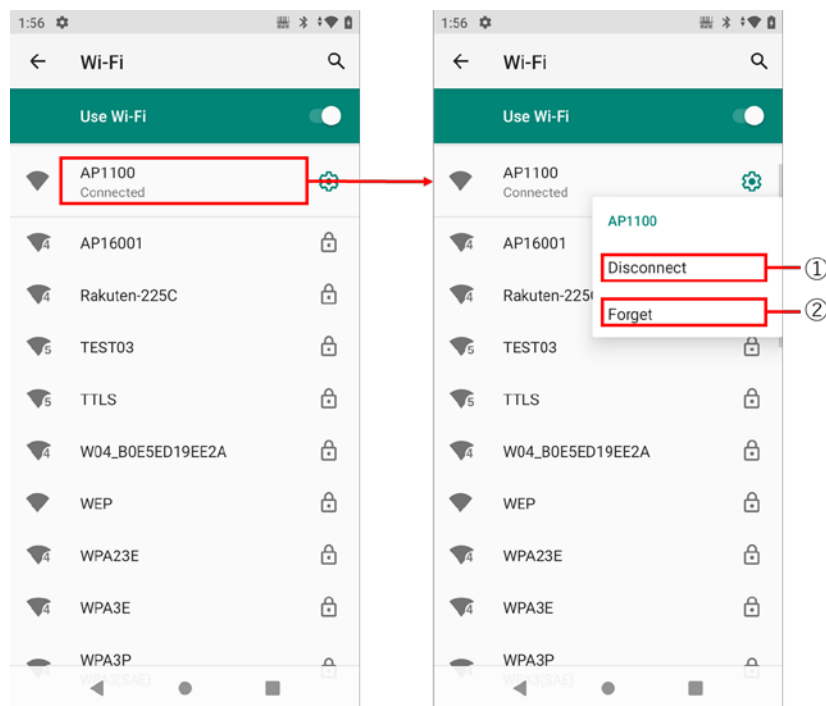
If it is enable, WIFI will be disconnected and reconnected.

If it is disable, the WIFI connection will be maintained without disconnecting.

Note!

When connecting to the stealth SSID, set [Add network] -> [Advanced options] -> [Hidden network] to "Yes".

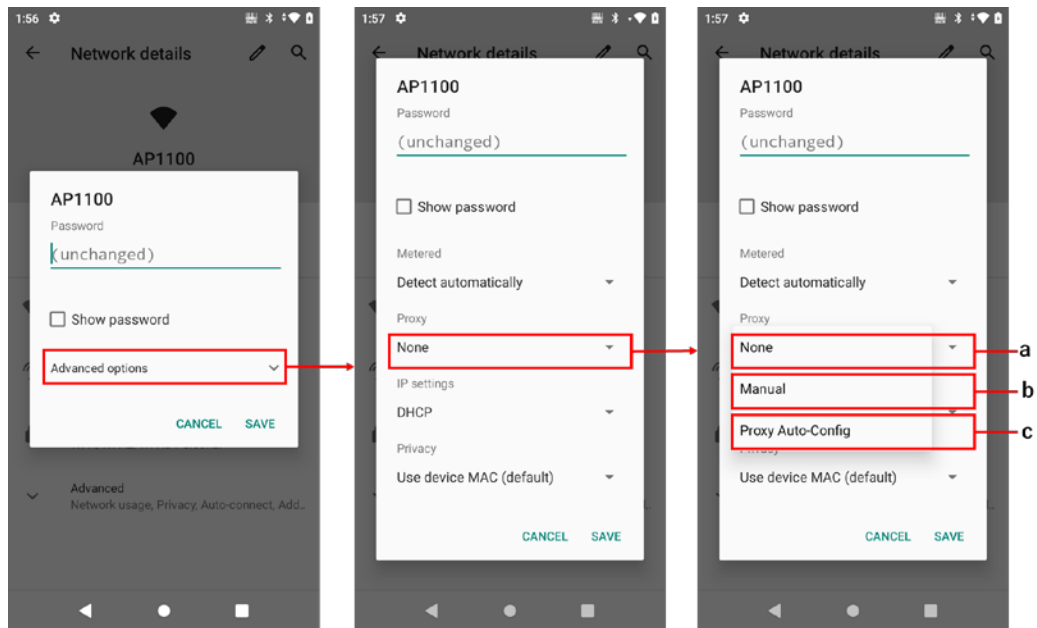
Modifies the setting contents and forgets the connected network. If touch and hold the connected network from the access point list, a menu pops up.



① Disconnect

② Forget

## Proxy settings



Touch [Advanced options] to display the pop-up. By defaults, the proxy is set to "None", so long press this to see the choices.

a) Proxy setting - None

Select "None" if you do not want to use a proxy.

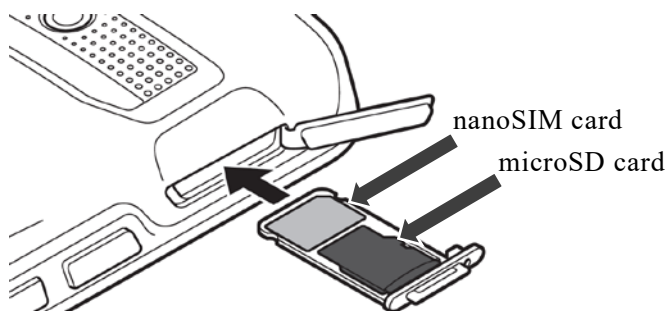
b) Proxy setting - Manual

Set proxy host name, port number and so on.

c) Proxy setting - Proxy Auto-config

Set URL of "Proxy PAC".

## Mobile network



Insert the nanoSIM card in the correct location as shown in the picture.

Follow instructions of the carrier to set the contents. It is not necessary to set items that are not specifically instructed.

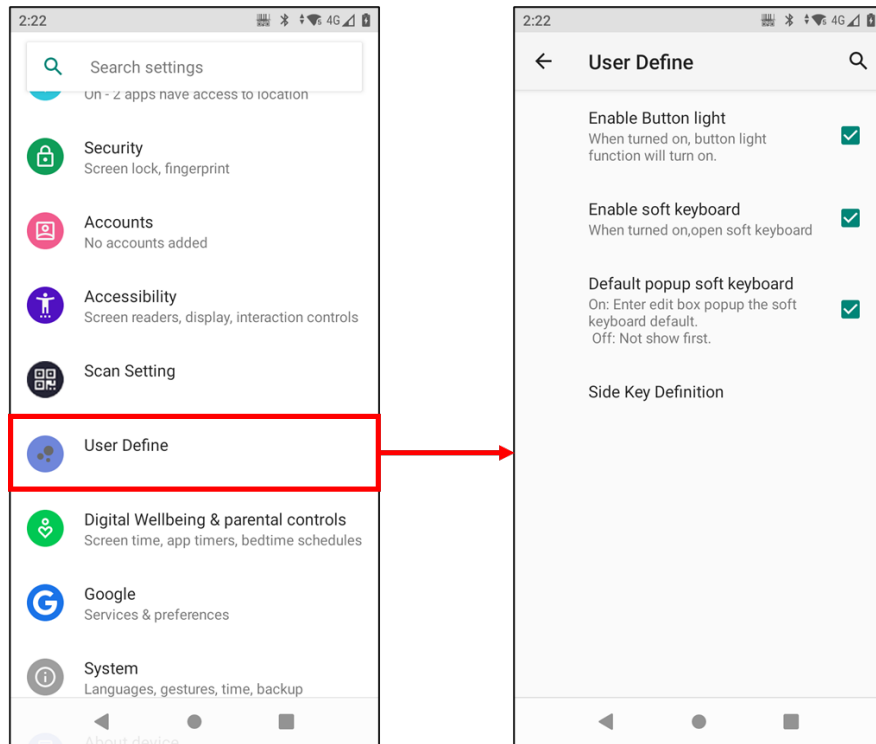
To change the setting, touch the + icon in the upper right corner of [SIM SLOT 1] -> [Advanced] -> [Access Point Names].

[SIM SLOT 2] can't be used on ET-L10.

Item	Description
Name	Set name of APN setting.
APN	Set Access point name.
Proxy	Set host name of proxy used for data communication.
Port	Set port number of the proxy.
Username	Set user name for authentication when connecting to APN.
Password	Set password for authentication when connecting to APN.
Server	Set the server name specified by the carrier.
MMSC	Configure MMS (multimedia messaging service) center.
MMS proxy	Set host name of the proxy used when using MMS.
MMS port	Set port number of the proxy used when using MMS.
MCC	Set MCC (Mobile Country Code).
MNC	Set MNC (Mobile Network Code).
Authentication type	Set one of the followings. None / PAP / CHAP / PAP or CHAP
APN type	Set APN type specified by the carrier.
APN protocol	Set one of the followings. IPv4 / IPv6 / IPv4/IPv6
APN roaming protocol	Set one of the followings. IPv4 / IPv6 / IPv4/IPv6
APN enable/disable	Enable / disable APN
Bearer	Set bearer
MVNO type	Set MVNO type
MVNO value	Set MVNO value

## User Define

The "User Define" can change the function of the hardware key, such as PTT Key and Light Key, mounted on the ET-L10.



## Key backlight

Switching "Enable Button light", enable / disable the key backlight.

## Software keyboard

Switching "Enable soft keyboard", enable / disable the software keyboard.

If disabled the software keyboard, it is not displayed regardless the setting of the application.

## Popup software keyboard

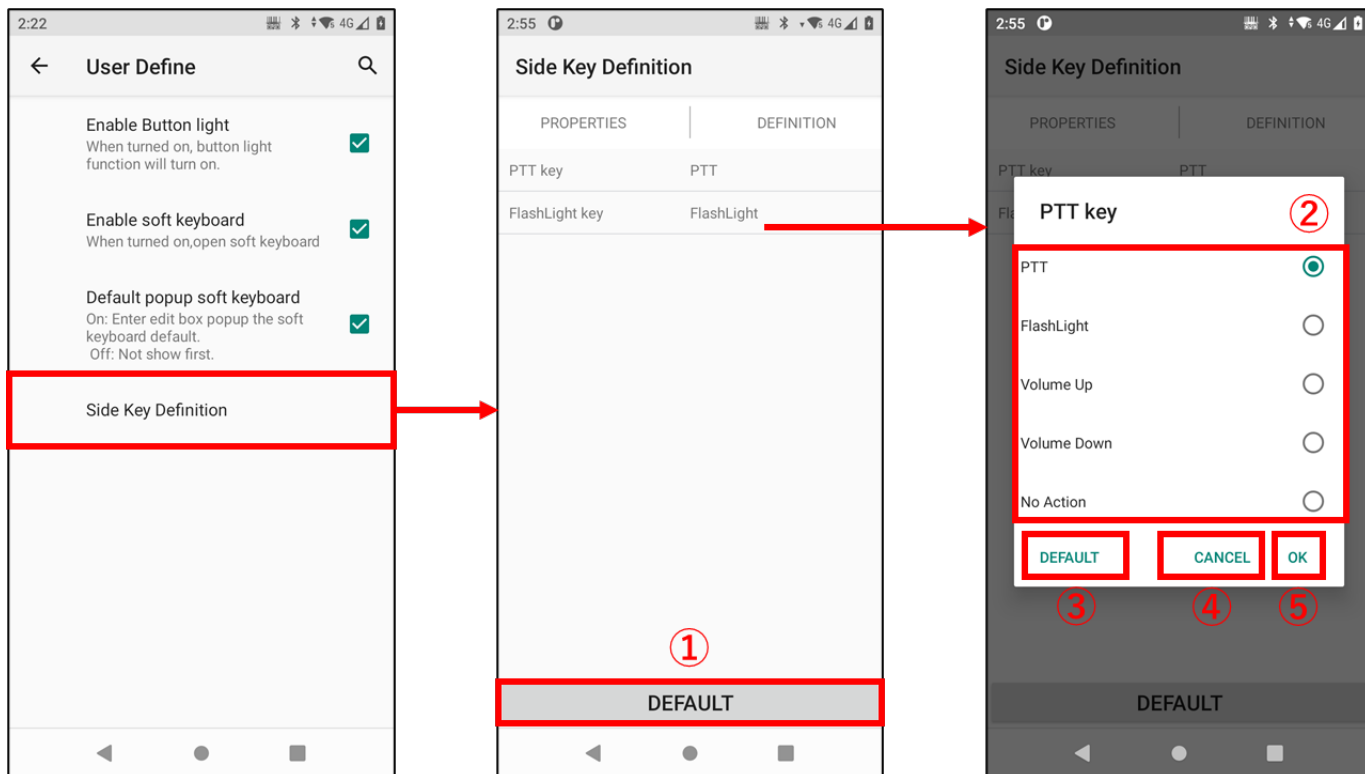
Switching "Default popup soft keyboard", popup / not popup the software keyboard when focus the editbox.

If disabled the popup, the software keyboard is not displayed when focus the edit box first time. Touch the edit box to display the software keyboard.

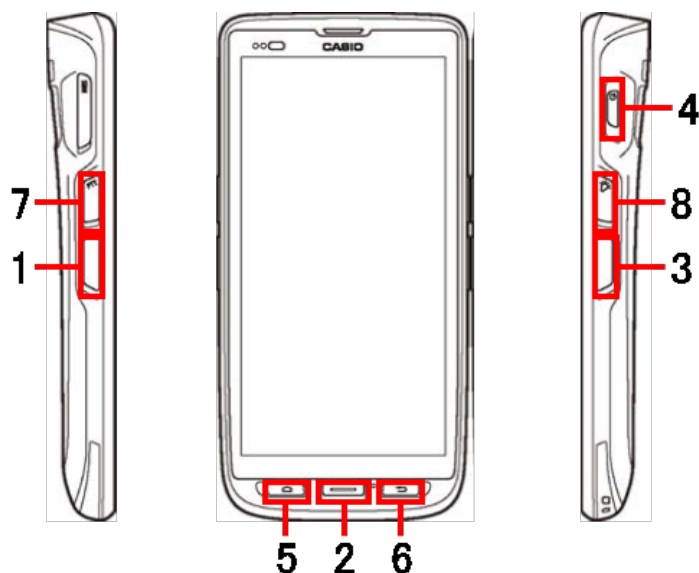
However, the application's setting has high priority more than this setting. Therefore, even if this setting is disabled, the software keyboard may be displayed.

## Hardware key definition

Changing "Side Key Definition", assign different function to the hardware key.



- ① Return all keys to the default function.
- ② Select the function to assign to the selected hardware key.
- ③ Return selected hardware key to default function.
- ④ Cancel the function assignment of the selected hardware key.
- ⑤ Determine the function to assign to the selected hardware key.



No.	Key	Default function
1	L Trigger Key	Can not change the function
2	Center Trigger Key	
3	R Trigger Key	
4	Power Key	
5	Home Key	



6	Back Key		
7	PTT Key	PTT	No Action
8	Light Key	FlashLight	Turn the light on the top of this device on and off.

The following functions can be assigned.

Function	Function	Android Key code
PTT	No Action	KEYCODE_PROG_RED
FlashLight	Turn the light on the top of this device on and off.	KEYCODE_PROG_BLUE
Volume Up	Volume up	KEYCODE_VOLUME_UP
Volume Down	Volume down	KEYCODE_VOLUME_DOWN
No Action	No Action	KEYCODE_UNKNOWN

## Accessibility

Settings related to users' usage.

Item	Description
Text-to-speech output	Set screen readers.
Preferred engine	
Language	
Speech rate	
Pitch	
Font size ※1	Set font size and display color.
Display size ※1	
Dark theme	
Magnification	
Color correction	
Color inversion	
Large mouse pointer	
Remove animations	
Autoclick (dwell timing)	Set interaction controls.
Power button ends call	
Auto-rotate screen	
Touch & hold delay	
Time to take action (Accessibility timeout)	
Vibration & haptic strength	
System navigation	
Mono audio	Set audio and on-screen text.
Audio balance	
Caption preferences	
High contrast text	Enable / disable high contrast text.

※1 Applications might not accurately display interfaces by the setting of "font size" and "display size". In that case, operate with hardware keyboards.

## System

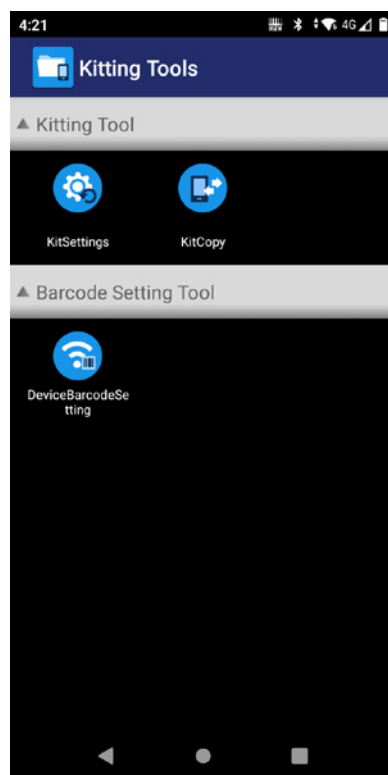
Set date and time and make settings for developers.

Item	Description
Languages & input	Set language and keyboard to use.
Languages	
On-screen keyboard	
Physical keyboard	
Spell checker	
Autofill service	
Personal dictionary	
Pointer speed	
Text-to-speech output	
Gestures	Set gestures
Quick open camera	
System navigation	
Prevent ringing	
Power menu	
Date & time	Set date and time and select time zone.
Use network-provided time	
Date	
Time	
NTP Server Address	
Use network-provided time zone	
Time zone	
Use locale default	
Use 24-hour format	
Backup	Set backup to Google Drive. Not cooperate with "Backup / Restore" in "Kitting Tools".
Account storage ※1	
Backup by Google One ※1	
Apps ※1	
Photos & videos ※1	
SMS & MMS messages ※1	
Call history ※1	
Device settings ※1	
Google Account data ※1	
Back up using mobile data	
Reset options	Clear network settings or all data in the terminal.
Reset Wi-Fi, mobile & Bluetooth	
Reset app preferences	
Erase all data (factory resset)	
System Updates	Use to update OS image.

※1 Some settings of Backup is available only the terminal signed in by Google Account.

### 3.1.2 Kitting Tools

It is called "kitting" to install various applications and set the setting to the terminal and make it available for business. This tool is to make kitting work for the ET-L10 efficient. Refer to "Kitting Manual".

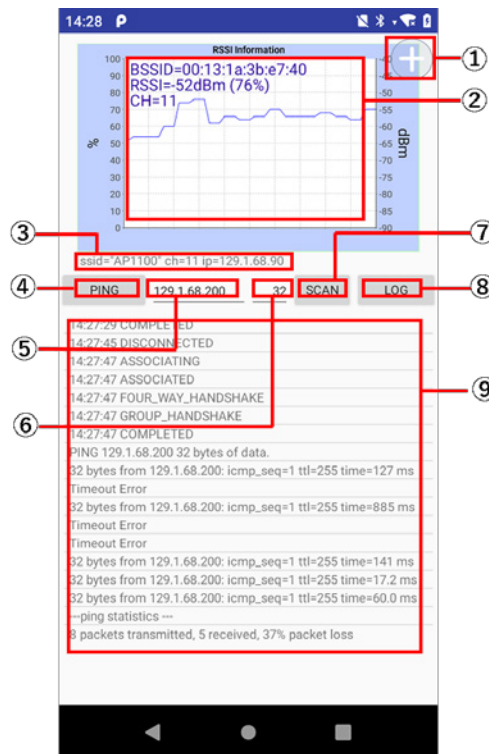


### 3.1.3 NetSearch

NetSearch is a tool to display and record WLAN status. It is useful to check the WLAN environment before installation and to analyze WLAN trouble during development. This tool has three views, Signal View, Scan View and Detailed View. To switch to another view, select desired view from the menu displayed by + icon placed on right upper.

#### Signal View

This view check WLAN status in real-time.



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## Log file

When [LOG] button is touched, two kinds of log files are created in the NetSearchLog folder of Internal Storage.

Logging stops when [LOG STOP] button is touched or the number of lines exceeds 100,000.

Ping result/Scan result/WLAN status

File name:

YYMMDDTTMMSSNetSearchlog.txt (YYMMDDTTMMSS is date and time of starting log)

Format of each line:

YYMMDDTTMMSS,results/status displayed at Signal View

RSSI graph data

File name:

YYMMDDTTMMSSGraphNetSearchlog.txt (YYMMDDTTMMSS is date and time of starting log)

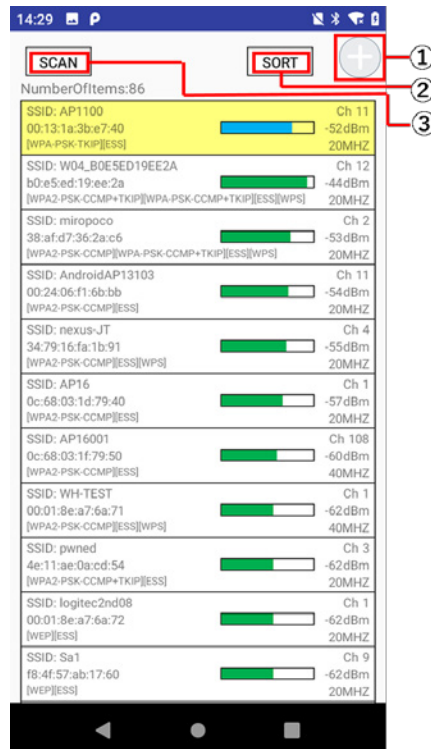
Format of each line:

YYMMDDTTMMSS,[SSID],[BSSID],[Channel],[RSSI(dBm)],[IPv4Addr]

## Scan View

This view checks neighborhood Access Points list.

When this view is displayed, Access Point scanning will take place once. After that, if [SCAN] button is touched, scanning will continuously take place until [STOP] button is touched.



- ① Switch to another view
- ② Select the display order of SCAN results
- ③ Start SCAN

### Colors:

Currently connected Access Point is shown with Blue strength bar. Other Access Points are shown with Green bar.

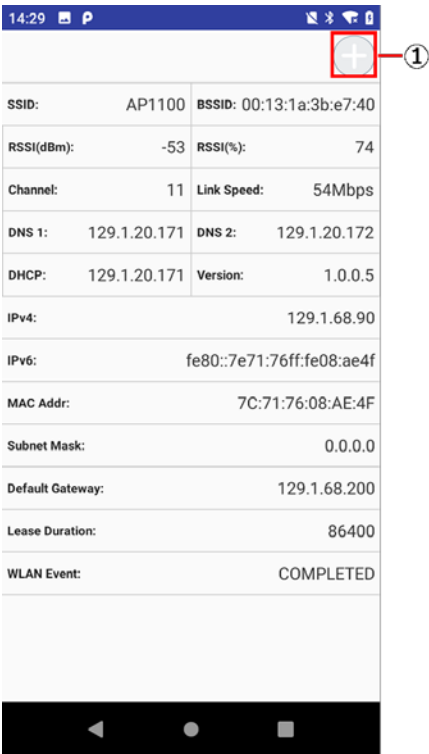
Access Points which have same SSID as currently connected are shown with Yellow background. Other Access Points are shown with White background.

### Display Order:

Currently connected Access Point is shown at top of the list regardless of sort setting. Access Points which have same SSID as currently connected are shown next. Other Access Points are shown at lower part of the list.

# Detail View

This view displays detailed information about by text.



① Switch to another view



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### 3.1.4 Scan Setting

Scan Setting is used to control the barcode scanner. This is effective when do not develop a dedicated program for barcode scanner control, such as a Web based application. For details, refer to "Barcode Scanner Control Manual".