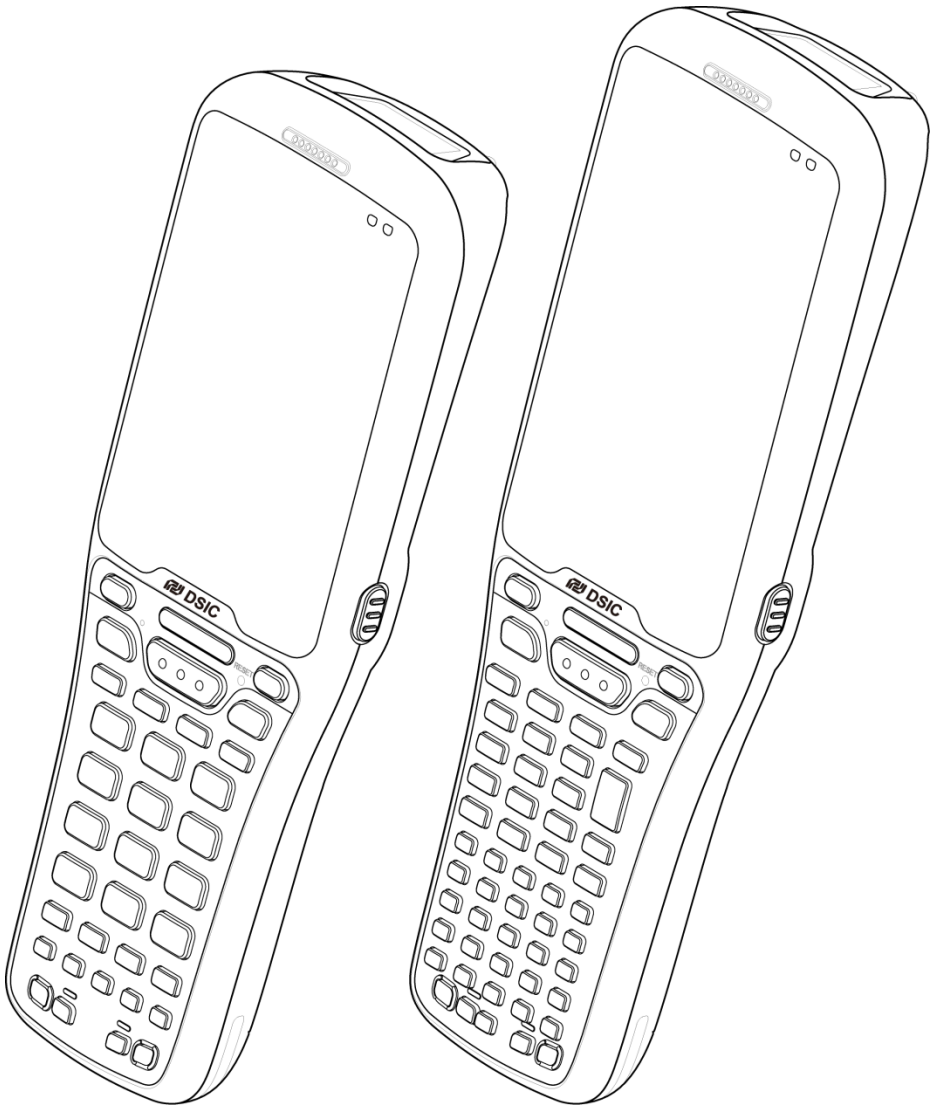
DS5-AX

User Manual

Android 4.4.2 Kitkat

Sep 10, 2015



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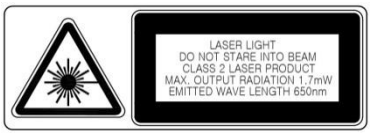
Safety Instruction

Read this instruction carefully to keep yourself safe and to avoid loss of property.

- Make sure that battery terminals (metal part) should not contact with any conductive materials like a necklace or coin. Also make sure that batteries should not be damaged by teeth or a nail. Impact may cause an explosion of batteries
- Use dedicated batteries only and do not use the batteries for any other purpose than operating this product. Using an inauthentic battery may reduce life of the product, or cause an explosion.
- Make sure to use the adapter or the standard charger supplied with this product. Using an inauthentic charger may reduce life of batteries or cause an explosion.

Caution in relation with Laser Scanner



Do not flashing scanner light in human and animal's eyes. It could cause the damage of retina and amblyopia.

Caution in relation with Batteries

- Batteries may explode when damaged, impacted, heated, flooded or taken apart with a gimlet. Make sure to keep the batteries out of reach of children or pets.
- Do not use the Product in the area with the risk of explosion.

Safety information

- This Product is compliant with EMC. For safety and health, use the authentic parts supplied by the manufacturer. Any inauthentic parts may affect safety.
- Do not press the power button when the product is wet. Touching the adapter, or power cord with wet hands may cause an electric shock.
- Do not modify, disassemble or repair the product at your discretion. Also make sure to follow the safety instructions.
- Record the data in the Product and keep it in a separate place. Data stored in the product may be deleted during repairing or upgrading the product. So, make sure to back up important data.
- Do not use this Product in a hot or humid place. Using the product under a hot/humid temperature such as rain or sauna may cause a trouble.
- Keep this Product away from magnetic products such as credit card, telephone card, bank book and traffic ticket. The magnetic field of the terminal may affect the data.

- When storing a battery for a long period of time, recharge it and keep it at a room temperature. Even a fully charged battery will suffer reduced life due to the characteristics of the battery.

Chapter 1: Introduction to the DS5-AX

The DS5-AX is rugged mobile computer for use data capture and automation in retail, warehouse and other field applications. The DS5-AX convenient features and capabilities at your hand, including barcode scanning, image capturing with built-in camera, and real-time mobile communications through WWAN and WLAN network.

This chapter will describe features of DS5-AX by front, back views, battery and power adapters.

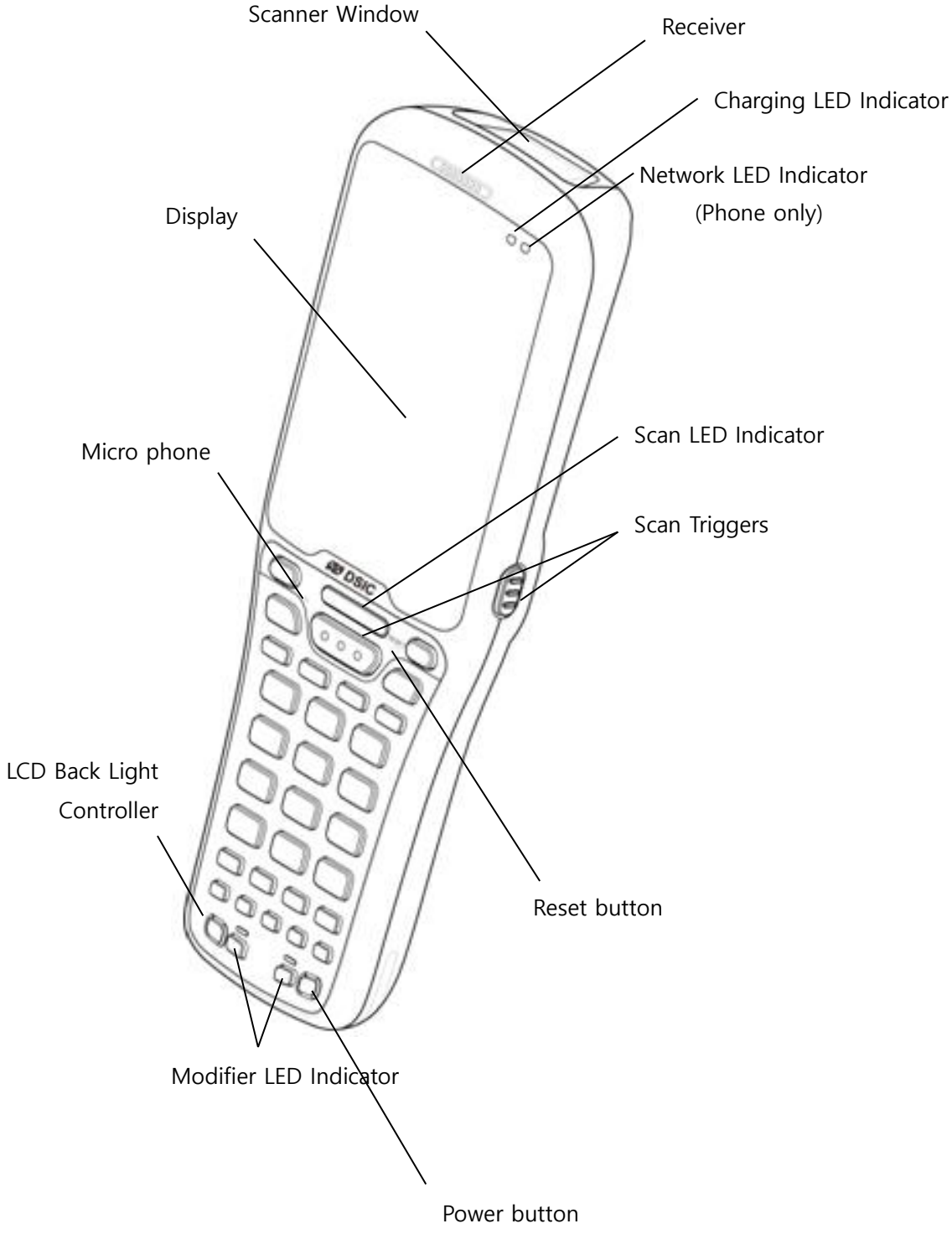
Not all features described in this guide may be available on your device. If you find that a feature is not available, contact your system administrator

Specifications

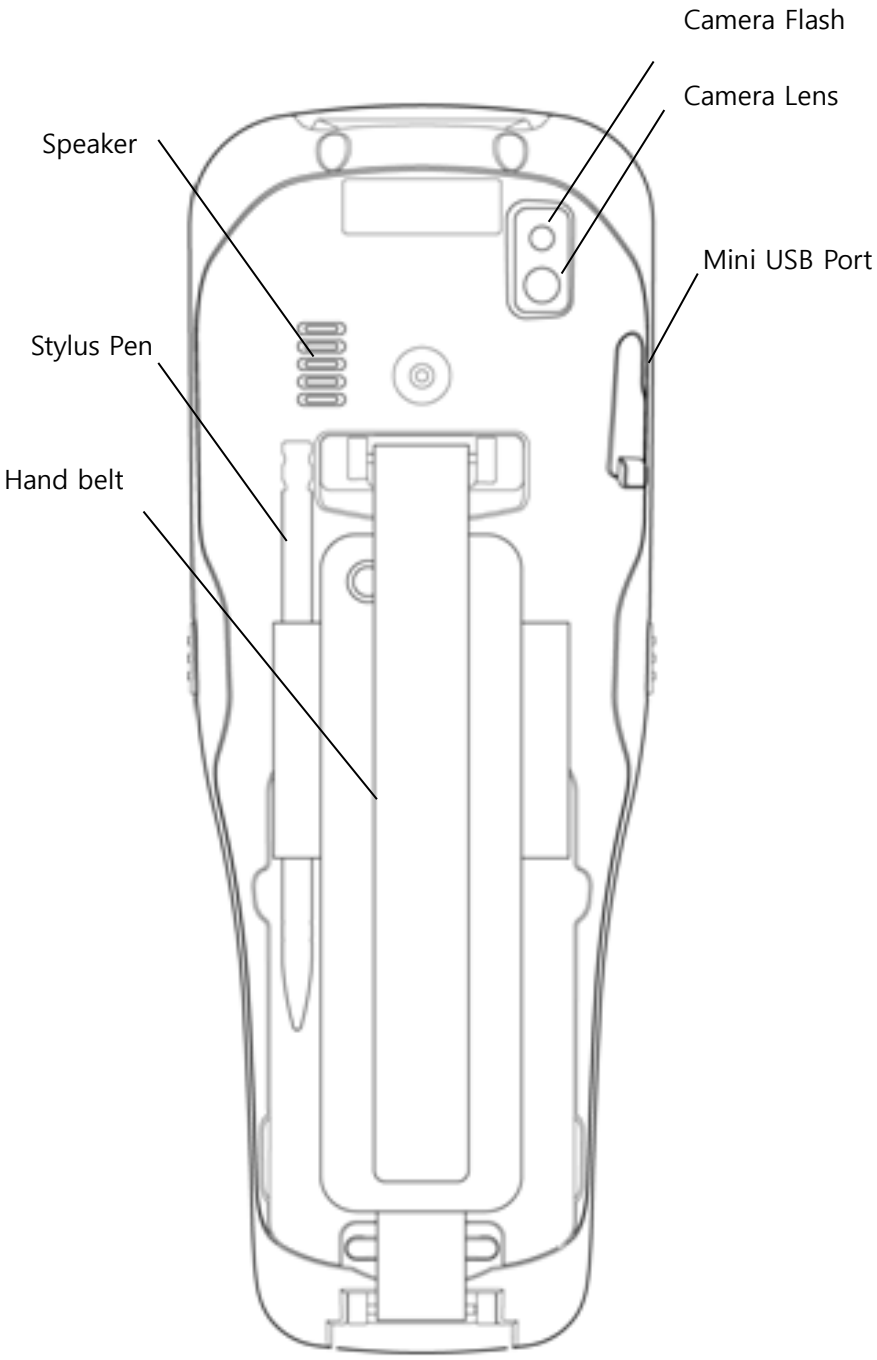
Characters	Descriptions
Display	4.3inch WVGA (480x800) IPS / Capacitive multi-touch
Dimensions (mm)	78(Grip: 58) x 225 x 58
Weight (g)	410g including battery
Battery	Li-ion 3.7V 5200mAh
Backup Battery	Li-ion 130mAh
Operating System	Android AOSP 4.4.2 KitKat
Processor	Exynos 5260 Hexa-Core (1.7GHz dual-core Cortex-A15 x 2, 1.3GHz quad-core Cortex-A7 x 4)
Memories(RAM/ROM)	LPDDR3 2GB/ 8GB
USB	USB2.0 On-The-Go (B-type)
External Interface	Micro USB, Micro SD slot, SIM slot (optional), SAM slot (optional)
Sound & Mic	Louder Speaker, Receiver, Mic
LED & Indication	Charging LED, Notification LED (Multi-color & Programmable), Vibration
Key buttons	34 Numeric Keys, Programmable F1~F10 keys) 54 Full Alpha Numeric Keys
Sensors	Ambient light sensor & Proximity sensor, 3-axis compass Motion tracking sensors (3-axis gyroscope, 3-axis accelerometer, Digital motion processor)
Sealing & Drop	IP67, 1.8m multi-drop resistance to concrete
Storage Temperature	-20°C to 70°C
Operating Temperature	-20°C to 60°C
Humidity	95% non-condensing
Regulatory	KCC, CE, FCC, CCC, RoHS complaint
Optional Integration Features	
WWAN	3.75G HSPA+/ 3G UMTS/ 2G GSM|GPRS|EDGE 4G LTE: T.B.D
WLAN	IEEE 802.11 a/b/g/n/ac
WLAN Security	WEP, WPA-PSK, WPA2-PSK, 802.1x EAP (PEAP-MSCHAPV2, PEAP-GTC, TLS, TTLS-PAP, TTLS-MSCHAP, TTLS-MSCHAPV2, TTLS-GTC, PWD)
WPAN	Bluetooth v4.0 (Bluetooth® Smart Technology)
Scanner	SE4750 imager (1D & 2D) Extraordinary scan range – Code39 barcode - 20Mil: 4.5cm - 81.3cm - 3mil: 7.9cm – 14.2cm
RFID (NFC) – **T.B.D**	13.56 MHz, ISO14443A&B, ISO15693, MIFARE, Felica, NFCIP-1, NFCIP-2
Camera	8.0M Pixel AF with Flash
GPS	Stand alone, A-GPS
Warranty	1 year manufacturer's warranty
Default Accessories	
· micro USB cable for charging & PC sync · AC/DC Adapter & Country configured adaptor plug · Screen protection film · Hand strap	
Optional Accessories	
· Desktop cradle: power, micro USB(OTG), RS232 · Gun Trigger · Bumper · Quad Battery Charger	

Overview of terminal features

DS5-AX Front View



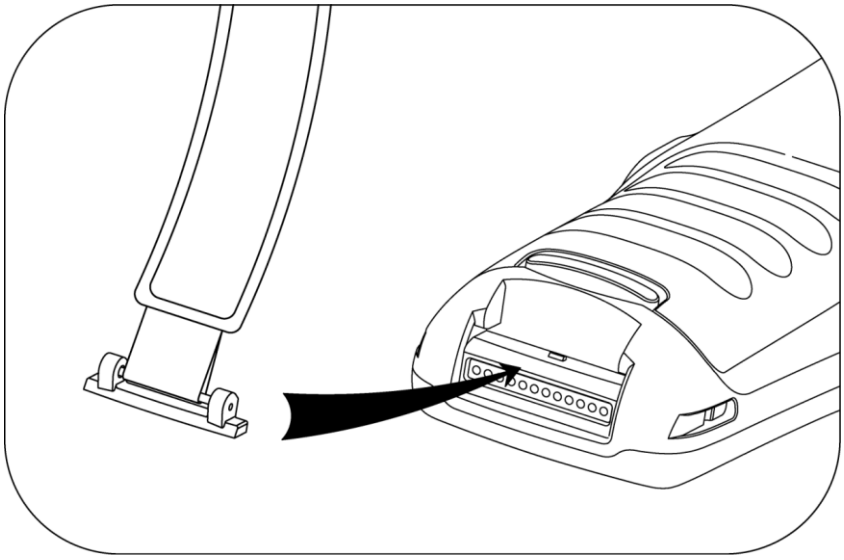
DS5-AX Back View



Hand Strap Removal and Replacement

To remove hand strap:

1. Rip the Velcro strap off
2. Take out the Velcro strap from the upper loop
3. Force to pull out lower loop from the terminal



Battery

Caution

If the Product is wet, do not put it in a device that may heat the terminal (heater, microwave oven, etc.). Heating batteries may cause an explosion, deformation or fault. (Water or any other liquid will change the color of the label inside the terminal.

Battery power source

Series	Description
DS5-AX	3.7V, 5200mAh (14.8Wh)

You may need to fully charge the battery before using your terminal for the first time. Battery can be charged using below listed accessories

Charging Accessory	Charging Time
mini USB cable	About 4hours 30minutes
Desktop cradle and AC adapter	About 4hours 30minutes
Snap on	About 4hours 30minutes
Quad battery charger	About 4hours 30minutes

Note

In combination with Vehicle cradle with Snap on, the terminal can be charged on vehicle

Power Adapter

Recharge only with the charger specified by the manufacturer.

Power Adapter	Specification
mini USB Cable	5V, 3A
Desktop cradle	5V, 3A
Snap on	5V, 3A
Quad battery charger	5V, 12A

Chapter 2: Getting Started

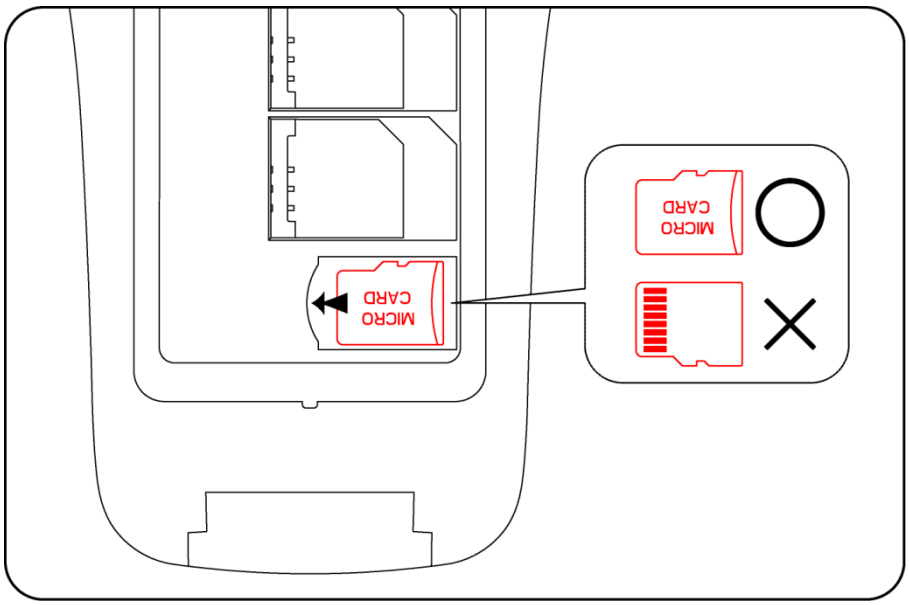
This chapter will describe how to install and charge battery, mount micro SD card and start up the terminal

To start up the terminal:

- Install Micro SD card
- Mount Battery
- Connect power source
- Operate power of the terminal

Installation micro SD card

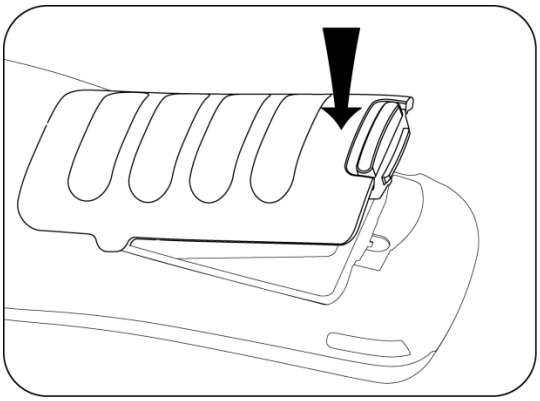
Insert the micro SD card carefully as shown in the following illustrations. Make sure the micro SD card terminal position before insert the micro SD card. Push the back end of the micro SD card to fix it at the last step.



Note

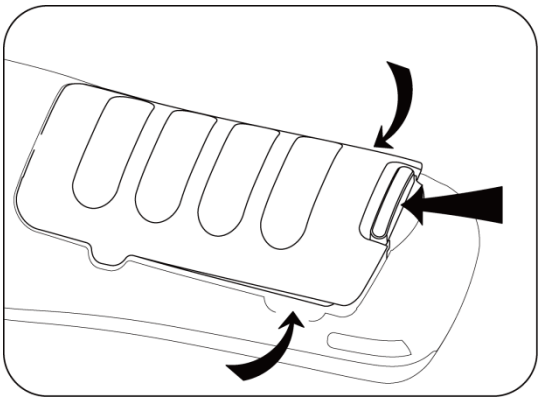
- Do not use the power too much when you insert the micro SD card. The micro SD card may be damaged
- If you install the micro SD card in the wrong position, the micro SD card may be damaged or it may cause the malfunction of the micro SD card Slot.
- Keep the terminal part of the micro SD card in clean. Be careful the terminal part of the micro SD card not to dusty
- As the micro SD card is consumable, the micro SD card end its days and may be not able to save data if you use it more than over certain times. In this case, replace micro SD card to buy a new one.

Battery Mounting and Operation



Push the battery release and mount clear the battery to terminal and gently release it.

Inserting the battery



Push the battery release toward the top of terminal until the battery released and lift it up

Remove the battery

Note

Battery Maintenance

Lithium-ion batteries have a limited life, which is affected by several factors; environment, storage, the number of charge/ discharge cycles, and level of discharge/ charge

To extend battery lifespan and battery life, we recommend following these simple guideline;

- Avoid heat and humidity
- If do not use the terminal regularly, fully recharge the battery at least once per month.
- Do not leave the terminal connected to a charging device for longer than 3 days.
- Use only charging adapter approved
- In case of storing terminal 3 months or longer,
  - The best temperature for proper care and storage is between 0~25°C
  - Extended storage can cause batteries to discharge deeply, which can deteriorate the cell and reduce battery capacity, service life and ability to recharge. It is suggested, therefore, that the battery be fully charged before putting to the terminal in extended storage and that it be recharged fully every three months while in storage
- Update the terminal Operating System as new updates available. OS updates may contain new programs to optimize battery life.

Transportation

The contained lithium ion batteries are subject to the Dangerous Goods Legislation requirements. The user can transport the batteries by road without further requirements. When being transported by third parties (e.g: air transport or forwarding agency), special requirements on packaging and labeling must be observed. For preparation of the item being shipped, consulting an expert hazardous material is required.

Disposal

Rechargeable batteries should be sorted for environmental friendly recycling. Do not disposal batteries into household waste. According to the European Guideline 2006/66/EC, defective or used battery packs/ batteries, must be collected separately and disposed of in an environmentally correct manner. Batteries no longer suitable for use can be directly returned at

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Connecting Power Source

Connect power, using one of the methods listed below.

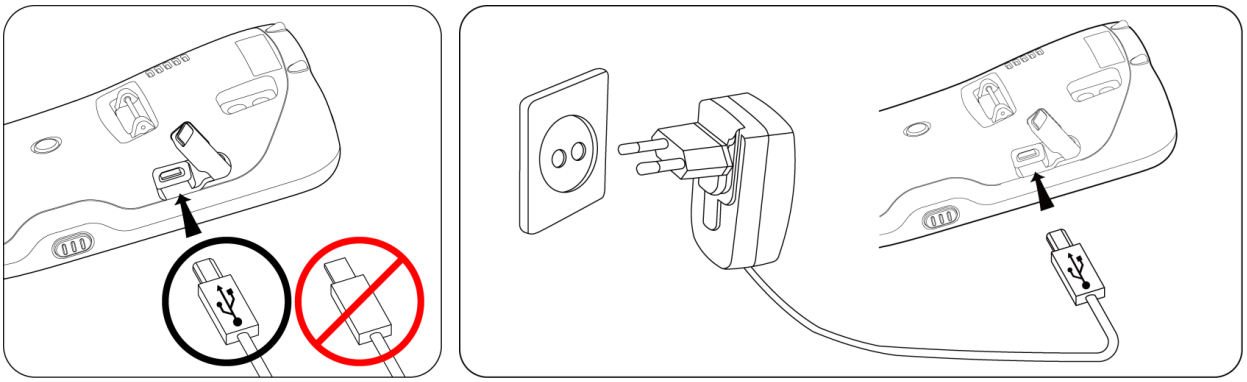
Caution

Verity that the terminal battery is installed prior to connection. If the battery is not properly installed and the wall charger is connected, the terminal may power off and on continuously, preventing proper operation.

Note

Failure to unplug the wall charger before you remove the battery, can cause damage to the terminal

To use mini USB Travel Charger



1. Plug the flat end of the mini USB Travel Charger into the Power interface connector and the other end into standard AC wall outlet
2. When charging is finished, remove the flat end from the interface connector jack on the terminal

To use Cradle

Plug the AC power cord into cradle and plug the other end into a wall outlet

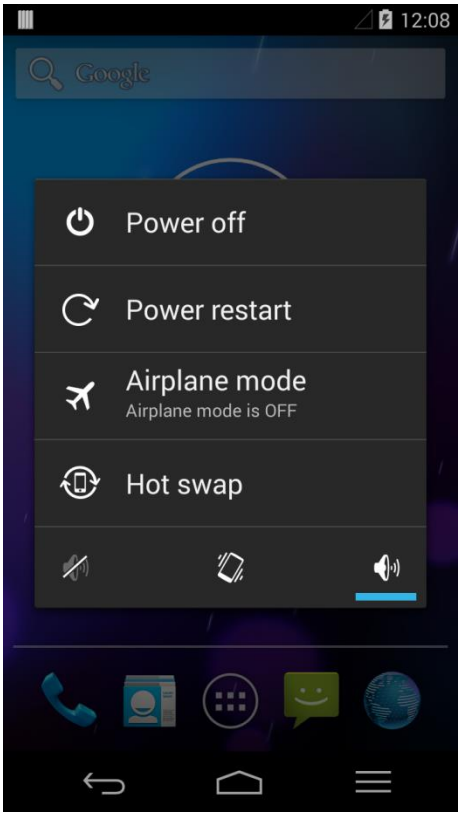
Operating power of the terminal

- Power on / off

  Make a long press **Power** button at the right side of the terminal to turn on.

  When you first turn on your device, you'll see a Welcome screen. Choose the right language you want and touch Start or the Start icon.

  Make a long press **Power** button and select **Power off**



- Sleep and Wake up

  Press **Power** button shortly to enter Sleep, or Wake up the device

- Power restart

  Make a long press **Power** button at the right side of the terminal. Select **Power restart**. Your device will shut down and restart

Note

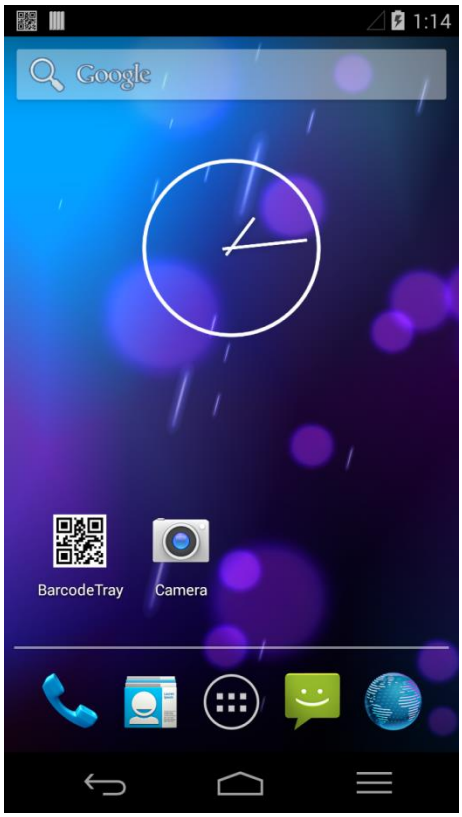
In case you need to force to restart your device, such as device hang up, long press **Power** button for 10

seconds. Your device will shut down and restart

- Hot swap
  To replace your battery without shutting down your device system, long press the **Power** button and select **Hot swap**. Then quickly replace battery. Blue LED shall be blinked.

Home Screen

Make yourself at home. After you finish setting up your device, the Home screen appears for the first time. To move between Home screens, swipe left or right.



Get around

At the bottom of every Home screen you'll find the Favorites tray: another quick way to get to your apps. Here's what it looks like on a DS5-AX.

To open an app, touch it. To drag an app in or out of the Favorites tray or anywhere else on a Home screen, touch & hold it, then move it with your finger into position.

DS5-AX navigation buttons

At the bottom of every DS5-AX screen, no matter what you're doing, you'll always find the navigation bar with three buttons:

Back

Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can't go back any further.

Home

Opens the central Home screen.

Recent apps

Press Home for few seconds to browse a list of thumbnail images of app you've worked with recently. To open an app, touch it. To remove a thumbnail from the list, swipe it left or right.

Menus

Many screens in apps and Settings include either a **menu** icon or items in the permanent Menu button at the bottom of the screen. Touch it to explore additional options, including help.

Organize your Home screens

To change the wallpaper for your Home screens, touch & hold the back ground.

To add an app icon to a Home screen:

1. Go to the Home screen where you want to place the app.
2. Touch the **All Apps** icon.
3. Swipe from right to left, if necessary, to find the app you want.
4. Touch & hold the app until the Home screen appears, slide it into place, and lift your finger.

To add a widget to the Home screen on a DS5-AX, swiping right through the All Apps screens to find the widget you want.

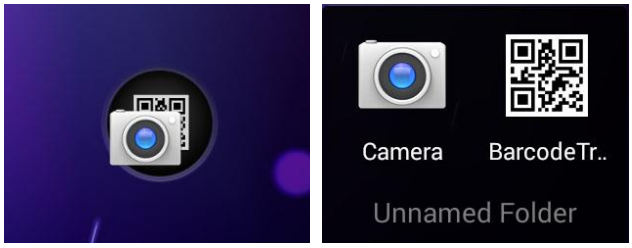
On DS5-AX, touch & hold the background of any home screen to reveal the widgets control.

To move an app or widget to another position:

1. Touch & gold the icon.

2. Slide your finger to the new position.
   To move between Home screens, slide toward the edge of the screen. To bump another icon out of the way, slide slowly into it.
3. Lift your finger.

To create a folder, slide one icon quickly over another.
To name of rename a folder, open it and touch its name.



Touch & type

To select or activate something, touch it.

To type something, such as a name, password, or search terms, just touch where you want to type. A keyboard pops up that lets you type into the field.

Other common gestures include:

- **Touch & hold.** Touch & hold an item on the screen by touching it and not lifting your finger until it responds. For example, this is how you access accent and other special characters on the keyboard.
- **Touch, hold & drag.** Touch & hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. For example, you can move apps around on the Home screen.
- **Swipe or slide.** Quickly move your finger across the surface of the screen, without pausing when you first touch (so you don't drag something instead). For example, you can slide a Home screen left of right to view the other Home screens.
- **Double-tap.** Tap quickly twice on a webpage, map, or other screen to zoom. For example, double-tap a picture in Chrome to zoom in, and double-tap again to zoom out.
- **Scale.** In some apps (such as Gallery), you can scale by placing two or more fingers on the screen at once and pinching them together (to enlarge scale) or spreading them apart (to reduce it). Alternatively, in some apps you can double-tap and then, without lifting your finger, drag up to reduce or down to enlarge the scale or the image.
- **Rotate the screen.** The orientation of most screens rotates with your device as you turn it. To lock or unlock a device's vertical orientations, swipe down from the top right of any

screen and touch the Rotation icon in Quick Settings. To do the same thing on a device, go to **Settings > Device > Display**.

You can open your device's Settings app from the All Apps screen or from Quick Settings.

For example, to change notification sounds, volumes, and more, go to **Settings > Device > Sound**

To change brightness, font size, and more, go to **Settings > Device > Display**.

Android version & updates

To check your version number or get the latest system update for a DS5-AX, first go to Settings > System > About tablet. Then look for these labels:

- **Android version.** Look partway down the list for this heading and the number just below it.
- **OTA Update Start.** Touch to check whether you have any pending system updates.

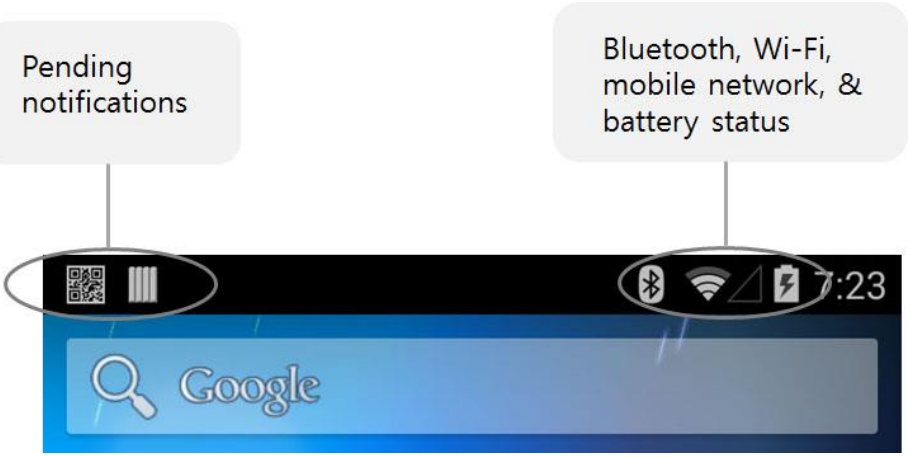
For comprehensive online help and support, including details about Android 4.4, visit http://support.google.com/android

Chapter 3: Essentials

Notifications & settings

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as ongoing events, such as video downloads.

When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons showing things like Wi-Fi signal, mobile carrier signal, or battery strength on the right:



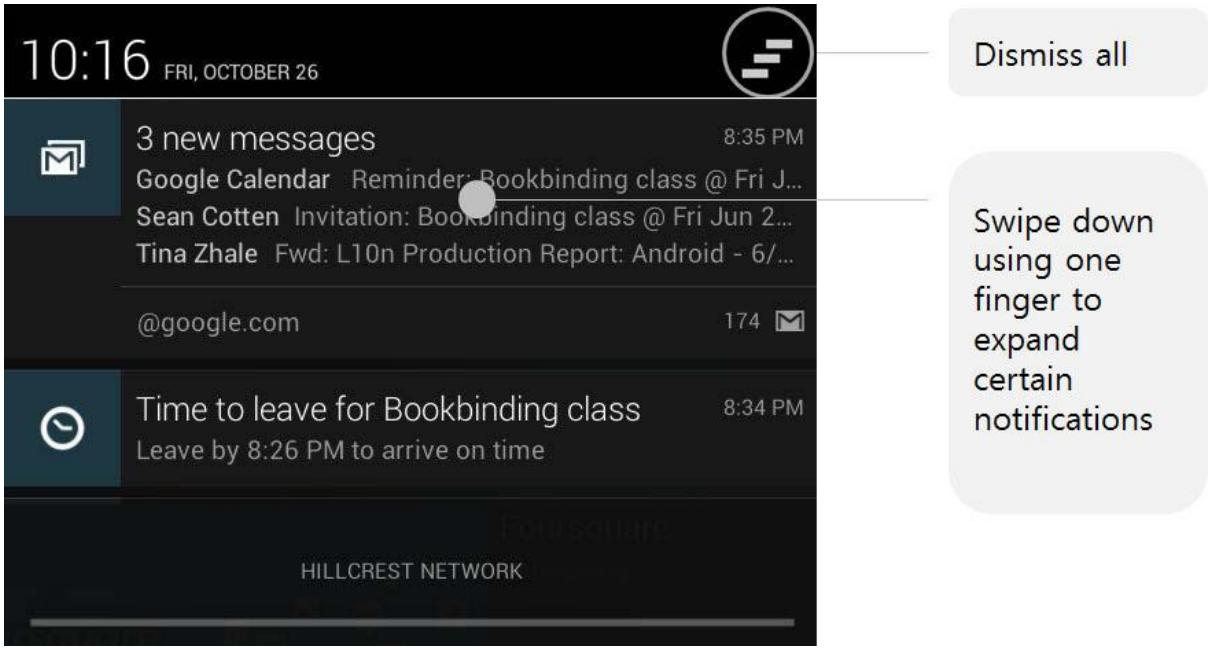
TIP: Wi-Fi and mobile signal strength are indicated at the top of the screen by white bars. To see whether the selected Wi-Fi network has a full internet connection, open Quick Settings: swipe down from the top right on tablets, or with two fingers on the phones.

In Quick Settings only, white bars in the Wi-Fi or mobile signal indicators indicate the signal strength of a normal internet connection.

Certain notifications can be expanded to show more information, such as email preview. The one at the top is always expanded when possible. To expand a notification, position one finger inside it and swipe down slowly.

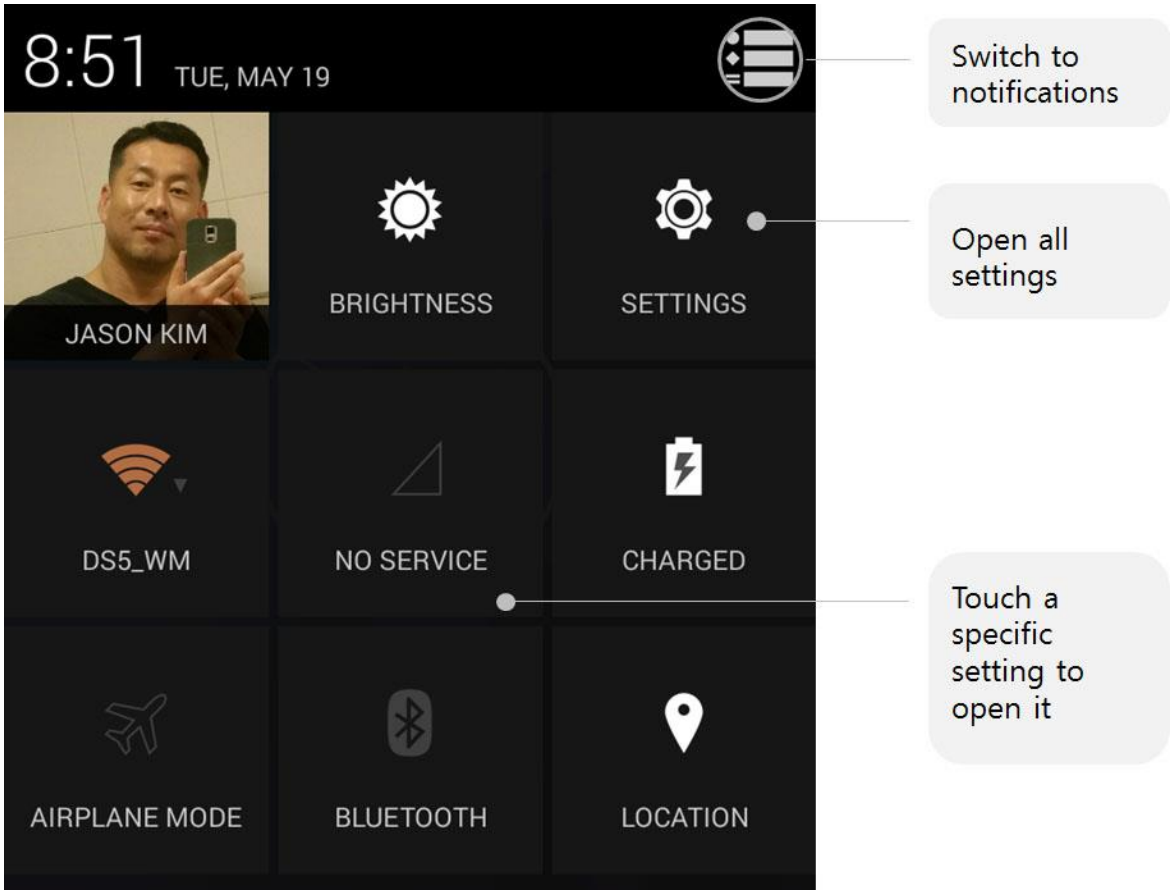
To open the related app, touch the notification icon on the left. Some notifications also allow you to take specific actions by touching icons within the notification.

When you finished with a notification, just swipe it away. To dismiss all notifications, touch the Dismiss icon at the top right.



Quick Settings

Use Quick Setting to easily access Wi-Fi settings, manage display brightness, open the main Settings menu, and more. To open Quick Settings, swipe down from the top of the screen with two fingers



If you have a signal but no internet connection, the bars indicating the strength of the Wi-Fi or mobile signal turn orange.

Lock screen

If a lock is set for your screen, the screen goes dark and locks when the display goes to sleep or if you press the Power button.

You can set locks of different strengths using lock settings:

1. Go to **Settings > Personal > Security > Screen lock**.
2. Touch the type of lock you'd like to use.

Lock screen actions

From the lock screen:

- One a phone, regardless of the lock you choose, it's always easy to take a picture. Swipe left from the right edge to bring Camera into view.

For more information, visit Customize the lock screen.

Android Beam

You can beam a web page, a video, or other content from your screen to another device by bringing the devices together (typically back to back).

Before you begin: Make sure both devices are unlocked, support Near Field Communication (NFC), and have both NFC and Android Beam turned on. To check, go to **Settings > Wireless & networks > More**. Also make sure you know where the NFC area is on the back of both devices – typically in the center.

1. Open a screen that contains something you'd like to share, such as a webpage, YouTube video, or place page in Maps.
2. Move the back of your device toward the back of the other device. When the devices connect, you hear a sound, the image on your screen reduces in size, and you see the message **Touch to beam**.
3. Touch your screen anywhere.
   The other device displays the transferred content.

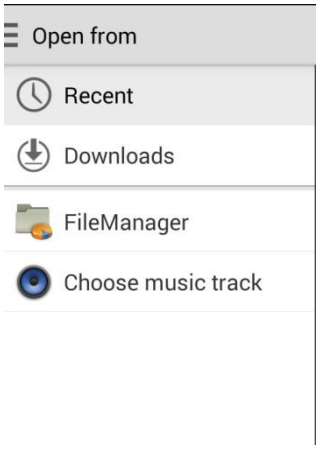
To turn on NFC, go to **Settings > Wireless & networks > More > NFC**.
To turn on Android Beam, go to **Settings > Wireless & Networks > More > Android Beam**.

File storage

Android 4.4 makes it easy to store and browse through pictures, videos, and other files on your device and attach them to an email, Hangout message, and so on. You can also use stored images as your Home screen wallpaper.

For example, to attach an image to an email you're composing, choose **Menu** > **Attach picture** or **Attach Video**.

A set of thumbnails appears. To view more choices, touch the ☰ Drawer icon at the top left. You'll see something like this:



From here, you can view any of these sources:

- **Recent** shows you the photos or video you've taken or opened most recently.
- **Images** displays any photos, videos, or other images on your device.
- **Downloads** includes most files (excluding Play content) you've downloaded from emails or the Web
- **Gallery** lets you browse all the images and videos that have been uploaded to your account.

Use the Downloads app to view, reopen, or delete files you download from email or other sources (excluding videos, magazines and other media)

In the downloads app:

- Touch an item to open it.
- Touch headings for earlier downloads to view them.
- Check items you want to share. Then touch the Share icon and choose a sharing method from the list.
- Check items you want to delete. Then touch the Trash icon.
- At the bottom of the screen, touch **Sort by size** or **Sort by date** to switch back and forth.

Screenshots

To take a screenshot from DS5-AX:

1. Make sure the image you want to capture is displayed on the screen.
2. Press the Power and Volume down buttons simultaneously.

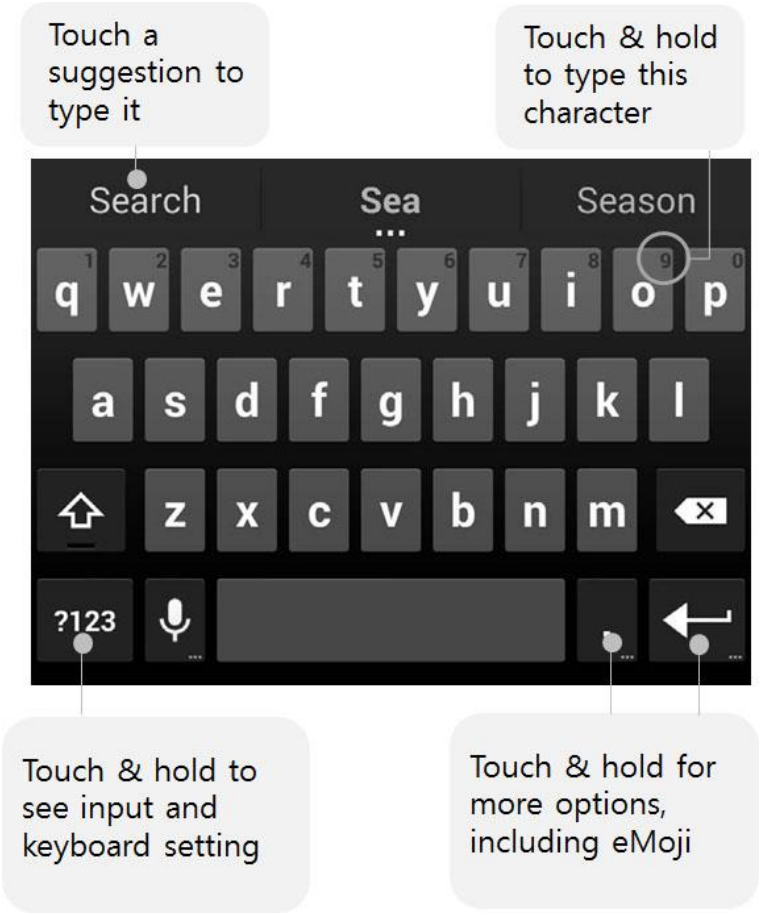
The screenshot is automatically saved in your Gallery.

TIP: To easily share your screenshot via message, or Bluetooth, and email, swipe down the notification shade and touch the Share icon, or email icon below the previous of your screen shot.

Chapter 4: Use the keyboard

Enter & edit text

Use the onscreen keyboard to enter text. Here's what it looks like on a DS5-AX device:



To make the keyboard go away, touch the Back button below it.

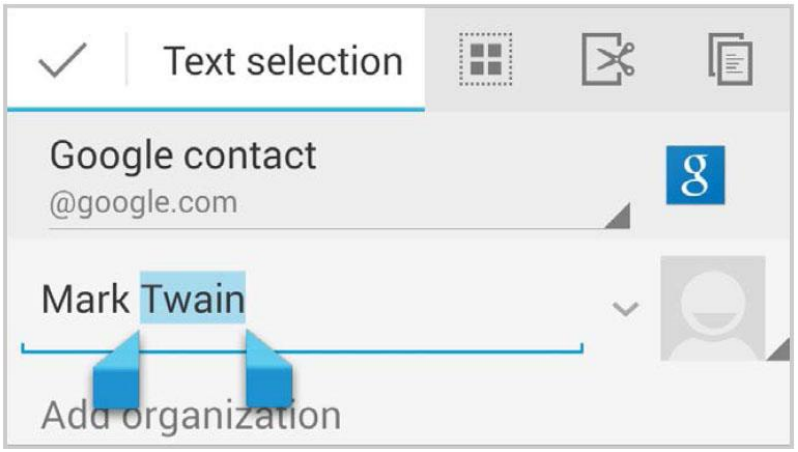
Some apps open the keyboard automatically. In others, you first need to touch where you want to type.

Basic editing

- **Move the insertion point.** Touch where you want to type. The cursor blinks in the new position, and a blue tab appears below it. Drag the tab to move the cursor.
- **Select Text.** Touch & hold or double-tap within the text. The nearest word highlights, with a tab at each end of the selection. Drag the tabs to change the selection. The tab disappears after a few moments. To make it reappear, touch the text again.
- **Delete text.** Touch to delete selected text or the characters before the cursor.
- **Type capital letters.** Touch the Shift key once to switch to capital letters for one letter. Or

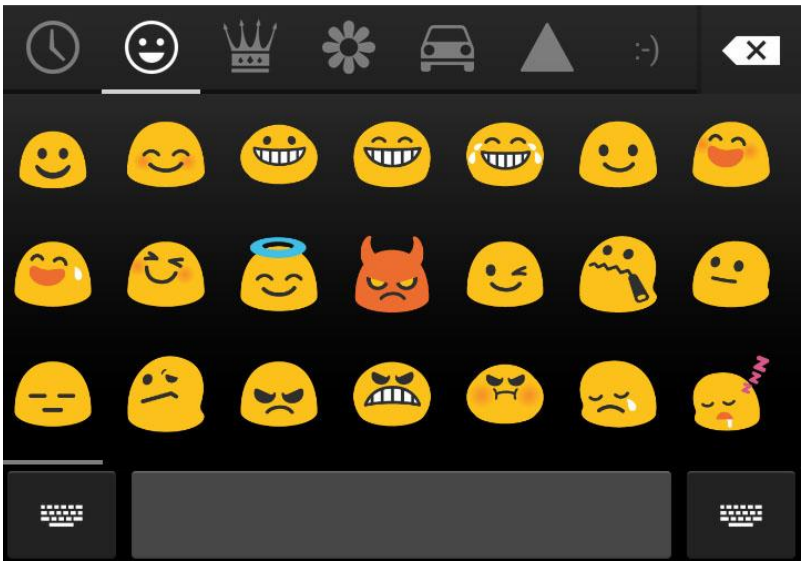
touch & hold Shift key while you type. When you release the key, the lowercase letters reappear.

- **Turn caps lock on.** Double-tap or touch & hold Shift key, so it changes to . Touch Shift key again to return to lowercase.
- **Cut, copy, paste.** Select the text you want to manipulate. Then touch the **Cut** or **Copy** icons. If there's something on the clipboard to paste, you'll also see a **paste** button:



Emoji

Android 4.4 vastly expands the variety of emoji available at your fingertips. Touch and hold the Return key to display emoji. You'll see a panel like this. To move between categories, swipe left or right or touch the symbols in the top row. To type an emoji, touch it:



Use next-word suggestions

1. Touch the location where you want to input text.
2. Start typing out a word. When the word you want is displayed in a list above the key

board, touch it.

3. Continue to touch words unless the one you want doesn't appear. If so, type it. Android continues to suggest words as you type.

To change your keyboard and input methods, go to **Settings > Personal > Language & input.**

To turn next-word suggestion on or off, go to **Setting > Personal > Language & input methods > Android keyboard**. Touch the Setting icon, then check the box next to **Next-word suggestions**.

Keyboard dictionaries

To manage keyboard dictionaries, go to **Setting > Personal > Language & input**.

Personal dictionary

You can add your own words to your personal dictionary so that your device remembers them. To add a word or phrase, including an optional shortcut, touch **Personal Dictionary**, then the Add icon.

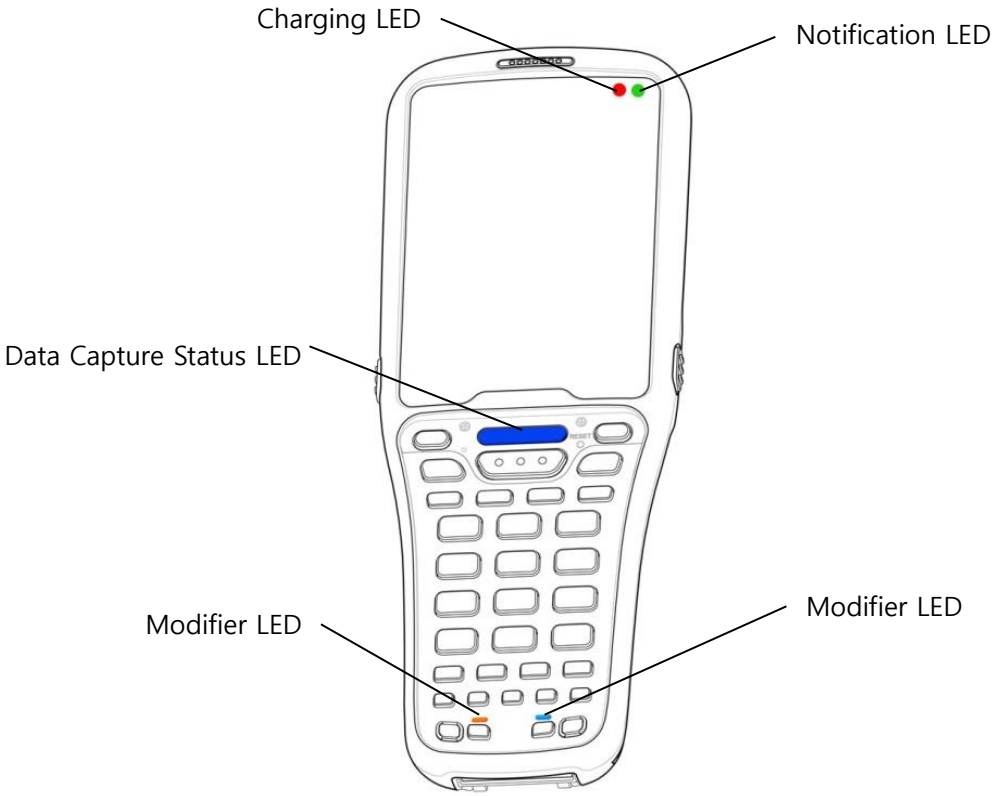
Add-on dictionaries

1. Touch the Settings icon next to **Android keyboard**.
2. Touch **Add-on dictionaries**. You'll see dictionaries for other languages that you can download to your device.
3. Touch the dictionary you want, then **Install**.

LEDs

LED indicates status of the terminal in power sourcing, data capture, network connection

Location of the DS5 Status LEDs



LED Appearance upon terminal feature

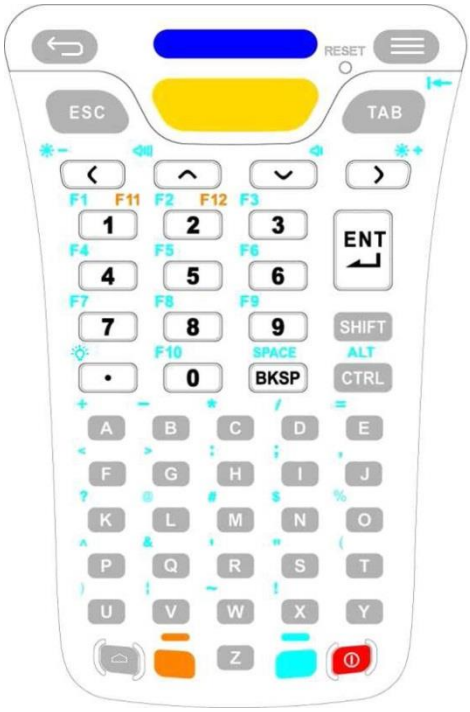
Feature	Color	Description
Data capture status LED	Blue	Good read barcode, or RFID
	Red	The terminal is in charging status
Charging LED	Green	The terminal has fully charged
	Off	Phone off status, or modem is not included in the terminal configuration
Notification LED	Blue blinking	When battery change when select Hot Swap menu

Keypad

DS5-A comes with large numeric keypad including function 1~10, full alphanumeric keypad

Numeric Keypad

Full Alphanumeric Keypad



Enter characters on Numeric Keypad

Following explains how to make continuous character input. For single character input, please refer **Key Strokes**.

You need to use **orange modifier key** and **blue modifier key** to access all characters and functions on Numeric Keypad

Input lower character continuously

- Press twice
- Toggle key one to four times depending on the position of the alphabet.
- Press one time to return to numeric input

Input upper character continuously

- Press twice
- Press SHIFT twice, then shall be displayed right bottom of the screen.
- Toggle key one to four times depending on the position of the alphabet.
- Press SHIFT one time to return lower character
- Press one time to return to numeric input

For example

- type **DEF**
- Press twice, SHIFT twice, 3, 3 3, 3 3 3

Upon repetition of SHIFT key press, input method varied

Status Bar	Shift Repetition	Remark
12	Default	Return to default
⇧	SHIFT	Single shift function. Return back to default after 1 time key stroke
⬆	SHIFT SHIFT	Fixed shift function. Shift functions are effective at multi key strokes

Enter characters on Full Alphanumeric Keypad

Following explains how to make continuous character input. For single character input, please refer **Key Strokes**.

Input numeric

- Press required numeric key button from 1~0.
- With modifier keys, special functions can be programmable from F1 to F20.
- Press , then press Numeric key to use F1 ~ F10.
- Press to use F11 ~ F20

Input Alphabet

- Default input is lower alphabet character
- In case single Alphabet character input, press SHIFT then press a Alphabet
- In case continuous Alphabet character input, press SHIFT twice then press Alphabet keys

For Example

- Input **A1a2**
- Press SHIFT, A, 1, A, 2

> **Note**
> When you press SHIFT key 1 time, it is effective only 1 time. Input icon status:
> If you need continuous upper character input, press SHIFT twice to fix the function. Input icon status:

- Input **ACDZY**
- Press SHIFT SHIFT, then A, C, D, Z, Y

Configure the Display Back Light

Set LCD display brightness of your terminal.

Press twice , then configure level of your favorable LCD back light brightness pressing > to brighter (☀+) and < to dimmer (☀−). Dimmer lessens power consumption of the terminal.

function lets you to switch back and forth to the brightness you have configured. Press button and then to dimmed brightness, and press again the button to back to the brighter display.

Adjust Volume

Press twice amber green modifier then configure level of your sound volume pressing to volume up ( )and button to volume down ( )

Chapter 5: Try some apps

All Apps

To see all your apps, touch the All Apps icon in the Favorites tray on any Home screen.

This is where you can see all your apps. You can move app icons to any of your Home screens.

From All Apps, you can:

- **Move between screens.** Swipe left or right.
- **Open an app.** Touch its icon.
- **Place an app icon on a Home screen.** Touch & hold the app icon, slide your finger, and lift your finger to drop the icon in place.
- **Brose widgets.** Touch the Widgets tab at the top of any All Apps screen.

To remove an app icon from the Home screen without removing it permanently from your device, touch & hold it, slide your finger toward the top of the screen, and drop the app over the ✕ Remove icon.

To view info about an app from an All App screen, touch & hold it, slide your finger toward the top of the screen, and drop the app over the ⓘ App Info icon.

Phone

Using a DS5-AX, you can place calls from the Phone app, the People app, or other apps or widgets that display contact information. Wherever you see a phone number, you can usually touch it to dial.

To place a call to one of your contacts:

1. Touch the Phone icon on a Home or All Apps screen
2. To choose someone to call, scroll or search. If the keypad's in the way, touch the Back button to lower it.
3. To place a call, touch the contact's name.

To view recent calls, touch the ◷ call log icon at the bottom of the screen. To use the keypad,

touch keypad icon.

Camera

The Camera app lets you take photos, panoramic photos, videos, and immersive 360-degree photo sphere shots, including what's above and below you.

To open Camera:

- From the lock screen, swipe from right to left.
- From the Home screen, touch the Camera icon.

The first time you open Camera, you may be asked if you want it to remember photo locations.
The shutter and other controls float above the framed image at the bottom of the screen.

The camera icon indicates Camera mode. To take a picture in this mode:

1. Frame your subject and watch for the focus ring:

   To focus on a different part of the image, touch it.
2. When the focus ring brackets change color, touch the shutter.
3. To see the image you just took, swipe from right to left.
   Keep swiping to see other images in your Gallery.

To change to a different mode, touch the Mode icon:

Video

To start recording a video, touch the red shutter button. Touch it again to stop.

Panorama

To take a panoramic , touch the blue shutter button, slowly pan across the scene, and touch the button again to stop.

Gallery

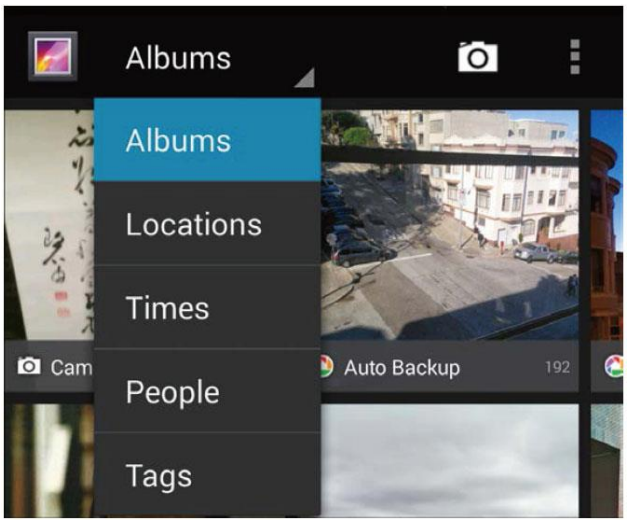
Gallery

The Gallery app gives you an easy way to browse pictures and videos you've taken with Camera. It also displays screenshots and auto backups from other devices.

To open Gallery from the:

- Camera app. Swipe from right to left.
- Home screen. Touch the Gallery icon.

To get to the top level of the Gallery app, touch the icon at the upper left. From there, open the drop-down menu to view the available categories.



Within each category you can browse groups of images, crop, edit, and tag them, create slideshows, make pictures or videos available offline, and share with friends.

People

The People app gives you quick access to everyone you want to reach. To open it, touch the People icon on a Home or All Apps screen. If you use Exchange, you can also sync that contact information with People.

When you open the People app, you can:

- **View all contacts, favorites, or groups.** Choose from the top left of the screen.
- **Read details.** Touch a name to see details for a contact or group.
- **View recent activity.** When viewing a contact, swipe to the right to see recent updates.
- **Edit details.** While viewing a contact, touch icons at the top of the screen or the Menu icon to edit or share contact details, delete a contact, and so on. You can touch the star besides the contact's name to add that contact to your Favorites list.
- **Change your settings.** While viewing the main list screen, touch the menu to import or export contacts, choose display options for the Group and All tabs, and add or edit accounts.

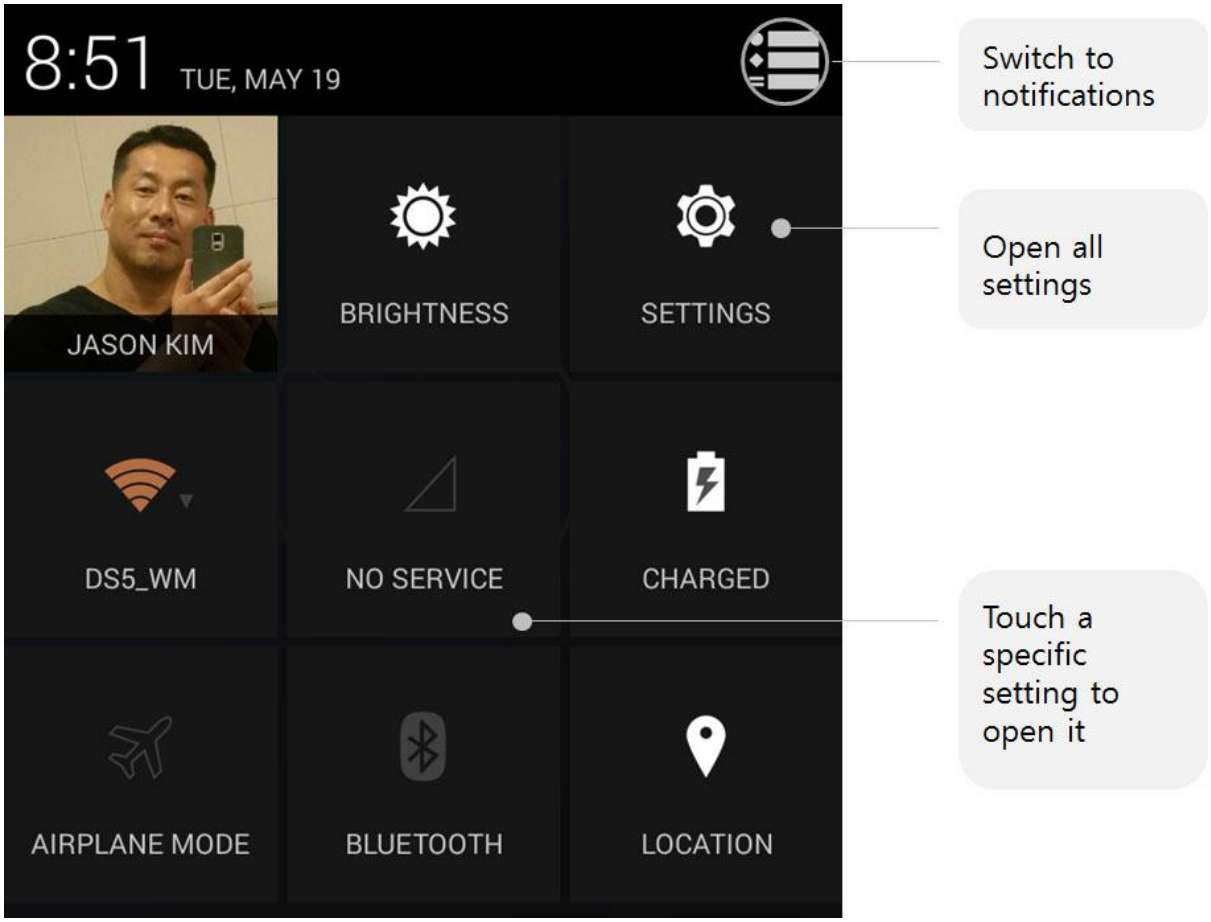
No matter where you are within People, you can always get back to the main lists by touch the People icon at the top of the screen.

Chapter 6: Settings

Most apps include their own settings, typically available from **Menu** > **Settings** on DS5-AX devices.

The fastest way to adjust system settings that you access frequently, such as Wi-Fi or brightness, is through Quick Settings.

Here are the Quick Settings for a DS5-AX phone:



To open Quick Settings, swipe down from the top of the screen the Settings icon.

The Settings app controls the core Android settings for networks, hardware, location, security, language, accounts, and so on.

Chapter 7: Accessibility

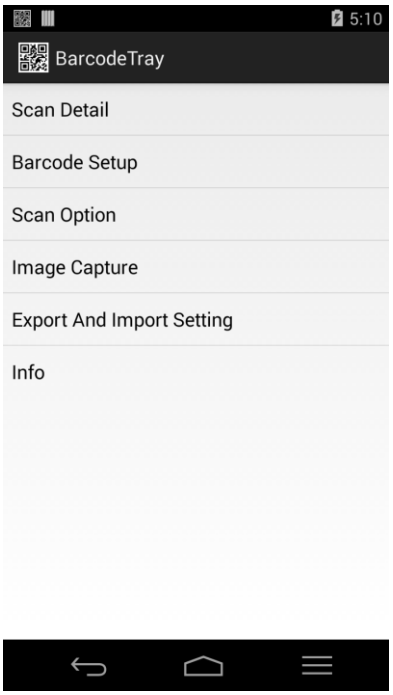
To use the accessibility options, open **Settings > System > Accessibility**.
Accessibility settings let you modify your device's display and sound options, such as increasing the text size, changing the speed at which text is spoken, and more.

You can also try magnification gestures which allow you to zoom in and out, as well as temporarily magnify what's under your finger. To try magnification gestures, go to **Settings > Accessibility > Magnification gestures**.

Chapter 8: Application Guide

Barcode Tray

To activate Barcode Tray program, touch barcode tray icon at your screen.



Scan Detail

Text view the scanned barcode

Barcode Setup

Setting to enable, or disable barcode types

Scan Option

Setting scanning feature, such as time out, prefix and suffix, scanner key setting, notification options and etc.

Image Capture

View image and capture the view from the imager scanner

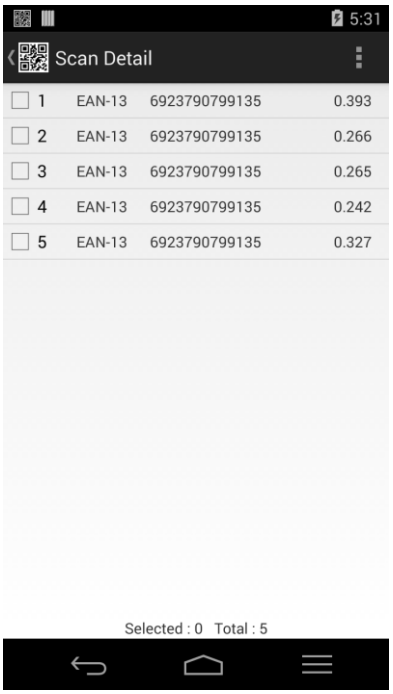
Export And Import Setting

Set up barcode configuration by programming, or export the set up to file

Info

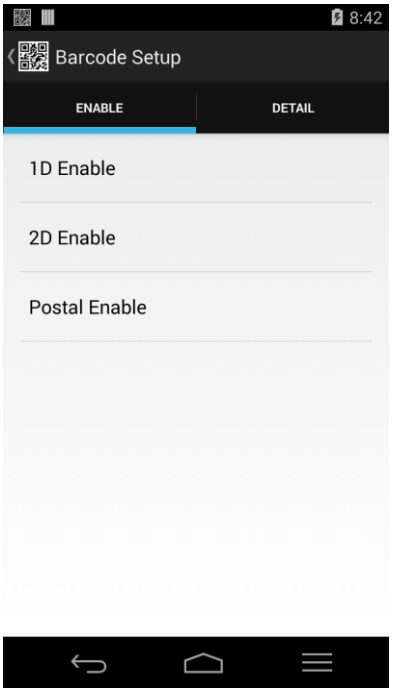
Demonstrate the installed barcode scanner to your device and application version information of your barcode scanner.

Scan Detail



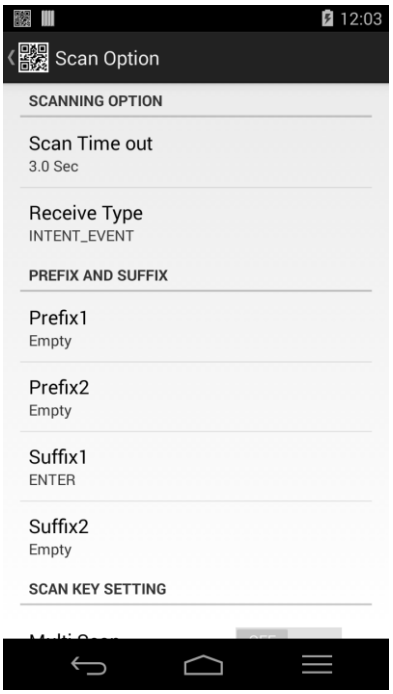
Demonstrate scanning data details

Barcode Setup



Setting to enable, or disable barcode types

Scan Option

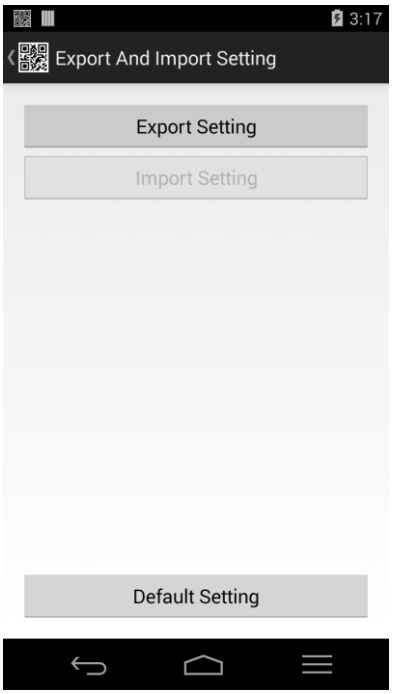


Setting scanning feature, such as time out, prefix and suffix, scanner key setting, notification options and etc.

Image Capture

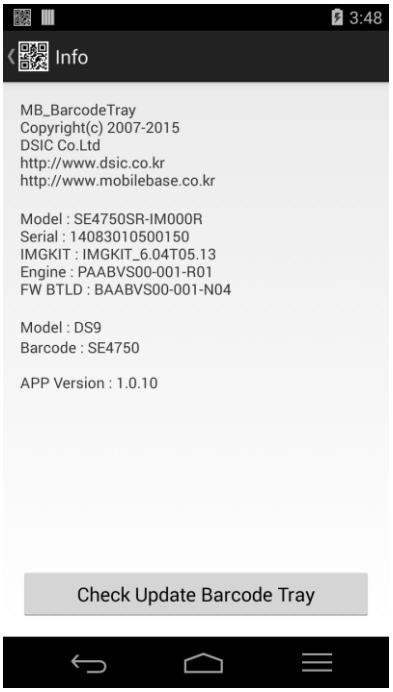
View image and capture the view from the imager scanner

Export And Import Setting



Set up barcode configuration by programming, or export the set up to file

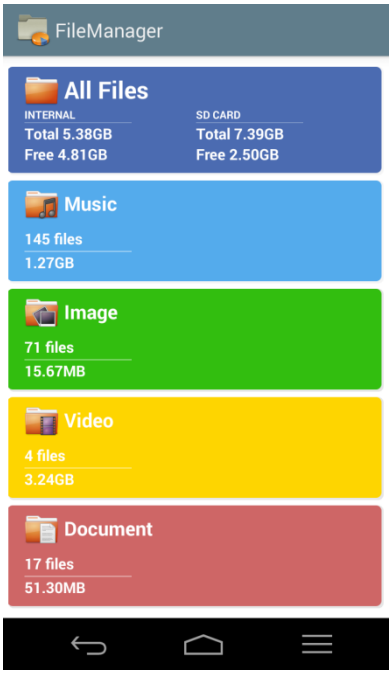
Info



Demonstrate the installed barcode scanner to your device and application version information of your barcode scanner.

Barcode tray program is able to be updated by **OTA Update**

File Manager

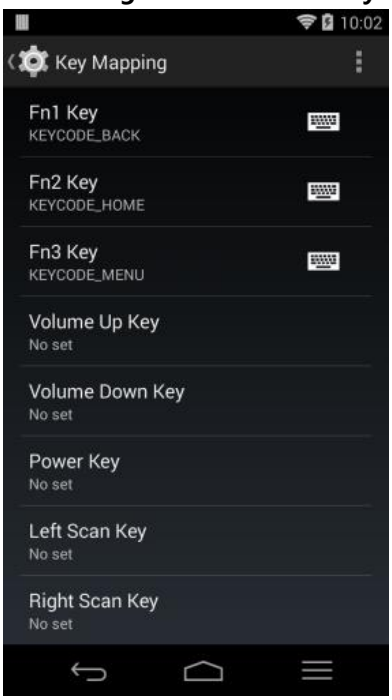


It demonstrates capacity of internal memory and SD card memory. File search, move, delete, rename. share, and property is available.

Key Mapping

It is enabling you to create a shortcut for repeating a sequence of keys or commands.

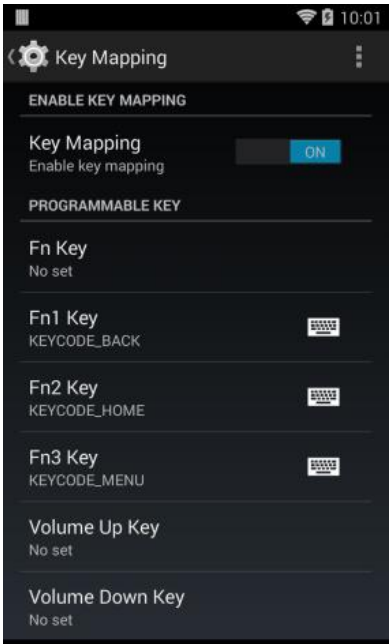
Go **Settings** > **Personal** > **Key Mapping**



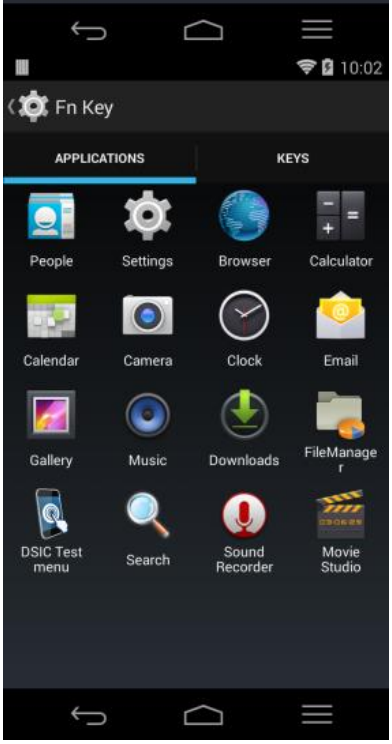
Total 9 hardware Keys as below are able to be set as your sequenced key or short cut to execute application.

Fn, Fn1, Fn2, Fn3, Volume (Up), Volume (Down), Power, Scan (Left), Scan (Right)

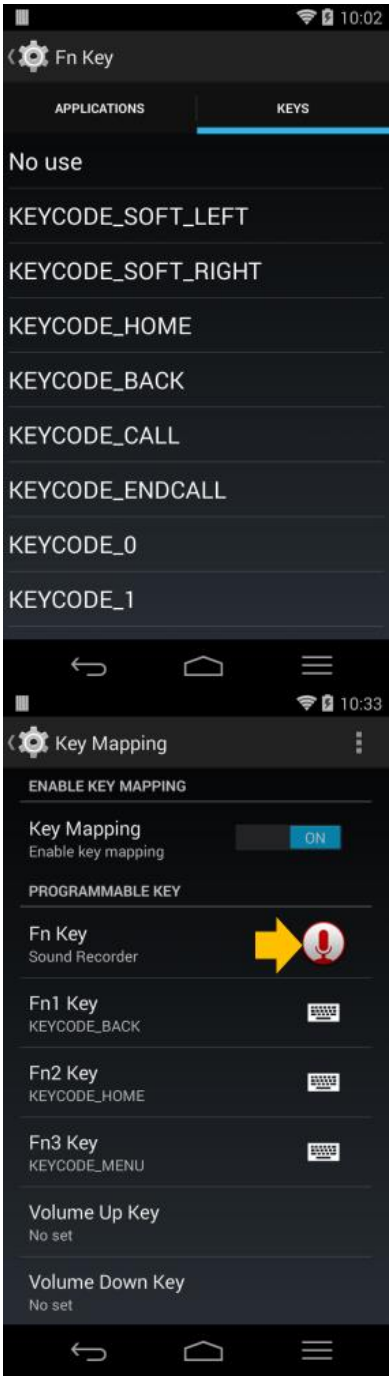
Key Mapping is On by default.
Fn1, Fn2, Fn3 has set by Back, Home



Select one of key in **PROGRAMMABLE KEY**



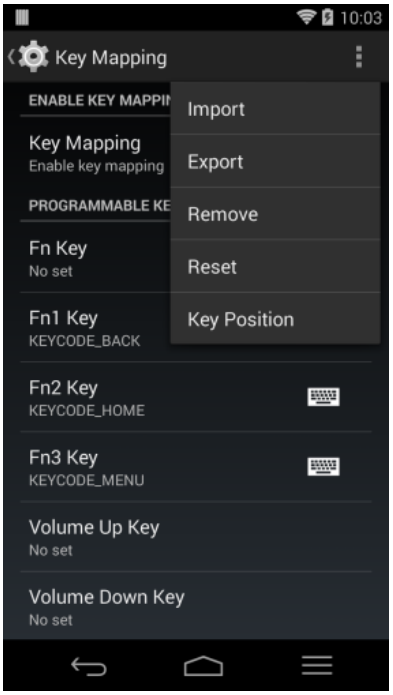
You can select an application to short cut for execution



Or, swipe the screen to left to set sequence.

When you select No use, then the key has no function

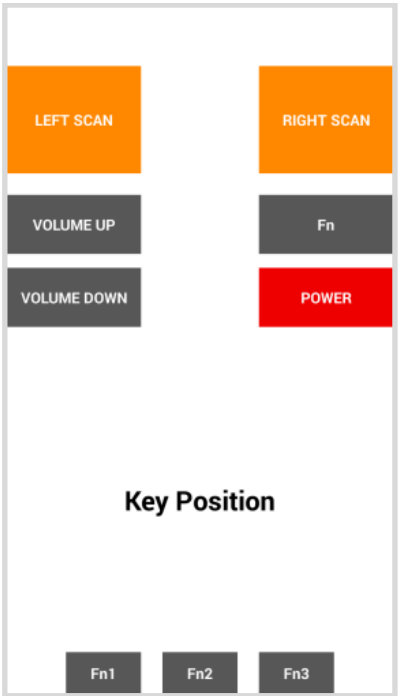
To reset the function key, press the icon. Then you can reset the config.



Press Menu icon ☰ to import, export, remove, or reset your key mapping configuration

Key Position

You can set your key mapping with graphic interface as below



OTA Update

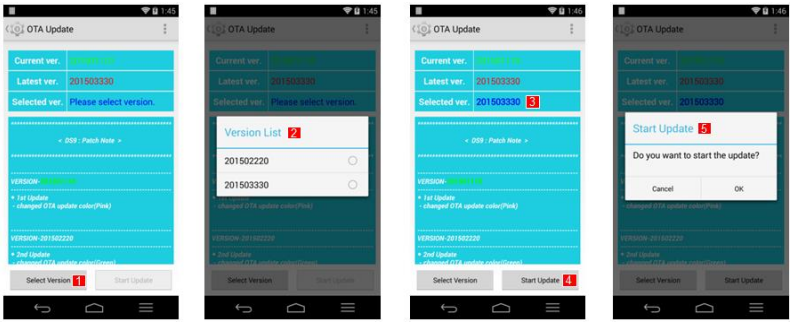
Go to Settings > About phone > OTA Update Start > OTA Start

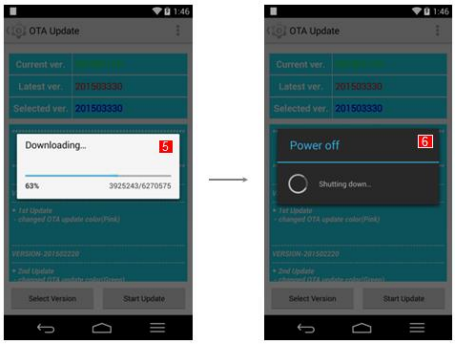
Check your available latest OS update at **Select Version**

Then touch **Start Update** button if you have available OS update.

After new OS download, your device will be restarted

Examples

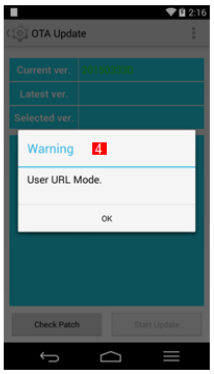




OS update by your own URL

Select Menu icon

Examples



Chapter 9: Developer's Guide

USB Driver

If you are Android developer, please download from below link and install on your PC before you connect DS5-AX to your PC. This is shell for ADB synchronization between your PC and DS5-AX.

ADB: Android Development Bridge

This driver is useful when you have "Unknown device" message at your PC while you are connecting DS5-AX to your PC.

https://www.dropbox.com/s/zkfqn3hesnnr60v/DS9_usb_driver.zip?dl=0

OS Update

You shall need below 5 types of files

- Boot.img
- Boot_ui_logo.bin
- Recovery.img
- System.img
- U-boot.bin

Update Instruction

Download your OS and install on your device as below

- Copy the firmware 5 images to root/sdfuse folder of the SD card
- Input micro SD card into your device
- **WHILE** pressing and holding **ESC** + **2** simultaneously, short press **Reset** key for seconds to turn on your device and, afterward to enter

DSIC SD Download screen

- When OS image file has been copied and installed completely, **Done** will be displayed on your device screen.
- After the **Done** message, long press **reset** key to restart your device

For latest OS, please contact your sales, or http://www.mobilebaseglobal.com

Barcode scanner API

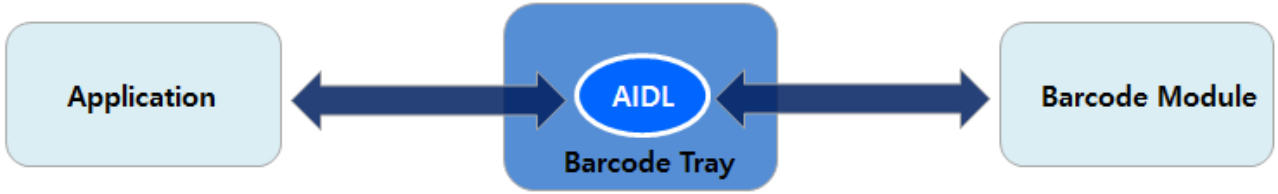
Environments

To develop barcode scanner feature on your application, please download 2 files from below link.

- Barcode Sample_dsic
- DS9_usb_driver

https://www.dropbox.com/sh/ptm624a0gdfppl6/AACl0WrBVNxDp1DG0em5Fg6Za?dl=0

SDK made by AIDL(Android Interface Definition Language) and Android SDK 19 version (Kitkat). AIDL service starts at Barcode Tray. To use SDK, Barcode Tray must be turned on.



Software Development Framework

Please refer below environment description of **Barcode Sample**

- Development Tool: Android Studio
- Android SDK version: API 19 (Kitkat 4.4.2)
- Interface: AIDL and Broadcast
- Tested version: JDK 1.6.0_45

Please refer Scan Start button and Stop button on the API. The structure is to control scanner module using AIDL for binding to barcode service

Basic Implementation

In case decode data without AIDL, The decoded data is spread by Broadcast. Two action shall be required, such as **Declaration** and **registry**.

- Example of global declaration of broadcast

```
BroadcastReceiver mBarcodeReadBroadCast = new BroadcastReceiver() {
        @Override
        public void onReceive(Context context, Intent intent) {
            if (intent.getAction().equals("app.dsic.barcodetray.BARCODE_BR_DECODING_DATA")) {
                BarcodeDeclaration.SYMBOLOGY_IDENT symbology_ident =
                        BarcodeDeclaration.SYMBOLOGY_IDENT.fromInteger(
                                intent.getIntExtra("EXTRA_BARCODE_DECODED_SYMBOLE", -1));
                TextView editText = (TextView) findViewById(R.id.editText);
                if (symbology_ident != BarcodeDeclaration.SYMBOLOGY_IDENT.NOT_READ) {
                    String data =
                            "["+symbology_ident.toString()+"]"+
                                    intent.getStringExtra("EXTRA_BARCODE_DECODED_DATA");
                    editText.setText(data);
                }else
                {
                    editText.setText("NOT READ");
                }
            }
        }
```

```
};
```

- Name of Decoding Broadcast (*Modifiable*): app.dsic.barcodetray.BARCODE_BR_DECODING_DATA

- In case to modify the name of Decoding Broadcast, please use AIDL API.

- Decoding Broadcast contains below *Symbology Identification* and *Decoding data*

Contents	Type	Default Value	Description
Symbology identification	Integer	-1	It will be get with getIntExtra function. - Name of Extra: EXTRA_BARCODE_DECODED_SYMBOLE In case your decoding fail, such as *Scan stop*, or *Scan Time out*, you still shall be received Broadcast without decoded data.
Decoding data	String	UTF-8	It will be get with getStringExtra function. - Name of Extra: EXTRA_BARCODE_DECODED_DATA

- Example of registry broadcast

```
@Override
protected void onResume() {
        super.onResume();
        /*Set Broadcast receiver*/
        registerReceiver(mBarcodeReadBroadCast,
                new IntentFilter("app.dsic.barcodetray.BARCODE_BR_DECODING_DATA"));
}

@Override
protected void onPause() {
        super.onPause();
        /*AIDL Service disconnect*/
        unregisterReceiver(mBarcodeReadBroadCast);
}
```

Note: Above examples are an example. You can also add at Androidmanifest.xml.

Controlling scanning & barcode using AIDL

It is able to control scanning and barcode setting used by AIDL, such as start and stop, disabling specific symbology identification. Below is introduction of some general part of function out of AIDL which is including many functions. Many of functions don't need to intent service implement. Some are using only barcode tray. For details, please refer Common APIs.

Step 1: Connect to AIDL

```
import app.dsic.barcodetray.IBarcodeInterface;

    private IBarcodeInterface mBarcode;
    /*AIDL Service Connection*/
     private ServiceConnection srvConn =
                new ServiceConnection() {
                    @Override
                    public void onServiceConnected(ComponentName name, IBinder service) {
                        mBarcode = IBarcodeInterface.Stub.asInterface(service);
                    }

                    @Override
                    public void onServiceDisconnected(ComponentName name) {
                        mBarcode = null;
                    }
```

```
            };
    @Override
    protected void onResume() {
        super.onResume();
        /*AIDL Service connect*/
        bindService(new Intent("app.dsic.barcodetray.IBarcodeInterface"),
                        srvConn, BIND_AUTO_CREATE);
     }

    @Override
    protected void onPause() {
        super.onPause();
        /*AIDL Service disconnect*/
        unbindService(srvConn);
    }
```

Step 2: Copy *IBarcodeInterface.aidl* package in your source code. Then, make *serviceConnection* global value and set barcode. Barcode interface value. Bind and unbind service at resume and pause.

The API related files

API has consisted as below;

- BarcodeDeclaration.java
- IBarcodeInterface.aidl

BarcodeDeclaration.java

This is declaration files related to return value and parameter. Below is meaning of each declaration in the file;

- BARCODE_RESULT: API return value
- RECEIVE_TYPE: Receiving method for decoded data
- SCAN_NOTIFICATION: Determine how to notification when decoding barcode
- DELAY_MODE: Determine the speed of data transmission when keyboard event mode
- SYMBOLOGY_IDENT: It changes the broadcasted *Symbology ident integer* to actual data
- SYMBOLOGY_ENABLE: It determines usability for a specific symbology

Please refer below table for return values and parameters of each declaration

Declaration	Type	Related APIs	Values		Applied Version
			Value	Description	
BARCODE_RESULT	Return Value	All APIs	RESULT_SUCEESS	Success	1.0.11
			RESULT_UNKNOWN	Unknown result	1.0.11
			RESULT_NOT_YET_IMPLEMENT	Unimplemented API	1.0.11
			RESULT_NOT_SUPPORT	Not supporting in this version	1.0.11
			RESULT_OPENED	You are trying to open again, even while it has been open already	1.0.11
			RESULT_CLOSED	You are trying to close again, even while it has been closed	1.0.11

				already	
			RESULT_OPEN_FAIL	Barcode scanner open fail	1.0.11
			RESULT_NOT_ON_SCANNING	Do not use anymore	1.0.11
			RESULT_SCAN_DISABLE	Scanning disable status	1.0.11
			RESULT_DRIVER_ERROR	Error in barcode driver layer	1.0.11
RECEIVE_TYPE	Parameter Value	・void SetRecvType(int nRecvType) ・int GetRecvType()	INTENT_EVENT	It is receiving data with INTENT method. Regarding **Action Name** and **Extra Value** of the specific INTENT, please refer below; **・GetIntentName()** **・GetIntentBarcodeData()** **・GetIntentSymData()**	1.0.11
			KEYBOARD_EVENT	Print decoding data typing with virtual keyboard	1.0.11
			CLIPBOARD_EVENT	After putting the decoded data in Clipboard, print it using **Menu** + **V** key	1.0.11
SCAN_NOTIFICATION	Parameter Value	・Int GetScanSuccessNoti() ・void SetScanSuccessNoti(int nNoti) ・int GetScanFailNoti() ・void SetScanFailNoti(int nNoti)	NOTI_MUTE	No sound	1.0.11
			NOTI_SOUND	Sound	1.0.11
			NOTI_VIB	Vibration	1.0.11
			NOTI_SOUND_VIB	Sound and vibration	1.0.11
DELAY_MODE	Parameter Value	・int GetDelayMode() ・void SetDelayMode(int nMode) ・int GetCustomDelayTime() ・void SetCustomDelayTime(int nDelayTime) ・int GetDelayTime()	DELAYMODE_NONE	0 sec	1.0.11
			DELAYMODE_SLOWLY	0.1 sec	1.0.11
			DELAYMODE_NORMAL	0.01 sec	1.0.11
			DELAYMODE_FAST	0.001 sec	1.0.11
			DELAYMODE_USER_DEFINITION	User programmable option	1.0.11
SYMBOLOGY_IDENT	Symbology identity	・BroadcastReceiver (@Override public void onReceive(Context context, Intent intent)	Please refer BarcodeDeclaration.java file		1.0.11
SYMBOLOGY_ENABLE	Parameter Value	・boolean SE4750_SetSymbologyEnable(int nIdent,boolean bEnable)	Please refer BarcodeDeclaration.java file		1.0.11

IBarcodeInterface.aidl

These files are to communicate with barcode service

Name	Description of function	Parameter	Return Value	User Accessibility	Version
Open()	It activates barcode scanner module	None	Int (BARCODE_RESULT)		1.0.11
Close()	It deactivates barcode scanner module	None	Int (BARCODE_RESULT)		1.0.11
IsBarcodeOpened()	It is to check activation status of barcode scanner module	None	boolean	√	1.0.11
ScanStart()	It starts barcode scanning	None	Int (BARCODE_RESULT)	√	1.0.11
ScanStop()	It stops barcode scanning	None	Int (BARCODE_RESULT)	√	1.0.11
IsScanEnable()	It is to check usability of barcode scanning	None	boolean	√	1.0.11
SetScanEnable(booleanbEnable)	It is to set to enable/disable scanning	boolean bEnable	void	√	1.0.11
GetVersionInfo()	It brings version information of the scanner module	None	String	√	1.0.11
SetScanTimeout()	It is to set maximum term of reading per single trigging	float nTimeout	boolean	√	1.0.11
GetScanTimeout()	It is to get maximum term of reading per single trigging	None	float	√	1.0.11
GetRecvType()	It determines how to receive decoded data between Intent, keyboard, or clipboard methods	None	Int (RECEIVE_TYPE)	√	1.0.11
SetRecvType(int nRecvType)	it is to check how to receive decoded data between Intent, keyboard, and clipboard methods	int nRecvType	void	√	1.0.11
SetPrefix1(String strPrefix1)	It determines value of the first prefix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	String strPrefix1	boolean		1.0.11
GetPrefix1()	It is to check value of the first prefix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	None	String		1.0.11
SetPrefix2(String strPrefix2)	It determines value of the second prefix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	String strPrefix2	boolean		1.0.11
GetPrefix2()	It is to check value of the second prefix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	None	String		1.0.11
SetSuffix1(String strSuffix1)	It determines value of the first suffix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	String strSuffix1	boolean		1.0.11
GetSuffix1()	It is to check value of the first suffix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	None	String		1.0.11
SetSuffix2(String strSuffix2)	It determines value of the second suffix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	String strSuffix2 It is available for only 1 character.	boolean		1.0.11

		Example: "A" "a" "B" "b" *Exception:* EMPTY: "EMPTY" TAB: "TAB" ENTER: "ENTER" SPACE: "SPACE"			
GetSuffix2()	It is to check value of the second suffix in KEYBOARD_EVENT, or CLIPBOARD_EVENT	None	String		1.0.11
GetEnableKeyupStop()	It is to determine scan stop, or maintain until time out after release scanner trigger. If you set to **true**, it stops immediately. If **false**, it maintains until time out	None	Boolean		1.0.11
SetEnableKeyupStop(boolean bSetEnableKeyupStop)	It is to determine scan stop, or maintain until time out after release scanner trigger. If you set to **true**, it stops immediately. If **false**, it maintains until time out	boolean bSetEnableKeyupStop	void		1.0.11
GetMultiScan()	It gets choice of multi scanning availability	void	Boolean		1.0.11
SetMultiScan(boolean bEnable)	It set choice of multi scanning availability	boolean bEnable	void		1.0.11
GetScanSuccessNoti()	It gets what kind of alarm event when scanning succeed	void	Int (SCAN_NOTIFICATION)	√	1.0.11
SetScanSuccessNoti(int nNoti)	It set what kind of alarm event when scanning succeed	int nNoti	void	√	1.0.11
GetScanFailNoti()	It gets what kind of alarm event when scanning fail	void	Int (SCAN_NOTIFICATION)	√	1.0.11
SetScanFailNoti(int nNoti)	It set what kind of alarm event when scanning fail	int nNoti	void	√	1.0.11
GetDelayMode()	It gets Delay Mode	void	Int (DELAY_MODE)	√	1.0.11
SetDelayMode(int nMode)	It sets Delay Mode	int nMode	void		1.0.11
GetCustomDelayTime()	It gets Delay Time for user customized delay	void	Int		1.0.11
SetCustomDelayTime(int nDelayTime)	It set Delay Time for user customized delay	int nDelayTime	void		1.0.11
GetDelayTime()	It gets current Delay Time	void	Int		1.0.11
GetIntentName()	It gets Action Name of broadcast when Intent Event Default value: "app.dsic.barcodetray.BARCODE_BR_DECODING_DATA"	void	String	√	1.0.11
SetIntentName(String	It is to set Action Name of broadcast when Intent Event	String IntentName	void	√	1.0.11

IntentName)					
GetIntentBarcodeData()	It gets Action Name of broadcast when Intent Event. Default value: "EXTRA_BARCODE_DECODED_DATA"	Void	String	√	
SetIntentBarcodeData(String BarcodeData)	It is to set Barcode Data Name when Intent Event	String BarcodeData	void	√	
GetIntentSymData()	It gets name of barcode symbology data of broadcast when Intent event Default value: "EXTRA_BARCODE_DECODED_SYMBOLE"	Void	String	√	
SetIntentSymData(String SymData)	It set barcode symbology name of broadcast when Intent Event	String SymData	void	√	
GetDecodingCharset()	It gets the used charset when decoding	Void	String	√	
SetDecodingCharset(String strCharset)	It sets using Character Set when decoding	[1] SetDecodingCharset(String strCharset)	boolean	√	
GetURLDirection()	It get the choice to view with internet browser when barcode has included URL	Void	boolean		
SetURLDirection(boolean bEnable)	It determines to show with internet browser when barcode has included URL	boolean bEnable	boolean		
SetAllSymbologyEnable()	It is enabling all types of barcode symbologies	None	Void	√	
SetAllSymbologyDisable()	It is disabling all types of barcode symbologies	None	Void	√	
SetSymbologyEnable(int nIdentifier,boolean bEnable)	It is enabling/ disabling for specific barcode symbologies	int nIdent * SYMBOLOGY_IDENT boolean bEnable * Scanning availability	Boolean	√	

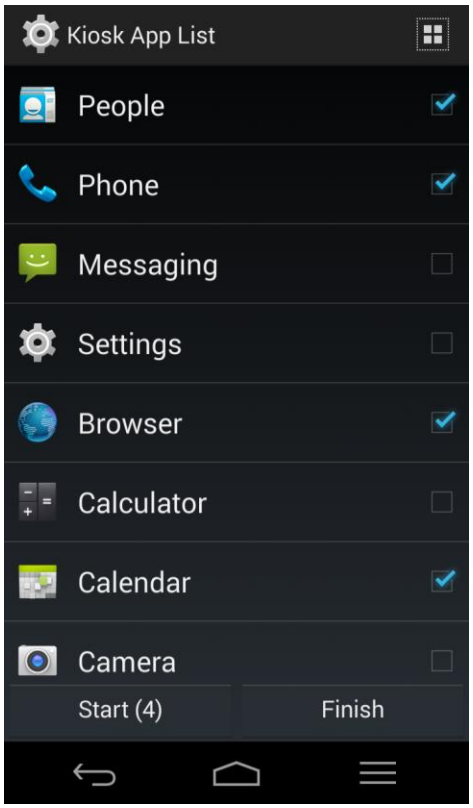
[1] **Available character set**: IBM00858, IBM437, IBM775, IBM850, IBM852, IBM855, IBM857, IBM862, IBM866, ISO-8859-1, ISO-8859-2, ISO-8859-4, ISO-8859-5, ISO-8859-7, ISO-8859-9, ISO-8859-13, ISO-8859-15, KOI8-R,KOI8-U, US-ASCII, UTF-8, UTF-16, UTF-16BE, UTF-16LE, UTF-32, UTF-32BE, UTF-32LE, x-UTF-32BE-BOM, x-UTF-32LE-BOM, windows-1250, windows-1251, windows-1252, windows-1253, windows-1254, windows-1257, x-IBM737, x-IBM874, x-UTF-16LE-BOM, Big5, Big5-HKSCS, EUC-JP, EUC-KR, GB18030, GB2312, GBK, IBM-Thai, IBM01140, IBM01141, IBM01142, IBM01143, IBM01144, IBM01145, IBM01146, IBM01147, IBM01148, IBM01149, IBM037, IBM1026, IBM1047, IBM273, IBM277, IBM278, IBM280, IBM284, IBM285, IBM297, IBM420, IBM424, IBM500, IBM860, IBM861, IBM863, IBM864, IBM865, IBM868, IBM869, IBM870, IBM871, IBM918, ISO-2022-CN, ISO-2022-JP, ISO-2022-KR, ISO-8859-3, ISO-8859-6, ISO-8859-8, JIS_X0201, JIS_X0212-1990, Shift_JIS, TIS-620, windows-1255, windows-1256, windows-1258, windows-31j, x-Big5-Solaris, x-euc-jp-linux, x-EUC-TW, x-eucJP-Open, x-IBM1006, x-IBM1025, windows-1258, windows-31j, x-Big5-Solaris, x-euc-jp-linux, x-EUC-TW, x-eucJP-Open, x-IBM1006, x-IBM1025, x-IBM1046, x-IBM1097, x-IBM1098, x-IBM1112, x-IBM1122, x-IBM1123, x-IBM1124, x-IBM1381, x-IBM1383, x-IBM33722, x-IBM834, x-IBM856, x-IBM875, x-IBM921, x-IBM922, x-IBM930, x-IBM933, x-IBM935, x-IBM937, x-IBM939, x-IBM942, x-IBM942C, x-IBM943, x-IBM943C, x-IBM948, x-IBM949, x-IBM949C, x-IBM950, x-IBM964, x-IBM970, x-ISCII91, x-ISO2022-CN-CNS, x-ISO2022-CN-GB, x-iso-8859-11, x-JIS0208, x-JISAutoDetect, x-Johab, x-MacArabic, x-MacCentralEurope, x-MacCroatian, x-MacCyrillic, x-MacDingbat, x-MacGreek, x-MacHebrew, x-MacIceland, x-MacRoman, x-MacRomania, x-MacSymbol, x-MacThai, x-MacTurkish, x-MacUkraine, x-MS950-HKSCS, x-mswin-936, x-PCK, x-SJIS_0213, x-windows-50220, x-windows-50221, x-windows-874, x-windows-949, UTx-windows-950, x-windows-iso2022jp

KIOSK MODE

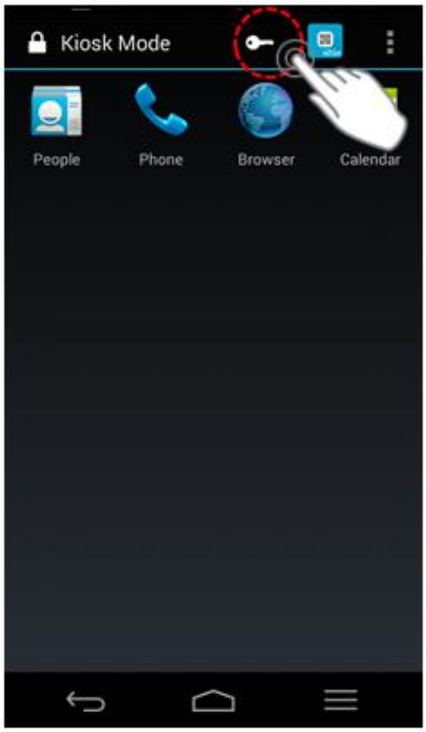
Kiosk mode is enabling to lock down unwanted device misuse. It is to control which application and device features can be used by user such as blocking access to games, social media apps and etc. When you allow access to business application apps, KIOSK MODE will ensure that the user can not access anything other than those allowed application.

Select **Settings** > **Kiosk Mode** > **Enable Kiosk Mode** > Input Admin Password: default **"374254675"**

After enter Kiosk Mode, select necessary applications from **Kiosk App List** as below. Then touch **Start**

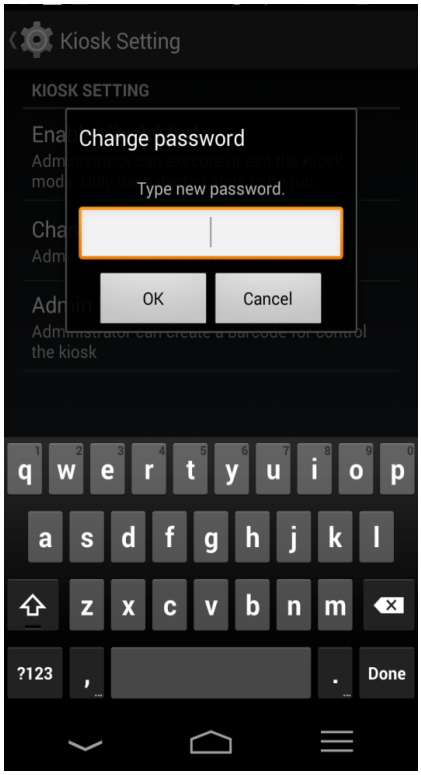


To return **Kiosk App List**, touch key icon on top of the screen.



Password change

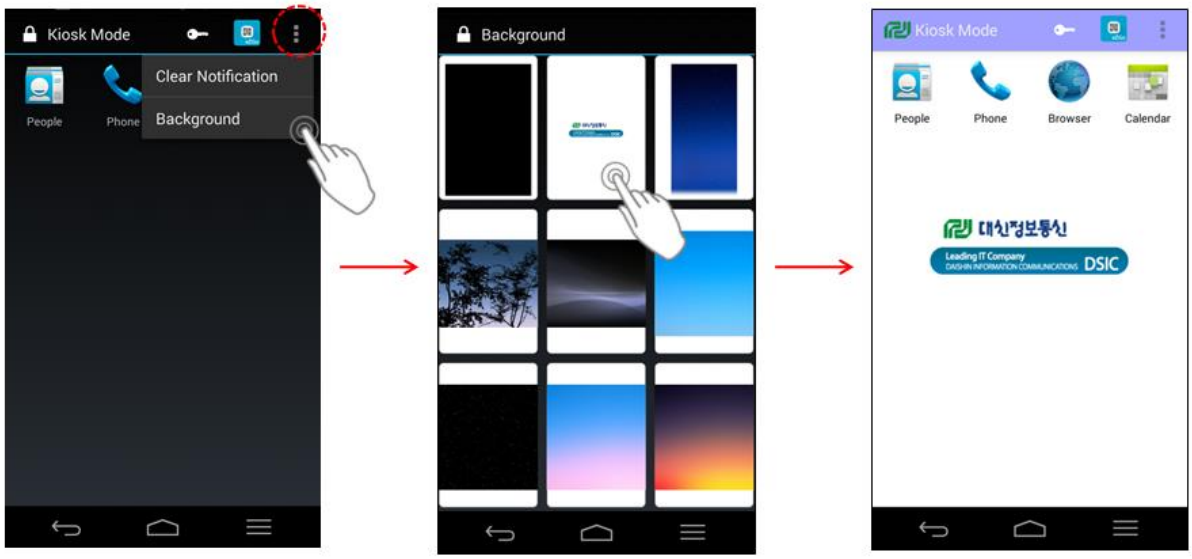
Input new password more than 4 characters



Notification clear

Setting Background

Select **Menu** > **Background** > Wall pager image

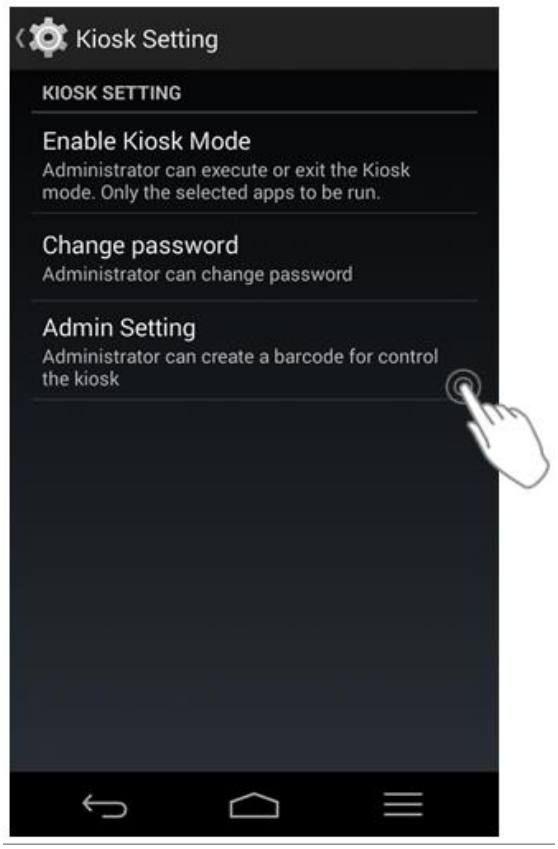


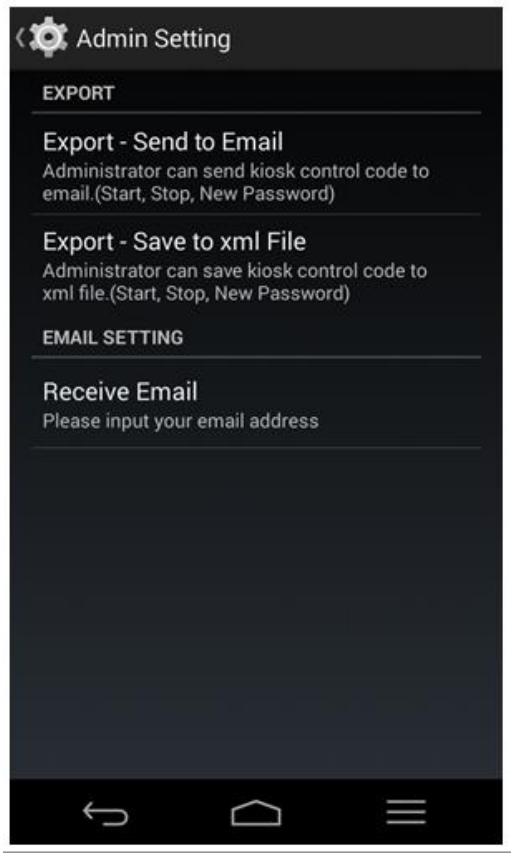
Admin Setting

Select **Admin Setting** to export KIOSK setting information of the device by email, or xml file, such as allowed APP List, KIOSK On, KISOK Off and new password.

If you want to assign special email account, then select **Receive Email**.

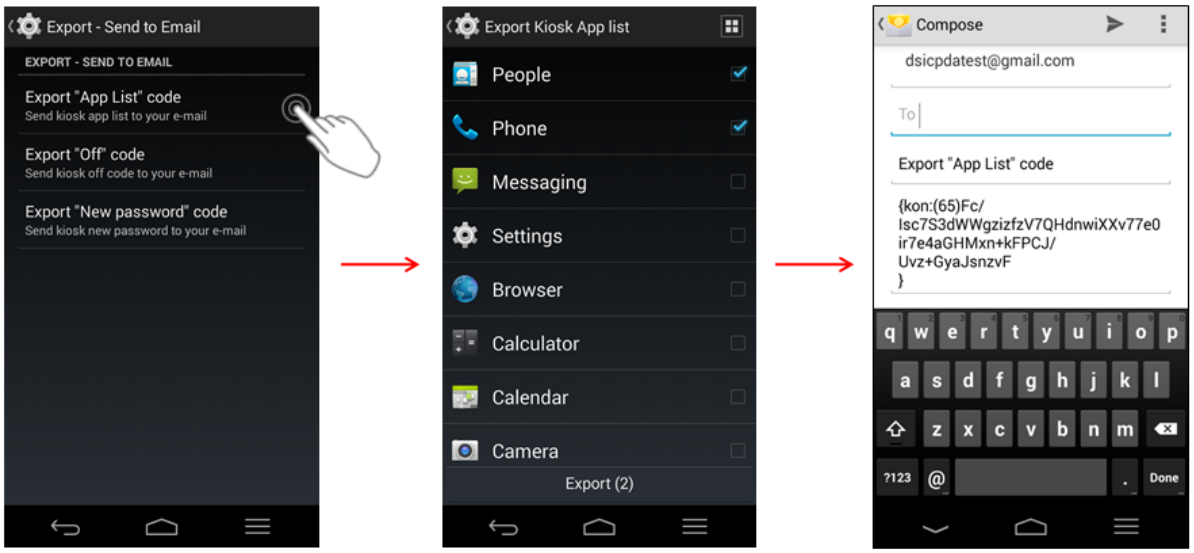
To check the exported file, go **File Manager** > **DSIC** > **kiosk** >

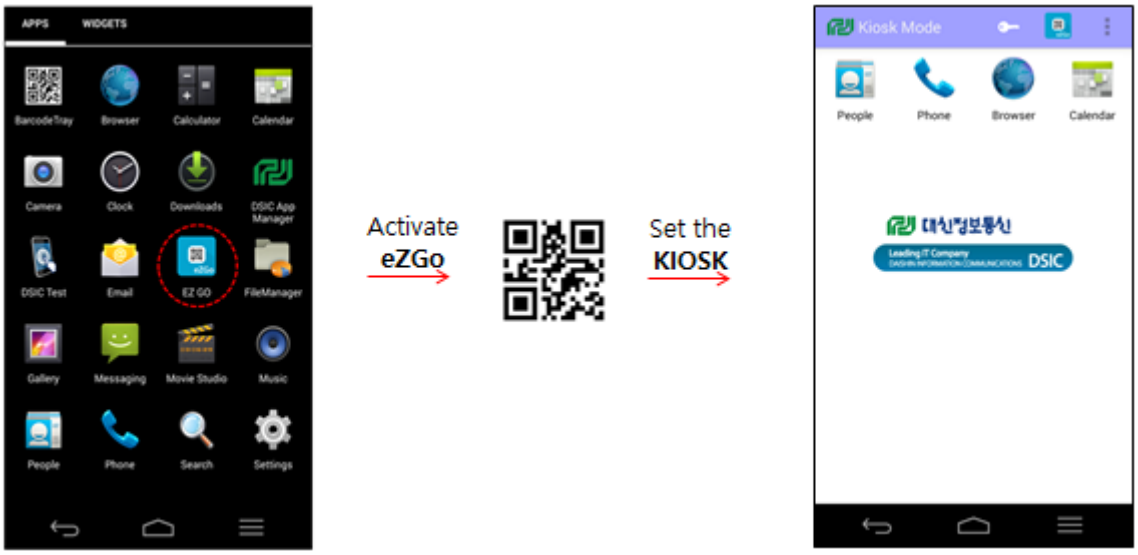




KIOSK and eZGo

Export your KIOSK setting information of the device and transfer by email, or xml file to generate with QR code. Activate eZGo application, and scan the QR code to simply set another device's KIOSK MODE.





eZGo

The eZGo is a utility to make enrollment quickly and easily with simple scanning QR code. You can create a configuration profile containing various settings into your barcode, then simply scan it with your device and deploy the profiles, such as;

- Set Wi-Fi configuration and connect to your network
- Download files from HTTP servers
- Admin settings of KIOSK MODE

Create your QR CODE

QR CODE Command

- Commands are classified by ; (semi colon)
- If you need to input data into your command, use : (colon)
- Use lower case (Small letter) to all commands

Function	Command	Parameter	Description
Start	{		Start of command
Wi-Fi	won		Wi-Fi On
	wof		Wi-Fi Off
	apc	SSID	Set Wi-Fi SSID
		Password	Set password of the SSID
Server address	udl	Server address	Download APK files from URL. http is available
KIOSK MODE	kon		KIOSK MODE On
	kof		KIOSK MODE Off
	kpw		Change password of KIOSK MODE
Reset	frs		Factory reset
	srs		Soft reset
Barcode	bes	Barcode type	Barcode enabling setting. It is supporting only EAN13, EAN8, ITF code types
		True	Enabling the barcode type
		False	Disabling the barcode type
End	}		End of command

☞ KIOSK MODE parameter is able to set using a device, then export the information with encrypted data file by email, or xml file.

- Example 1) Wi-Fi on and setting SSID / Password
  SSID: dsic
  Password: dsic1234

  {won;apc:dsic,dsic1234}

- Example 2) if your APK files are in www.dsic.co.kr, and you want to download them and install on your device using above Wi-Fi connection,

  {udl:http://www.dsic.co.kr}

- Example 3) Enabling EAN 13, and EAN 8 barcode decoding only. And ITF barcode disabling
  {bes:ean13,true;bes:ean8,true,bes:itf,false}

Device Administration

Go **Settings** > **Security** > **Device administrators** > XXXXX (Your application) > **Activate**

You use the Device Administration API to write device admin applications that users install on their devices. The device admin application enforces the desired policies. Here's how it works:

- A system administrator writes a device admin application that enforces remote/local device security policies. These policies could be hard-coded into the app, or the application could dynamically fetch policies from a third-party server.
- The application is installed on users' devices. Android does not currently have an automated provisioning solution. Some of the ways a sysadmin might distribute the application to users are as follows:
    - Google Play (Not supported in DS5-AX)
    - Enabling installation from another store
    - Enabling installation from another store
- The system prompts the user to enable the device admin application. How and when this happens depends on how the application is implemented.
- Once users enable the device admin application, they are subject to its policies. Complying with those policies typically confers benefits, such as access to sensitive systems and data.

For more information, please refer below link
http://developer.android.com/guide/topics/admin/device-admin.html

Appendix Ⅰ Key Strokes

DS5 series inter-changeable different types of keyboards in simple manual way. Following tables are how to make key character entry using keypads. Characters are not mentioned at this key stroke sequence, it is also available in Soft Input Panel (SIP)

- 38-key Descriptions
- 54-key Descriptions
- DS5 and DS5 wide Alphanumeric Characters
- DS5 and DS5 wide Special Functions

DS5-AX 34 Key Descriptions

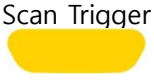
34K-key has Alpha and numeric input in a key. Also, programmable keys are available using function keys from up to F1~F10

Key	Description
Power	Turns on the terminal and off.
Back	Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can't go back any further.
Menus	Many screens in apps and Settings include either a ⋮ **menu** icon or items in the permanent Menu button at the bottom of the screen. Touch it to explore additional options, including help.
Scan Trigger	Scanning button barcode scanner, or RFID
ESC	Escape the current operation
Enter	Execute selected item or function
Move Left/Right	Moves left and right. With blue modifier on. it can adjust LCD back light levels
Move Up/Down	Moves page, or items lists up and down. With blue modifier, it can adjust volume level
Alphanumeric	Input numeric in default. With orange modifier, it can switch numeric to alphabet character input
Tab/Back Tab	Tabulator key which is used to advance the cursor to the next tab stop. With Orange modifier on, the function switch to back tab.

Shift	It is modifier key which is used to type capital letters and other alternative upper characters.
Control	It is modifier key which, when pressed in conjunction with another key, performs a special operation, for example Ctrl+C. similar to the Shift key. Pressing Blue modifier key, the function change to Alt key
Space/ Back Space	Space: its main purpose is to conveniently enter a space. Back Space: it moves the display cursor one position backwards, delete the character at that position. And shift back the text after that position by one position.
Function	Programmable key buttons. Default F1~F5, press blue modifier key for F6~F10
Orange Modifier	Function key to input Alphabet. Pressing 1 time is to apply single effect and back to default. Press 2 times to keep the function continuously.
Blue Modifier	Function key to execute special function, or special characters. Press 1 time is to apply single effect and press 2 times to keep its function continuously.
Home	It opens central Home screen.

DS5-AX 54 Key Description

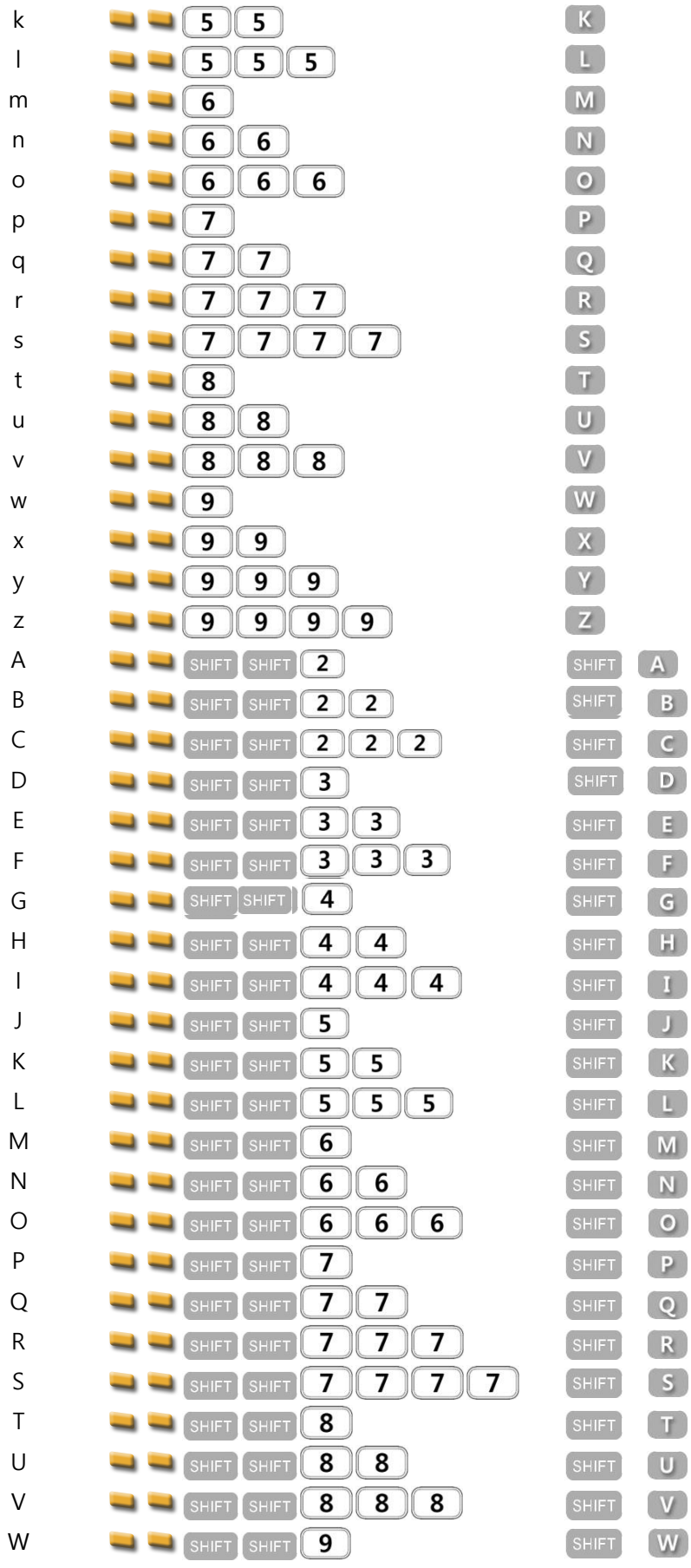
54 key has full alpha-numeric key board. Programmable keys are able to be assigned from F1 to F20 using modifier keys.

Key	Description
Power	Turns on the terminal and off.
Back	Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can't go back any further.
Menus	Many screens in apps and Settings include either a ⋮ **menu** icon or items in the permanent Menu button at the bottom of the screen. Touch it to explore additional options, including help.
Scan Trigger 	Scanning button barcode scanner, or RFID
ESC	Exit the current operation
Tab	Tabulator key which is used to advance the cursor to the next tab stop. With Orange modifier on, the function switch to back tab.

Enter	Execute selected item or function
Move Left/Right	Moves left and right. With blue modifier on. it can adjust LCD back light levels
Page Up/Down	Moves page, or items lists up and down. With blue modifier, it can adjust volume level
Numeric	Input numeric. Execute preset function, or application by your IT desk, press blue modifier for F1~F10 and orange modifier for F11 ~ F20
Alphabet	Input alphabet. Default is lower characters. Press SHIFT to input upper characters.
Shift	It is modifier key which is used to type capital letters and other alternative upper characters.
Control	It is modifier key which, when pressed in conjunction with another key, performs a special operation, for example Ctrl+C. similar to the Shift key. Pressing Blue modifier key, the function change to Alt key
Back Space	It moves the display cursor one position backwards, delete the character at that position. And shift back the text after that position by one position. Press Blue modifier for Space function.
Modifier (Orange)	Function key to access F11 ~F20
Modifier (Blue)	Function key to access F1~F10 and special characters and features
Home	It opens central Home screen.

DS5-AX Alphanumeric Characters

Character	Numeric Keypad	Full Alpha Numeric Keypad
a	2	A
b	2 2	B
c	2 2 2	C
d	3	D
e	3 3	E
f	3 3 3	F
g	4	G
h	4 4	H
i	4 4 4	I
j	5	J


k 5 5 K
l 5 5 5 L
m 6 M
n 6 6 N
o 6 6 6 O
p 7 P
q 7 7 Q
r 7 7 7 R
s 7 7 7 7 S
t 8 T
u 8 8 U
v 8 8 8 V
w 9 W
x 9 9 X
y 9 9 9 Y
z 9 9 9 9 Z
A SHIFT SHIFT 2 SHIFT A
B SHIFT SHIFT 2 2 SHIFT B
C SHIFT SHIFT 2 2 2 SHIFT C
D SHIFT SHIFT 3 SHIFT D
E SHIFT SHIFT 3 3 SHIFT E
F SHIFT SHIFT 3 3 3 SHIFT F
G SHIFT SHIFT 4 SHIFT G
H SHIFT SHIFT 4 4 SHIFT H
I SHIFT SHIFT 4 4 4 SHIFT I
J SHIFT SHIFT 5 SHIFT J
K SHIFT SHIFT 5 5 SHIFT K
L SHIFT SHIFT 5 5 5 SHIFT L
M SHIFT SHIFT 6 SHIFT M
N SHIFT SHIFT 6 6 SHIFT N
O SHIFT SHIFT 6 6 6 SHIFT O
P SHIFT SHIFT 7 SHIFT P
Q SHIFT SHIFT 7 7 SHIFT Q
R SHIFT SHIFT 7 7 7 SHIFT R
S SHIFT SHIFT 7 7 7 7 SHIFT S
T SHIFT SHIFT 8 SHIFT T
U SHIFT SHIFT 8 8 SHIFT U
V SHIFT SHIFT 8 8 8 SHIFT V
W SHIFT SHIFT 9 SHIFT W

X		
Y		
Z		
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		

DS5-AX Special Functions

Character	Numeric Keypad	Full Alpha Numeric Keypad
. Decimal/Full stop		
OK OK		
+ Plus		
- Hyphen/Minus		
***** Asterisk		
/ Slash(Punctuation)		
# Number Sign		
Start Menu		
= Equals		
< Less-than		
>		

Greater-than

:

Colon

;

Semicolon

,

Comma

?

Question

@

@

$

Dollar

%

Percent

^

Caret

&

Ampersand

‘

Apostrophe

“

Quotation

(

Parentheses

)

Parentheses

|

Vertical bar

~

Tilde

!

Exclamation