



## CIAO User Manual





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## About the Guide

#### Introduction

This Guide offers information on usage of CIAO Intelligent Shopper Assistant (ISA) and its accessories. Note: The screens and windows described in this Guide are samples, which can differ from actual ones.

#### Software version

To determine the software version of the current device, please touch "Settings"- "About Device".

Android Version-display operating system version.

Version No.-display software build version number.

#### Service information

If you have a problem with your equipment, contact MEFERI Global Customer Support for your region. Contact information is available at: www.meferi.com.

When contacting support, please have the following information available:

- Phone SN (Serial Number)
- Model or product name
- Software type and build number

MEFERI responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by MEFERI Customer Support, you may need to return your equipment for servicing and will be given specific directions. MEFERI is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your MEFERI business product from a MEFERI business partner, contact that business partner for support.

#### Determining the Serial Number

Before contacting Customer Support, determine the serial number of your device.

- Touch Settings.
- Touch "About phone".
- Phone SN.



## **Getting Started**

#### Introduction

This section describes product information and instruction of device for the first time.

#### Unpacking

Unpacking the CIAO from the box.

Carefully remove all protective material from the device and save the shipping container for laterstorage and shipping.
 Verify the following items are in the box:

- CIAO Intelligent Shopper Assistant (ISA) .
- Quick start guide.

3. Inspect the equipment for damage. If any equipment is missing or damaged, contact the Global Customer Support Center immediately.

4. Before using the device for the first time, remove the protective shipping film that covers the display.

#### Front side





Back

# Rear camera Flash Internal battery Pogo pin (for charging and communication)

#### Back





#### Scan Key

The Scan key operates the imager when a scanning application is active. When the device is turned off, press the Scan key for three seconds to power on the device.



#### Charging the Battery

Use 3-Slot Cradle the following to charge the CIAO.







1. To charge the battery, connect the charging accessory to the appropriate power source.

2. Insert the CIAO into a cradle. The CIAO turns on and begins charging.

NOTE: To charge the battery in the device, it is recommended to use a charging cradle instead of the USB cable, since it is more time efficient.

#### **Caution on Battery Charging**

1. Please do not use or charge the device in any environment with too high or low temperature;

2. Please charge the battery by the product's charger in standard configuration or desktop charger only;

3. Please do not idle the device for over 3 months; be sure to charge and discharge the battery not used for the moment once per 3 months, where the stored battery should be 60%~70% charged (i.e., 3.8V~3.9V);

4. Should be stored somewhere cool, dry and ventilated. It is advised to be stored in a 0°C to 28°C environment.

#### **Charging Indicators**

LED Charge Indicators.

- When charging, the power is below 95%, the light is red.
- When charging, the power is above 95%, the light is green.
- When scanning, the scan is successful, the light is green.

#### **Replacing the Battery**

Replacing the battery in the CIAO.

1, Pull down the status bar to open the quick access panel.







2, Touch the power button and select "Power off".

| 10:00 AM<br>Sat. Aug 3           | ∅≱⊕∎84%         |
|----------------------------------|-----------------|
|                                  | ۲               |
| <pre>Internet Networks ava</pre> | Bluetooth<br>On |
|                                  | ¢ rb            |
| FI Power off                     | Restart         |
| Battery Saver<br>Unavailable     | Airplane mode   |
| 13 (TKQ1.230721.002) ••          | 1               |
|                                  |                 |
| (i) 1 app is active              | > \$            |

CAUTION: The CIAO must be off before removing the battery. Failing to turn off the CIAO before removing the battery may damage the data stored on flash memory or corrupt the operating system files.

3, Use a T6 screwdriver to loosen the captive screw that secures the battery cover.

4, Lift the battery cover from the handle.

5, Inside the battery compartment, press down on the plastic tab of the battery cable connector and slide it out of the shrouded male pin connector.

6, Press down the plastic tab to release the battery, and remove the battery from the battery compartment.





7, With the replacement battery, guide and press the battery cable connector into the shrouded male pin connector inside the battery compartment. The connector is designed to only fit one way.

- 8, Place the battery inside the battery compartment.
- 9, Place the battery cover onto the handle.

10, Secure the battery cover with the screw, using a T6 screwdriver.



#### Powering On the Device

Either with a charged battery installed or when inserted into the cradle, press and hold the Scan button to turn on the device.



## Using the Device

This chapter explains how to use the device.

#### Home Screen

Turn on the device to display the Home screen. Depending on how your system administrator configured your device, your Home screen may appear differently than the graphics in this chapter.



| 1 | Status bar     | Displays the time, status icons (right side), and notification icons (left side). |
|---|----------------|---|
| 2 | Widgets        | Launches stand-alone apps that run on the Home screen.                            |
| 3 | Shortcut icons | Opens apps installed on the device.   |
| 4 | Folder         | Contains apps.  |

#### Setting Home Screen Rotation

By default, the Home screen rotation is disabled.

1. Touch and hold anywhere on the Home screen until the options appear.

- 2. Touch "Home settings".
- 3. Touch the "Allow home screen rotation switch".
- 4. Touch "Home".
- 5. Rotate the device.





#### Status Bar

The Status bar displays the time, notification icons (left side), and status icons (right side).

If there are more notifications than can fit in the Status bar, a dot displays indicating that more notifications exist. Swipe down from the Status bar to open the Notification panel and view all notifications and status.

2:14 PM 🌣 🤀

🗉 🗚 🕴



#### Notification Icons

Notification icons indicate app events and messages.

| Icon       | Description   |
|------------|---|
|            | Main battery is low.  |
| •          | More notifications are available for viewing.                               |
| ¢          | Data is synching.   |
| 1          | Indicates an upcoming event. AOSP devices only.                             |
| Ţ          | Open Wi-Fi network is available.  |
| <b>4</b> ) | Audio is playing.   |
| (Ľ)        | Problem with sign-in or sync has occurred.                                  |
| <u>1</u>   | Device is uploading data.   |
| <u>↓</u>   | Animated: the device is downloading data. Static: the download is complete. |
|            | Preparing internal storage by checking it for errors.                       |
| A <u>.</u> | Indicates the ring scanner is connected to the device in HID mode.          |

#### Status Icons

Status icons display system information for the device.

| Icon        | Description   |
|-------------|---|
| Ö           | Alarm is active.  |
| 0           | Main battery is fully charged.  |
| Ê           | Main battery is partially drained.                                      |
|             | Main battery charge is low.   |
| ī           | Main battery is charging.   |
| վ_ի         | All sounds, except media and alarms, are muted. Vibrate mode is active. |
| Θ           | Do Not Disturb mode active.   |
| ★           | Airplane Mode is active. All radios are turned off.                     |
| *           | Bluetooth is on.  |
| <b>\$</b> 5 | Connected to a Wi-Fi network. Indicates the Wi-Fi version number.       |
| None        | Not connected to a Wi-Fi network or no Wi-Fi signal.                    |
| Q           | Speakerphone enabled.   |



#### **Managing Notifications**

Notification icons report the arrival of new messages, calendar events, alarms, and ongoing events. When a notification occurs, an icon appears in the Status bar with a brief description.

| 10:37 PM Wed, Aug 7                        | @ ⊁ 🕩 🕈 🖬 92%   |
|--|---|
|  | Bluetooth   |
| I NFC                                      | ⊖ Do Not Disturb  |
| Android System                             | 2 🗸   |
| USB debugging conn<br>Charging this device | ected Tap to turn off USB<br>via USB Tap for more optio |
| Managa                                     |   |
| Manage                                     |   |
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|  |   |
| 1  | Duick settings bar                                      |

- To view a list of all notifications, open the notification panel by dragging the Status bar down from the top of the screen.
- To respond to a notification, open the notification panel and then touch a "notification". The Notification panel closes and the corresponding app opens.
- To manage recent or frequently used notifications, open the notification panel and then touch "Manage". Touch the "APP settings" to turn off all notifications, or touch an "app" for more notification options.
- To clear all notifications, open the notification panel and then touch "CLEAR ALL". All event-based notifications are removed.
   Ongoing notifications remain in the list.
- To close the Notification panel, swipe the Notification panel up.



#### **Opening the Quick Access Panel**

Use the Quick Access panel to access frequently used settings (for example, "Bluetooth" mode).

| 10<br>Wed, # | 1:56 PM                      |          |            | ©                            |
|--------------|------------------------------|----------|------------|------------------------------|
| ₹5           | <b>Internet</b><br>MEFERI    | <b>,</b> | *          | <b>Bluetooth</b><br>Off      |
| ۵            | NFC<br>On                    |          | Θ          | <b>Do Not Disturb</b><br>Off |
| 8            | <b>Flashlight</b><br>Off     |          | $\diamond$ | Auto-rotate<br>Off           |
| Ð            | Battery Saver<br>Unavailable |          | *          | <b>Airplane mode</b><br>Off  |
| 13 (TI       | KQ1.230721.002)              | •        |            | 1                            |
|              |                              |          |            | \$ U                         |

- If the device is locked, swipe down once.
- If the device is unlocked, swipe down once with two fingers, or twice with one finger.
- If the Notification panel is open, swipe down from the Quick Settings bar.

#### **Quick Access Panel Icons**

Quick Access panel icons indicate frequently used settings (for example, "Bluetooth" mode).

| lcon | Description   |
|------|---|
| ٢    | Display brightness - Use the slider to decrease or increase the brightness of the screen.                                 |
| €?   | Internet - Turn Wi-Fi on or off. To open Wi-Fi settings, touch the Wi-Fi network name.                                    |
| *    | Bluetooth settings - Turn Bluetooth on or off. To open Bluetooth settings, touch Bluetooth.                               |
| Θ    | Do not disturb - Control how and when to receive notifications.   |
| *    | Airplane mode - Turn Airplane mode on or off. When Airplane mode is on the device does not connect to Wi-Fi or Bluetooth. |
| \$   | Auto-rotate - Lock the device's orientation in portrait or landscape mode or set to automatically rotate.                 |



#### **Battery Management**

Observe the recommended battery optimization tips for the device.

- Set the screen to turn off after a short period of inactivity.
- Reduce screen brightness.
- Turn off all wireless radios when not in use.
- Turn off automatic syncing for Email, Calendar, Contacts, and other apps.
- Minimize use of apps that keep the device from suspending, for example, music and video apps.

NOTE: Before checking the battery charge level, remove the device from any AC power source (cradle or cable).

#### **Checking Battery Status**

1, Open "Settings" and touch "Battery". Or, swipe down from the screen open "Quick Access Panel" and touch "Settings icon" choose "Battery".



- Battery present status indicates if the battery is present.
- Battery level lists the battery charge (as a percentage of fully charged).
- Battery percentage is displayed next to the battery icon.



#### Monitoring Battery Usage

The Battery screen provides battery charge details and battery management options to extend battery life.Different apps display different information. Some apps include buttons that open screens with settings to adjust power use. Use the "Disable" or "Force stop" buttons to turn off apps that consume too much power.

- Go to Settings.
- Touch "Battery".

To display battery information and power management options for a specific app:

- Go to Settings.
- Touch "Apps".
- Touch an "app-APP battery usage".

CustomDroid

Allow battery usage in background without restrictions. May use more battery.

Optimize based on your usage. Recommended for most apps.

Restrict battery usage while in background. App may not work as expected. Notifications may be

Changing how an app uses your battery can affect its performance.

A

Force stop

Open

0

 $\bigcirc$ 

0

(j)

Unrestricted

Optimized

Restricted

delayed.





#### Low Battery Notification

When the battery charge level drops below the 15% below, the device displays a notice to connect the device to power. Charge the battery using charging 3-Slot Cradle.

#### Waking the Device

The device goes into Suspend mode when you press Scan or after a period of inactivity (if the never setting is changed to something else in "Settings" > "Display" > "Screen timeout").



1, To wake the device from Suspend mode, press Scan button .The Lock screen displays.

2, Swipe the screen up to unlock.

- If the Pattern screen unlock feature is enabled, the Pattern screen appears instead of the Lock screen.
- If the PIN or Password screen unlock feature is enabled, enter the PIN or password after unlocking the screen.

CAUTION: If you enter the PIN, password, or pattern incorrectly five times, you must wait 30 seconds before trying again.

• If you forget the PIN, password, or pattern, contact your system administrator.

#### **USB** Communication

Connect the device to a host computer to transfer files between the device and the host computer.

1, Use a T6 screwdriver to loosen the captive screw that secures the battery cover.

- 2, Lift the battery cover from the handle.
- 3, Insert one end of the device's USB cable to the device and the other to the PC's USB port to connect the device to the PC.



#### **Transferring Files**

Use Transfer files to copy files between the device and the PC.

- 1, Connect the device to a PC using a USB cable.
- 2, On the device, pull down the Notification panel and touch Charging this device via USB. By default, No data transfer is selected.
- 3, Touch File Transfer.



4, At PC end, open My Computer to access CIAO device.

| > 设备和驱动器 (6)        |                      |                     |                     |  |
|---------------------|----------------------|---------------------|---------------------|--|
| WPS云盘               | 系统 (C:)              | 新加卷 (D:)            | 新加卷 (E:)            |  |
| 双击进入WPS云盘           | 27.5 GB 可用, 共 111 GB | 215 GB 可用, 共 312 GB | 132 GB 可用, 共 312 GB |  |
| 新加卷 (F:)            |                      |                     |                     |  |
| 139 GB 可用, 共 306 GB |                      |                     |                     |  |
| ∨ 网络 <u>位置</u> (1)  |                      |                     |                     |  |

#### **Transferring Photos**

Use PTP to copy photos from the device to the PC.

- 1, Connect the device to a PC using a USB cable .
- 2, On the device, pull down the Notification panel and touch Charging this device via USB.
- 3, Touch PTP.
- 4, At PC end, open My Computer to access CIAO device.
- 5, Open the Internal storage folder.
- 6, Copy or delete photos as required.

| WPS云盘      | CIAO   | 系统 (C:)              | 新加卷 (D:)            | 新加卷 (E:)            |
|------------|--------|----------------------|---------------------|---------------------|
| 双击进入WPS 云盘 | (( C)) | 27.5 GB 可用, 共 111 GB | 215 GB 可用, 共 312 GB | 132 GB 可用, 共 312 GB |
| 所加卷 (F:)   |        |                      |                     |                     |



#### Disconnecting from the PC

CAUTION: Carefully follow the PC's instructions to disconnect USB devices correctly to avoid losing information.

- 1. On the PC, unmount the device.
- 2. Remove the device from the USB Cable.

#### Restart

If an app stops responding, long press the power key for hot reset.

- 1, Pull down the status bar to open the quick access panel.
- 2, Tap the power icon to.
- 3, Tap the restart option.



#### Task Manager

1, Swipe up from the bottom of the screen and the list shown below will appear.





- 2. Slide left or right the screen to find any app accessed lately.
- 3. Slide up to clear apps lately accessed from the background.
- 4, Tap the clear icon to clear all the lately accessed apps from the background.
- 5, Tap apps to be switched to switch apps.

#### About Device

Open Settings - "About phone" to view information of this Terminal Device.



- Model—view the device's model.
- Phone SN—display the device's unique identifier--SN.
- Android Version—view the device's Android version.
- IP Address—display the device's IP address.
- WLAN MAC Address—display the device's WIFI physical address.
- Bluetooth Address—display the device's Bluetooth address.
- Build number—display the device's Build number.



#### Upgrading

**1**00% 1:39 AM 🅸 4:03 AM 🖘 96% \* 🖘 🗎 78% Local Upgrade ÷ GuardForce ← System  $\mathbf{Q} \hspace{0.1in} \text{Search settings}$ Current version of the system: MS35\_EN\_GE\_V01\_Q3\_H01\_20240801 MFS: GE\_01\_001 SN: NA ٥. Languages & input Location  $\odot$ On - 4 apps have access to location Gestures Safety & emergency © Date & time GMT-04:00 Eastern Daylight Time cy SOS, medical info, alerts Emerge Passwords & accounts Backup Saved passwords, autofill, synced accounts Your system is currently up to date. GuardForce Updated to Android 13 ¥ Digital Wellbeing & parental controls Screen time, app timers, bedtime schedules ° Multiple users 0 G Google Services & preferences { } Developer options System Languages, gestures, time, backup Reset options
 Refresh About phone

Remote Upgrading--open Settings - "System" - "GuardForce", For remote upgrading, please contact MEFERI's technical support team, And provide the device SN number and current version.

| 4:03 AM | T 100%   | 1:39 AM  | A 🕸  | <b>9</b> 6% 03: | :13 | * 🕈 🕶 🗎 78%  |
|---------|--|----------|--|-----------------|-----|--|
| ٩       | Search settings  | ÷        | System   |                 | Ð   | GuardForce   |
| 0       | Location<br>On - 4 apps have access to location                    | •        | Languages & input                              | 0               | ¢   | Current version of the system:<br>MS35_EN_GE_V01_Q3_H01_20240801<br>MFS: GE_01_001<br>SN: NA |
| *       | Safety & emergency<br>Emergency SOS, medical info, alerts          | 0        | Date & time<br>GMT-04:00 Eastern Daylight Time |                 |     |  |
| 2       | Passwords & accounts<br>Saved passwords, autofill, synced accounts | ۲        | Backup   |                 |     |  |
| \$      | Digital Wellbeing & parental controls                              | Ð        | GuardForce<br>Updated to Android 13            | ]               |     | Your system is currently up to date.   |
| G       | Google<br>Services & preferences                                   | <u>گ</u> | Multiple users<br>Signed in as Owner           |                 |     |  |
| 0       | System<br>Languages, gestures, time, backup                        | •        | Reset options                                  |                 |     |  |
|         | About phone<br>CIAO  |          |  |                 |     | Refresh  |

Local Upgrading--open Settings - "System" - "GuardForce" - Select Local Upgrade.



## Settings

#### Introduction

This chapter describes the settings on the device.

#### **Accessing Settings**

There are multiple ways to access settings on a device.

#### Method 1

Swipe down from the top of the Home screen to open the Quick Access panel and touch "settings icon" .



#### Method 2

Swipe up from the bottom of the Home screen, touch "Settings APPS".





## **Display Settings**

#### Introduction

Use Display settings to change the screen brightness, enable night light, enable screen rotation, set sleep time, and change font size.

#### Setting the Screen Brightness Manually

Manually set the screen brightness using the touchscreen.

#### Method 1

- 1, Swipe down twice from the top of the Home screen to open the Quick Access panel and touch " 🏵 "
- 2, Slide the icon to adjust the screen brightness level.



#### Method 2

1, Swipe down from the top of the Home screen to open the Quick Access panel and touch "settings icon" or swipe up from the bottom of the Home screen, touch "Settings APPS".

2, Touch "Display".

3, Touch "Brightness level", slide the icon to adjust the screen brightness level.





#### Setting the Screen Brightness Automatically

Automatically adjust the screen brightness using the built-in light sensor.

1, Swipe down from the top of the Home screen to open the Quick Access panel and touch "settings icon" or swipe up from the bottom of the Home screen, touch "Settings APPS".

**1**00%

2, Touch "Display".

3, If disabled, touch "Adaptive brightness" to automatically adjust the brightness. By default, "Adaptive brightness" is enabled. Toggle the switch to disable.





#### Setting Night Light

The Night Light setting tints the screen amber, making the screen easier to look at in low light.

- 1. Go to Settings.
- 2. Touch "Display".
- 3. Touch "Night Light".



- 4, Touch "Schedule".
- 5, Select one of the schedule values:
- None (default)
- Turns on at custom time





- 6, By default, Night Light is disabled. Touch "Use Night Light" to enable.
- 7, Adjust the tint using the Intensity slider.



#### **Setting Screen Rotation**

#### By default, screen rotation is off.

NOTE: To change the Home screen rotation, see Setting Home Screen Rotation.

- 1. Go to Settings.
- 2. Touch "Display".
- 3. Touch "Auto-rotate screen".





#### Setting Screen Timeout

Set the screen sleep time.

- 1. Go to Settings.
- 2. Touch "Display".
- 3. Touch "Screen timeout", select one of the sleep values:
- None (default)
- 15 seconds
- 30 seconds
- 1 minute
- 2 minutes
- 5 minutes
- 10 minutes
- 30 minutes

| 10:48 PI | M 🌣            | <b>1</b> 00% |
|----------|----------------|--------------|
| ÷        | Screen timeout |              |
| ۲        | Never          |              |
| 0        | 15 seconds     |              |
| 0        | 30 seconds     |              |
| 0        | 1 minute       |              |
| 0        | 2 minutes      |              |
| 0        | 5 minutes      |              |
| 0        | 10 minutes     |              |
| 0        | 30 minutes     |              |
|          |                |              |

#### **Setting Font Size**

Set the size of the font in system apps.

- 1. Go to Settings.
- 2. Touch "Display".
- 3. Touch "Display size and text, you can set the font size or display size



| 11:00 PM 🌣              |                             |               | 0 1      | 00% |
|-------------------------|-----------------------------|---------------|----------|-----|
| ÷                       | Display si                  | ze and text   |          |     |
|                         |                             | Preview       |          |     |
|                         | 0                           |               | -        |     |
|                         | Chrome                      | Clock         | Contacts |     |
|                         | <b></b>                     | 5             | \$       |     |
|                         | Messaging                   | Phone         | Settings |     |
|                         |                             | •••           |          |     |
| Font<br>Make            | t size<br>text bigger or si | maller        |          | +   |
| Disp<br><sub>Make</sub> | everything bigg             | er or smaller |          | +   |
| Bolo                    | l text                      |               | C        |     |
| Hiał                    | n contrast te               | ext           |          |     |

## **General Sound Setting**

#### Introduction

Use the Sound settings to configure media and alarm volumes.

- 1. Go to Settings.
- 2. Touch "Sound & vibration".
- 3. Touch an option to set sounds.





#### Sound Options

- Media volume—Controls the music, games, and media volume.
- Call volume—Controls the Call volume.
- Ring & notifications volume—Controls the notification volume.
- Alarm volume—Controls the alarm clock volume.
- Do Not Disturb—Mutes some or all sounds and vibrations.
- Media—Shows the media player in Quick Settings while sound is playing, allowing quick access.
- Vibrations & haptics
  - Ring vibrations
  - Notifications vibrations
  - Alarm vibrations
  - Touch feedback
  - Media vibrations
- Default notification sound—Select a sound to play for all system notifications.
- Default alarm sound—Select a sound to play for alarms.
- Touch sounds—Play a sound when making screen selections
- Charging sounds and vibration.

## System Settings

#### Introduction

Use System settings to change the languages, set data & time, and factory reset.

#### Changing the Language Setting

Use the Language & input settings to change the device's language.

- 1, Go to Settings.
- 2, Touch "System" > "Languages & input".





- 3, Touch "Languages". A list of available languages displays.
- 4, If the desired language is not listed, touch Add a language and select a language from the list.
- 5, Touch and hold to the right of the desired language, then drag it to the top of the list.
- 6, The operating system text changes to the selected language.



#### Setting the Date and Time

You are only required to set the time zone or set the date and time if the wireless LAN does not support Network Time Protocol

(NTP) or when not connected to a cellular/wireless network.

- 1, Go to Settings.
- 2, Touch "System" > "Date & time".





3, Touch "Date" to select the date in the calendar, touch OK.



- 4, Touch "Time".
- a) Touch the green circle, drag to the current hour, and then release.
- b) Touch the green circle, drag to the current minute, and then release.
- c) Touch "AM" or "PM".

#### 5, Touch OK.



6, Touch "Use 24-hour format".



### Notifications

#### Introduction

The user can configure notifications for the device and for specific apps. Device & app notifications settings allow the user to configure how notifications occur on the device. App settings allow the user to configure how notifications for a specific app occur.

1, To view Device & app notifications settings, touch Settings > Notifications > Device & app notifications.

2, To view app notifications, Settings > Notifications > App settings, and then select an app.

#### **Setting App Notifications**

Configure the notifications settings for a specific app.

- 1, Go to Settings.
- 2, Touch "Notifications".
- 3, Touch "App settings" > See "All apps" . The App info screen displays.

| 03:49 🌣   | <b>1</b> 94% | 03:51 | ¢                           |     | <b>1</b> 94 | 4% |
|---|--------------|-------|-----------------------------|-----|-------------|----|
| ← Notifications   |              | ÷     | App notification            | ons | ۵           | :  |
| Manage  |              | M     | ost recent 🗸                |     |             |    |
| App settings<br>Control notifications from individual apps                  |              | M     | ost recent<br>lost frequent |     |             | D  |
| Notification history<br>Show recent and snoozed notifications               |              | A     | ll apps                     | ore |             | 0  |
| Conversation  |              | *     | 4 days ago                  | ing |             | D  |
| Conversations<br>No priority conversations                                  |              |       |                             |     |             |    |
| Bubbles<br>On / Conversations can appear as floating ico                    | ons          |       |                             |     |             |    |
| Privacy   |              |       |                             |     |             |    |
| Device & app notifications<br>Control which apps and devices can read noti  | fications    |       |                             |     |             |    |
| Notifications on lock screen<br>Hide silent conversations and notifications |              |       |                             |     |             |    |

4, Select an app.

5, Touch "Notifications".

Options vary depending on the app selected.



| 3:54 🏟     |                   | <b>0</b> 94% | 03:55 🌣                                 | <b>1</b> 94 |
|------------|-------------------|--------------|---|-------------|
| ÷          | App notifications | Q :          | ← Google Play Store                     |             |
| All        | apps 🗸            |              |   |             |
| ۸          | Android Auto      |              | Google Play Store                       |             |
| - x<br>+ = | Calculator        |              |   |             |
|            | Calendar          |              | All Google Play Store<br>notifications  | D           |
| 0          | Chrome            |              | Alerts                                  |             |
| 0          | Clock             |              | All "Alerts" notifications              |             |
| 8          | Contacts          |              | Account                                 |             |
| ۵          | CustomDroid       |              | About 1 notification per week           |             |
| ÷          | Digital Wellbeing |              | Payments, Deals, and<br>Recommendations |             |
| ۵          | Drive             |              | Updates available                       |             |
|            | Files             |              | Updates completed                       |             |
|            |                   |              |   |             |

6, Select Setup: Show notifications - Select to turn all notifications from this app on (default) or off. Touch a notification category

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#### to display additional options.



- Pop on screen Allow notifications from this app to pop notifications on the screen.
- Sound Allow notifications from this app to make sound. .
- Vibrate Allow notifications from this app to make vibrate the device. ٠
- Blink light Allow notifications from this app the light the Notification LED. •
- Show notification dot Allow notifications from this app to add a notification dot to the app icon.
- Override Do Not Disturb Let these notifications continue when Do Not Disturb is on. ٠



- Silent Do not allow notifications from this app to make a sound or vibration.
- Minimize In the Notification panel, collapse notifications to one line



#### **Controlling Lock Screen Notifications**

Control whether notifications can be seen when the device is locked.

- 1. Go to Settings.
- 2. Touch "Notifications".
- 3. Touch "Notifications on lock screen" and select one of the following:
- Show conversations, default, and silent.
- Hide silent conversations and notifications.
- · Don't show any notifications.





## Applications

#### Introduction

Apart from the standard pre-installed Android applications, the following table lists MEFERI-specific applications installed on the device.

#### **Installed Applications**

| lcon       | Description  |
|------------|--|
| - x<br>+ = | Calculator - Provide basic and scientific calculating functions.                     |
| <b>31</b>  | Calendar - View and manage calendar events.  |
| 0          | Camera - Take photos and record videos.  |
| 0          | Chrome - Access the network.   |
| ۲          | Clock - Set the alarm and timer.   |
|            | Contacts - Manage contact information.   |
|            | Drive - Cloud Drive to store files   |
|            | Files - Organize and manage all the files in the device.                             |
|            | Gmail - Receive and send e-mails.  |
| G          | Google - Search engine.  |
|            | Google TV - Google smart TV  |
| <b>Q</b>   | Map- View satellite maps, public transport and driving directions.                   |
|            | Meet - Videoconference.  |
| <b>9</b>   | Messaging - Receive and send SMS and MMS.  |
| <b>%</b>   | Phone - Dial a phone number for voice communications.                                |
| *          | Photos - View or edit photos in the device and microSD Card.                         |
|            | Play Store - Download apps developed with the Android SDK and distributed by Google. |
| <b>\$</b>  | Settings - Configure CIAO.   |
## **MEFERI**

| 0110     | Sound Recorder - Record audio files.  |
|----------|---|
|          | YouTube - Upload original content and share your videos.                                    |
| 0        | YT Music - Play audio files online or stored on your device.                                |
|          | MeSynch - Enables to copy device settings to other devices with just one scan of a barcode. |
|          | MeWedge - Configures a set of scanning head parameters for each application.                |
|          | ScanEdge - Configures the settings of the scanning head parameters.                         |
|          | CustomDroid - Installing your custom functions for the Android OS.                          |
| *        | SerialTools - Perform cradle operations (for example, unlock cradle or set LED) .           |
| *        | Safety - Safety settings (Emergency SOS, Emergency sharing, etc).                           |
| <b>)</b> | MeRetail - This application is designed for the retail industry.                            |
|          | GuardForce - Android provides regular updates with the latest security patches              |

## **Accessing Apps**

Access all apps installed on the device using the APPS window.

- 1, On the Home screen, swipe up from the bottom of the screen.
- 2, Slide the APPS window up or down to view more app icons.
- 3, Touch an icon to open the app.





### Switching Between Recent Apps

- 1, Swipe up from the bottom of the screen. A window appears on the screen with icons of recently used apps.
- 2, Slide left or right the screen to find any app accessed lately.
- 3, Slide up to remove the app from the list and force close the app.
- 4, Slide up to remove the app from the list and force close the app.
- 5, Tap apps to be switched to switch apps.



### Camera

This chapter provides information for taking photos and recording videos using the integrated digital cameras.

The device saves photos and videos on internal storage.

## **Taking Photos**

1, Swipe up from the bottom of the Home screen and touch "Camera".







| 1 | Scene mode     |
|---|----------------|
| 2 | Color effect   |
| 3 | Flash          |
| 4 | Settings       |
| 5 | Gallery        |
| 6 | Shutter button |
| 7 | Camera mode    |

- 2, If you need a front camera, touch the Camera Mode.
- 3, To zoom in or out, press two fingers on the display and pinch or expand your fingers. The zoom controls appear on the screen.
- 4, Touch an area on the screen to focus. The focus circle appears. The two bars turn green when in focus.

4

5, The photo momentarily displays as a thumbnail in the lower-left corner.

### **Recording Videos**

- 1, Swipe up from the bottom of the Home screen and touch Camera.
- 2, Point the camera and frame the scene.
- 3. To zoom in or out, press two fingers on the display and pinch or expand fingers. The zoom controls appear on the screen.
- 4. Touch to "start recording". The video time remaining appears in the top left of the screen.
- 5. Touch to "end the recording". The video momentarily displays as a thumbnail in the lower left corner.





| 1 | Recording time                 |
|---|--------------------------------|
| 2 | Start recording/Stop recording |
| 3 | Pause recording                |

## **Photo Settings**

- 1, In Photo mode, photo settings appear on Top right corner.
- 2, Touch to settings display the photo settings options





### Front Camera Photo Settings

- Selfie Flash Turns the screen white to help produce a little extra light in dimmer settings. Options: Off(default), or On.
- Picture size Set the size (in pixels) of the photo to: 5MP pixels (default), HD720, WVGA, VGA, or QVGA.
- Picture quality Set the picture quality setting to: Low, Standard or High (default).
- Countdown timer Set to: Off (default), 2 seconds, 5 seconds or 10 seconds.
- Storage Default location to store the photo to: Phone.
- Face Detection Select to turn face detection Off (default) or On.
- Selfie Mirror Select to save a mirror image of the photo. Options: Disable (default), or Enable.
- White balance Select how the camera adjusts colors in different kinds of light, to achieve the most natural-looking colors.

### **ProMode Settings**

- Exposure Touch to adjust the exposure settings. Options: 0 (default), +0.5, +1, +1.5, +2, -0.5, -1, -1.5 or -2.
- ISO Set how sensitive the camera is to light. Options: Auto (default), ISO Auto (HJR), ISO100, ISO200, ISO400, ISO800, ISO1600 or ISO3200.

|                                    | Incandescent - Adjust the white balance for incandescent lighting. |
|------------------------------------|--|
| \$ <b>\_</b> \\<br>\$ <b>\_</b> \\ | Fluorescent - Adjust the white balance for fluorescent lighting.   |
| Αυτο                               | Auto - Adjust the white balance automatically (default).           |
| ١                                  | Daylight - Adjust the white balance for daylight.                  |
| 6                                  | <b>Cloudy</b> - Adjust the white balance for a cloudy environment. |

## Video Settings

In Video mode, video settings appear on Top right corner. Touch to display the video settings options.

| & ¥ 🗘  | ← Settings            |
|--|-----------------------|
|  | General               |
|  | Image: Face Detection |
|  | Storage<br>Phone      |
| Contraction of the local distance of the loc | Video camera          |
| Color Statement and Statement  | Video quality         |
|  | Video duration        |
|  |                       |
|  | NR Noise Reduction    |
| 1.0x   | Video Encoder<br>H264 |
| •  | C EncoderProfile      |
| Video HFR Photo ProMode  | Audio Encoder     AAC |
|  | Uideo Rotation        |
|  | O Time lapse off      |



## Front Camera Video Settings

- Video quality Set video quality to: HD1080p (default) or HD 720p.
- Video duration Set to: 30 seconds (MMS), 10 minutes (default), 30 minutes or no limit.
- Storage The default storage location is: Phone.
- Exposure Touch to adjust the exposure settings. Options: 0 (default), +0.5, +1, +1.5, +2, -0.5, -1, -1.5 or -2.
- Noise Reduction Set to: Off, Fast or High Quality (default).
- Video Encoder Set to: H264 or H265.
- Audio Encoder Set to: AMRNB, ACC or OFF.
- Video Rotation Set to: 0, 90, 180 or 270.
- Video High FrameRate 30FPS.

### SerialTools

1, Swipe up from the bottom of the Home screen and touch SerialTools.

- 2, Use the SerialTools to:
- Perform cradle operations (for example, unlock cradle or set LED).
- Configure cradle information (for example, Row ID or Column ID).
- Read the cradle manufacturing information.
- Read the cradle diagnostics information.



### Controlling the Cradle

Tap the "CRADLE UNLOCK" tab to set the cradle unlock information.



| 94:44 🌣 🗖 🔅    |             | * 🛿 100%      |
|----------------|-------------|---------------|
| CRADLE UNLOCK  | SETTINGS    | DIAGNOSTICS S |
| Unlock Period: |             | 10 seconds    |
| LED            | Smooth Ef   | fect          |
|                | Unlock Crad | le            |
| On C           | Off (       | Count         |
| 500 ms         | 500 ms      | 5             |
|                | Blink       |               |
|                | Reset       |               |
|                | Turn Off    |               |
|                | Turn Off    |               |

- Unlock Period: The duration in seconds for which the CIAO remains in unlocked state (if not removed from the cradle). For example; if unlock period is set to 15 and unlock signal is received, the CIAO will unlock and lock back after 15 seconds (if its not removed by user).
- Unlock Cradle: Press Unlock Cradle to manually unlock the CIAO from the cradle.
- LED: Check the LED box to enable the cradle LED indication.
- Smooth Effect: Check the Smooth Effect box to enable smooth blinking of the LEDs.
- LED Setting > On: The duration (in ms) that the cradle LED remains turned on or blinks during unlock.
- LED Setting > Off: The duration (in ms) that the cradle LED remains turned off or blinks during unlock.
- LED Setting > Count: The number of times the cradle LED blinks when user presses the blink button.
- Blink: Tap to test the cradle LED operation.

## Setting the Cradle

Tap the "Settings" tab to set the cradle information.





- Tap the Settings tab to set the cradle information.
- Column ID: The cradle column number in the dispenser wall.
- Wall ID: The number of dispenser wall where the cradle is positioned.
- Read Data: Retrieve setting data from the cradle memory and display on the screen.
- Write Data: Tap this button to program the row/col/wall information onto the cradle.

Note: that each slot on the Three Slot Cradle needs to be programmed separately.

## Performing Cradle Diagnostics

Touch "Diagnostic" tab to perform the cradle diagnostics.

| 04:23 | 3 💠 🔅 🖘           |             | 🛯 🗚 🗋 97% |
|-------|-------------------|-------------|-----------|
| ск    | SETTINGS          | DIAGNOSTICS |           |
| Cra   | dla Diagnostic II | tility      |           |
| Cia   | die Diagnostic o  | tinty       |           |
| Boa   | rd Voltage:       |             |           |
| Mc    | u Voltage:        |             |           |
| Sol   | enoid Current:    |             |           |
|       |                   |             |           |
|       |                   | Read Data   |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
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|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |
|       |                   |             |           |

• Read Data: Tap to start performing diagnostics.

## Serial Number

Touch "Serial Number" table to write the SN and PN of each cradle slot.

- Write SN:When CIAO in a cradle slot, write the SN of this cradle slot.
- Write PN:When CIAO in a cradle slot,write the PN of this cradle slot.



| 04:53 | ¢ 🔅 🖘  |               | @ ≭ 🛔 97% |
|-------|--------|---------------|-----------|
|       |        | Serial Number |           |
|       |        |               |           |
|       |        |               |           |
| SN:   | SN nun | nber          |           |
| PN:   | PN num | iber          |           |
|       |        |               |           |
|       | -      |               |           |
|       |        | Write SN      |           |
|       |        | Write PN      |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |
|       |        |               |           |

## Viewing Cradle Information

To view cradle information, touch the "INFO" tab.

| 04:23    | <b>A</b>            |       | 🖹 97%   |
|----------|---------------------|-------|---------|
|          |                     | INFO  | HOLDER  |
| Firmwa   | are version:        |       |         |
| Androi   | d Version: 13       |       |         |
| Library  | Version:            |       |         |
| Serial N | Number:             |       |         |
| Part Nu  | umber:              |       |         |
| Hardwa   | are ID: c66aa7caf3c | 7614e |         |
| Manuf    | acturing Date:      |       |         |
|          |                     |       |         |
|          | негр                | G     | et Info |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |
|          |                     |       |         |



## CIAO AI Connect(Smart Holder)

- CIAO AI Connect/RK1109 mainboard/lidar sensor 2MP camera/5180mAH battery/Wifi 2.4g/Bluetooth.
- Al fraud recognition camera/Sliding mount for any trolley/Replaceable Pogo pin connectors.

Configuration and test items related to AI Connect.



- Connect Holder: When the CIAO is connected to the network and placed in an AI Connect, it can pair with the AI Connect and connect the AI Connect to the network.
- Set blue light: You can set the blue light on the AI Connect to be on or off.
- Set red light: You can set the red light on the AI Connectto be on or off.
- Set green light: You can set the green light on the AI Connect to be on or off.
- AT+CONNECT: Serial port debugging.
- Holder charging (ON): When CIAO is placed in the AI Connect, the reverse charging of the AI Connect is turned on or off.



## CIAO Complete Usage Process



1, Unlock:Unlock by connecting to MC45

a, Before placing CIAO into the Charging Cradles, ensure it is connected to Wi-Fi, and make sure both CIAO and MC45 are connected to the same Wi-Fi network.

b, After CIAO successfully connects to Wi-Fi, put it into the charging cradles, open the SerialTool application, click the SETTINGS page, set the ROW ID, write the ID.





2, Open UnlockDemo on CM45, scan the barcode, and take out the CIAO with the highest power from the charging cradles.



3, After removing the CIAO, place it in the AI Connect.





4, Open the SerialTool application, click on the HOLDER page, and then click Connect Holder. Wait for the prompt indicating "WIFI configuration successful."



5, Click on the MeRetail application, then click "Settings".

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|------------|-------------------|-----------|-------------|----------|--|---------|
|            | Q                 | Search ap | ips         |          | Q2224.16.706: Image upload service:<br>started | E       |
| -          | _                 | Anappa    |             |          |  |         |
| + =        | 31                | 0         | 0           | -        |  |         |
| Calculator | Calendar          | Chrome    | Clock       | Contacts |  |         |
|            | $\mathbf{\Delta}$ |           | M           | G        |  |         |
| Custom     | Drive             | Files     | Gmail       | Google   |  |         |
|            | Ð                 | 0         |             | 1        |  |         |
| Google TV  | GuardFor          | Maps      | Meet        | MeRetail |  |         |
|            | -                 |           |             |          |  |         |
| Messagi    | MeSynch           | MeWedge   | Phone       | Photos   |  |         |
|            |                   | meneuge   |             |          |  |         |
|            | *                 |           | <b>\$</b>   | Ŕ        | quantity                                       |         |
| Play Store | Safety            | ScanEdge  | SerialTools | Settings | Total: 0                                       | Confirm |



6, Modify the SKU URL (sku.meferi.com:29999).

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|----------------------------|-------------|-------|--------|---------|----------------|----------------|-------|----------|------------------|-------------------------------|
| Sku url                    |             | Ski   | ı url  |         |                |                |       |          |                  |                               |
| Sync sku                   |             | Syr   | nc sku |         |                |                |       |          |                  |                               |
| get 1126_url               |             | g     | Sku    | url     |                |                |       |          |                  |                               |
| Bluetooth electronic scale |             | в     | 192.   | 168.10  | 1.90:          | 3900           | 1     |          |                  | _ 1                           |
| connect Bluetooth          |             | С     |        |         |                |                | CAN   | NCEL     | OF               |                               |
| disconnect Bluetooth       |             | dis   | connec | t Bluet | ooth           |                |       |          |                  |                               |
|                            |             |       |        |         |                |                |       |          |                  |                               |
|                            |             | <     | 1      | ) c     | IF             | <b>Å</b>       | \$    |          | ••••             | Ŷ                             |
|                            |             | q     | W      | e³      | r <sup>4</sup> | t <sup>5</sup> | /° L  | <b>,</b> | i <sup>®</sup> ( | p <sup>°</sup> p <sup>°</sup> |
|                            |             |       | a s    | d       | f              | g              | h     | j        | k                | I                             |
|                            |             | Û     | z      | x       | с              | v              | b     | n        | m                | $\bigotimes$                  |
|                            |             | ?12   | 3,     | •       |                | Eng            | llish |          |                  | ~                             |
|                            |             |       | ~      |         |                |                |       |          |                  |                               |

7, Click "Sync sku" until the prompt indicates that the synchronization is successful. (Note: The purpose of this operation is to synchronize the images that have been uploaded on the SKU server).

| 23:26 🌣 📃                                     | * 🕈 🕶 💼 89% | 上午2:06 🌣 📕 🖨 🔅           | @ * † 🗣 🗎  |
|---|-------------|--------------------------|------------|
| C 23:24:16.706: Image upload service: started | ୍ ରୁ        | Sku url                  |            |
|   |             | Sync sku                 |            |
|   |             | aet 1126 url             |            |
|   |             | get 1120_uii             |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
|   |             |                          |            |
| _   |             | Sync successful, local q | uantity:14 |
| quantity<br>Total: 0                          | Confirm     |                          |            |
|   |             |                          |            |



8, Next, you can connect the Bluetooth scale by selecting the corresponding Bluetooth address and clicking on the connection until it is successful, (After scanning the product, the Bluetooth scale will indicate the weight of the product. If the weight matches the SKU, the product details will be shown in CIAO. If the weight does not match, it will indicate a failure). You can also uncheck the Bluetooth scale and use it directly.

| 11:31 PM 🏟 🕀 📕 🕴           | © * * ▼ 🕯 | 下午11:19 🌩 📕 🖨 👶                            | @ 🗱 🕈 🕶 📋 | 11:34 PM 🂠 🖨 📕 👌           | 0 * * 🕶 🕯    |
|----------------------------|-----------|--|-----------|----------------------------|--------------|
| Sku url                    |           | Device Name<br>meferi<br>E0:30:10:00:15:60 |           | Sku url                    |              |
| Sync sku                   |           | E0.30.10.00.1E.00                          |           | Sync sku                   |              |
| get 1126_url               |           |  |           | get 1126_url               |              |
| Bluetooth electronic scale |           |  |           | Bluetooth electronic scale | $\checkmark$ |
| connect Bluetooth          |           | New Devices                                |           | connect Bluetooth          |              |
| disconnect Bluetooth       |           |  |           | disconnect Bluetooth       |              |
|                            |           |  |           |                            |              |
|                            |           |  |           |                            |              |
|                            |           |  |           |                            |              |
|                            |           |  |           |                            |              |
|                            |           | SEARCH                                     | _         |                            |              |
|                            |           | JERKON                                     |           | Bluetooth is conn          | nected       |
|                            |           |  |           |                            |              |

9, You can now scan product barcodes (the products must already be entered into the SKU server). There are two scanning modes:

Method 1: Proximity Sensor Auto-Trigger

Place CIAO in the AI Connect, and when a product approaches the scanner, it will automatically trigger the scan. Just align the product barcode with the scanner and, once successfully read, place it in the cart. The AI Connect will recognize the product's entry, and CIAO will display detailed information about the scanned product.

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|--|-------------|--|-----------|
|  |             | 〇 <sup>01.08.17 666.</sup> 处理结果[718.821289,<br>Ock, rec.score: 0.562843] | i≘ (Õ     |
| -  | ٩.          | lays potato chips<br>sku 6924743915060                                   | \$5.00    |
| Scanned<br>successfully<br>Close after 1 s | ŕ           |  |           |
| quantity Co<br>Total: 0                    | nfirm       | quantity<br>Total: 1   | onfirm    |



If the AI Connect does not successfully recognize the product's entry, it will prompt:



## Proximity Sensor Auto—Trigger Flow Chart





#### Method 2: Button Trigger

Press the CIAO scan button to scan the product barcode. Then place the product in the cart. The AI Connect will recognize the product's entry, and CIAO will display detailed information about the scanned product.





10, Pay directly on ciao device and skip checkout line if no fraud/error have been detected.

11, Embrace the future of shopping with CIAO's Innovative Contactless Payment. This feature elevates the shopping experience, allowing customers to quickly complete transactions via their Smartphones or Cards, Directly on the CIAO device. Transforming retail interactions, CIAO's contactless solution offers Unprecedented Speed and Convenience, streamlining the checkout process like never before.



## Steps to Upload Products to the Backend Server

1, Log in according to the server link we deployed (sku.meferi.com:29999).

- SKU backend URL (We need to deploy it for you remotely):
  - Account:
  - Password:

#### 2, Add SKU Category:

| SKU Creator 🔠 SKU Admi       | n 😩 User Center 🗋 Log Record          |         | 😺 🏂 🙆 root              |
|------------------------------|---------------------------------------|---------|-------------------------|
| SKU Category                 |                                       |         |                         |
| Sku List<br>Search SkU Q Add | SKU Images<br>SKU Category: SKU Name: | No data | Check All Delete Upload |



#### 3, Enter a category name:

| SKU Creator BB SKU Admin            | 😩 User Center 🗋 Log Record |         | 键 × 名 root              |
|-------------------------------------|----------------------------|---------|-------------------------|
| SKU Category<br>All No more than 30 |                            |         |                         |
| SKU List                            | SKU Images                 |         |                         |
| Search SKU Q Add                    | SKU Category: SKU Name:    |         | Check All Delete Upload |
| No data                             |                            | No data |                         |

#### 4, Click Add in SKU List to add product details.

| SKU Creator                | BB SKU Adm | in 온 User Center                         | Log Record             |  |  | 🕫 🏂 root                |
|----------------------------|------------|--|------------------------|--|--|-------------------------|
| SKU Category               | aaa 🖉 🗙 👼  | ≝   2 × [+]                              |                        |  |  |                         |
| SKU List<br>Search SKU     | Q Add      | <b>SKU Images</b><br>SKU Category: 零售 SK | U Name: <i>moliana</i> |  |  | Check All Delete Upload |
| mollana<br>8004690512804   | 28         |  | 2. 🗆 🗟                 |  |  |                         |
| plain<br>8888077103389     | 2 1        |  |                        |  |  |                         |
| redoude<br>9331275008271   | 2 8        |  |                        |  |  |                         |
| biscoff<br>5410126106183   | 2 🗉        |  |                        |  |  |                         |
| bundaberg<br>9311493002534 | 2 18       |  |                        |  |  |                         |
| bundaberg<br>9311493002572 | 2 8        |  |                        |  |  |                         |
| bundaberg<br>93238946      | 28         |  |                        |  |  |                         |
| colombia                   |            |  |                        |  |  |                         |

5, Enter the product's Barcode data, product name, product category, product information description, product image, and then click Save

| SKU Creator                     | BE SKij Adm | in 😤 User Center 🗋 Log    | Record                         |   |       | at 🐁 🚫 root |  |
|---------------------------------|-------------|---------------------------|--------------------------------|---|-------|-------------|--|
| SKU Category                    | ma ∠ × =    | 1 ¢ × (+)                 |                                |   |       |             |  |
| SKU List                        |             | SKU Images                |                                |   | - 11  |             |  |
|                                 | Q Add       | SKU Category: ## SKU Name |                                | Adding  | ×     | Check All   |  |
| moltana<br>sobires612904        | 2 8         |                           | * Barcode                      | Please enter bartoide                                     | 0/30  |             |  |
| plain<br>1889/077102109         | 2 8         |                           | <ul> <li>SKU Name</li> </ul>   | Please enter SKU name                                     | 0/30  |             |  |
| redoude<br>REINZISSOBERY        | 2.8         |                           | SKU Category                   | Please select SKU Category                                | 1993  |             |  |
| biscoff<br>Stratzeroones        | 2.11        |                           | SKU Info                       | Please enter SKU information, a maximum of 200 characters | 9/200 |             |  |
| bundaberg<br>etrs493002534      | e 9         |                           | <ul> <li>SKU Images</li> </ul> |   |       |             |  |
| bundaberg<br>811149:00x072      | ۵ ۵         |                           |                                | *   |       |             |  |
| bundaberg<br>#1228346           | ۵ ک         |                           |                                | Uplead Count0   |       |             |  |
| colombia<br>4099041107088       | ۵.          |                           |                                | Cancel. Save:   |       |             |  |
| 06903244950756<br>9953244950756 | ۵ ۵         |                           |                                |   |       |             |  |
| off                             | 2 11        |                           |                                |   |       |             |  |



#### Notice:

Regarding uploading pictures, we have two methods, but regardless of the method chosen, it is essential to ensure that the picture background contains only the product itself and is clear. For example:



Method 1: Upload directly to the product backend server.

| SKU Creator                 | r SKU Adm   | in 🚊 User Center 🗋 Log    | Record                       |   |       |          | ut 🤹 🚫 root |
|-----------------------------|-------------|---------------------------|------------------------------|---|-------|----------|-------------|
| SKU Category                | aa [∠, ×] = | a   ∠ × [+]               |                              |   |       |          |             |
| SKU List                    |             | SKU Images                |                              |   |       |          |             |
|                             | a Add       | 5KU Category: 即應 SKU Name |                              | Adding  | ×     |          | Check All   |
| AUMINO<br>8006343209660     | 2 8         |                           | * Barcode                    | Please enter barcode                                      | 0/30  | -        |             |
| 9607990m<br>8853018162025   | 2.8         |                           | <ul> <li>SKU Name</li> </ul> | Please enter SKU name                                     | 0/30  | <u>(</u> |             |
| COCORE:<br>2107404810007407 | 28          |                           | * SKU Category               | Please select SRU Category                                | v     | I I      |             |
| bertolli<br>nanzecentego    | ₫ 0         |                           | SKU Info                     | Please enter SKU Information, a maximum of 200 characters | 0/200 |          |             |
| curry<br>605e965521373      | é a         |                           | • SKU Images                 |   |       |          |             |
|                             | e 8         |                           |                              | +   |       |          |             |
|                             | 2 8         |                           | L                            | Upload Count0   |       |          |             |
| molilana<br>10041990512804  | £ 8         |                           | 1                            | Cancel  |       |          |             |
|                             |             |                           |                              |   |       |          |             |

Method 2: Use CIAO to upload to the backend server (install the MeRetail application on the CIAO device, enter the SKU URL,

product barcode, and select the category).

| 1:39 PM              |   | 0 ***  | 031% |
|----------------------|---|--------|------|
| sku.meferi.com:29999 | 1 |        |      |
| barcode              |   |        |      |
| 8009342000660        | 2 |        |      |
|                      |   |        |      |
|                      |   |        | 3    |
|                      |   |        |      |
|                      |   |        |      |
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| 4                    |   |        |      |
|                      |   | _      |      |
| ADD PIC              |   | SUBMIT |      |
|                      |   |        |      |



# Data Capture

This chapter provides information for capturing barcode data using various scanning options.

The imager has the following features:

• Reads a variety of bar code symbologies, including the most popular linear, postal, and 2D code types.

The device supports data capture using:

- Integrated Honeywell HS7 Imager
- Integrated Zebra SE4710 Imager
- Integrated Zebra SE4770 Imager

## **Scanning Considerations**

Typically, scanning is a simple matter of aim, scan, and decode, with a few quick trial efforts to master it. However, consider the following to optimize scanning performance:

- Range—Scanners decode best over a particular working range minimum and maximum distances from the barcode. This range varies according to barcode density and scanning device optics. Scan within range for quick and constant decodes; scanning too close or too far away prevents decodes. Move the scanner closer and further away to find the right working range for the barcodes being scanned.
- Angle—Scanning angle is important for quick decodes. When the illumination/flash reflects directly back into the imager, the specular reflection can blind/saturate the imager. To avoid this, scan the barcode so that the beam does not bounce directly back. Do not scan at too sharp an angle; the scanner needs to collect scattered reflections from the scan to make a successful decode. Practice quickly shows what tolerances to work within.
- Hold the device farther away for larger symbols.
- Move the device closer for symbols with bars that are close together.

NOTE: Scanning procedures depend on the app and device configuration. An app may use different scanning procedures from the one listed above.

## **Scanning Barcodes**

Use the CIAO to capture barcode data.

- 1, Launch a scanning application.
- 2, Press the Scan key and aim the device at a barcode.
- 3. Adjust the position of the device so that the:
- Red aiming dot appears at the center of the barcode on devices with the SE4710 imager.
- Cross aiming dot appears at the center of the barcode on devices with the HS7 imager.
- Cross aiming dot appears at the center of the barcode on devices with the SE4770 imager.

Ensure the barcode is within the area formed by the aiming pattern.



## SE4710 Imager Decode Mode









4. Release the Scan key.

The barcode data displays on the screen.

## Decode Ranges

| Decode Ranges | Symbology          | Near Distance (mm [in]) | Far Distance (mm [in]) |
|---------------|--------------------|-------------------------|------------------------|
|               | 4 mil Code 39      | 84 mm [3.3 in]          | 224 mm [8.8 in]        |
|               | 5 mil Code 128     | 71 mm [2.8 in]          | 208 mm [8.2 in]        |
|               | 5 mil Code 39      | 50.8 mm [2.0 in]        | 343 mm [13.5 in]       |
| SE4710        | 5 mil PDF417       | 79 mm [3.1 in]          | 213 mm [8.4 in]        |
|               | 10 mil DataMatrix  | 74 mm [2.9 in]          | 257 mm [10.1 in]       |
|               | 100% UPCA          | 46 mm [1.8 in]          | 660 mm [26.0 in]       |
|               | 20 mil Code 39     | 50.8 mm [2.0 in]        | 762 mm [30.0 in]       |
|               | 5 mil C39          | 70 mm [2.8 in]          | 311 mm [12.2 in]       |
|               | 10 mil C39         | 40 mm [1.6 in]          | 536 mm [21.1 in]       |
|               | 20 mil C39         | 68 mm [2.7 in]          | 868 mm [34.2 in]       |
| ЦС7           | 5 mil C128         | 75 mm [3.0 in]          | 868 mm [34.2 in]       |
| 137           | 10 mil PDF         | 45 mm [1.8 in]          | 425 mm [16.7 in]       |
|               | 20 mil QR Code     | 57 mm [2.2 in]          | 513 mm [20.2 in]       |
|               | 100% UPC-A         | 44 mm [1.7 in]          | 573 mm [22.6 in]       |
|               | 10 mil Data Matrix | 64 mm [2.5 in]          | 297 mm [11.7 in]       |
|               | 3 mil Code 39      | 76 mm [3.0 in]          | 147 mm [5.8 in]        |
|               | 5 mil Code 128     | 58 mm [2.3 in]          | 249 mm [9.8 in]        |
|               | 5 mil PDF417       | 76 mm [3.0 in]          | 201 mm [7.9 in]        |
|               | 6.67 mil PDF 417   | 63 mm [2.5 in]          | 257 mm [10.1 in]       |
| SE4770        | 10 mil DataMatrix  | 53 mm [2.1 in]          | 278 mm [11.0 in]       |
|               | UPCA (100%)        | 41 mm [1.6 in]          | 632 mm [24.9 in]       |
|               | 15 mil Code 128    | 61 mm [2.4 in]          | 706 mm [27.8 in]       |
|               | 20 mil Code 39     | 41 mm [1.6 in]          | 917 mm [36.1 in]       |
|               | 20 mil QR Code     | 28 mm [1.1 in]          | 445 mm [17.5 in]       |



## **Scan Settings**

- 1, ScanEdge: can be tested and set, this setting is for the scan head.
- 2, Mewedge: scan settings for a certain application, for example: open continuous scanning in a certain APP, continuous

scanning does not work outside this APP, only in the APP.

#### Method 1-ScanEdge

1, In the home screen, pull up the screen to enter the app center interface, Select "ScanEdge".



| 02:39                           |             | * 👎 🛿 28%  |
|---------------------------------|-------------|------------|
| Test                            | Symbologies | Settings   |
| Basic settings                  |             |            |
| Float Enable                    |             | $\bigcirc$ |
| Scanner Enable                  |             |            |
| Input Settings                  |             |            |
| Trigger Mode<br>Trigger Hold    |             | >          |
| Scan Config                     |             | >          |
| Multi barcode pa                | arameter    | >          |
| Reader params                   |             | >          |
| Output Settings                 |             |            |
| Output Mode<br>Key and Broadcas | t Output    | >          |
| Broadcast Outpu                 | t Settings  | >          |
| Scan Feedback                   |             | >          |

#### Method 2-Mewedge

1, In the home screen, pull up the screen to enter the app center interface, Select "Mewedge".





2, Create a new one and select the APP you want to set up.

| 02:44   | * * 💎 🛿 28% |                         |
|---------|-------------|-------------------------|
| MeWedge | :           | New profile<br>Settings |
| Default | >           |                         |
|         |             |                         |
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| 02:47    | * 🐨 🛙 28% |
|----------|-----------|
| MeWedge  | :         |
| Default  | >         |
| O chrome |           |
|          |           |
|          |           |
|          |           |
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|          |           |
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|          |           |

#### 3, Apply scan settings.

| 02:52                                   | * 🗣 🛿 28%  |
|---|------------|
| chrome                                  |            |
| Symbologies                             | Settings   |
| Basic settings                          |            |
| Float Enable                            | $\bigcirc$ |
| Scanner Enable                          |            |
| Input Settings                          |            |
| Trigger Mode<br>Trigger Hold            | >          |
| Scan Config                             | >          |
| Multi barcode parameter                 | >          |
| Reader params                           | >          |
| Output Settings                         |            |
| Output Mode<br>Key and Broadcast Output | >          |
| Broadcast Output Settings               | >          |
| Scan Feedback                           | `          |

## Floating action button

Open the virtual key scanning tool on the desktop, which is available for dragging at will and touching to simulate the key scanning function.



| 02:54                            |             | * * 🗣 🛿 28% |
|----------------------------------|-------------|-------------|
| Test                             | Symbologies | Settings    |
| Basic settings                   |             |             |
| Float Enable                     |             |             |
| Scanner Enable                   |             |             |
| Input Settings                   |             |             |
| Trigger Mode<br>Trigger Hold     |             | >           |
| Scan Config                      |             | >           |
| Multi barcode pa                 | rameter     | >           |
| Reader params                    |             |             |
| Output Settings                  |             |             |
| Output Mode<br>Key and Broadcast | Output      | >           |
| Broadcast Outpu                  | t Settings  | >           |
| Scan Feedback<br>Sound   LED     |             | >           |

## Trigger mode

- Auto mode—manually trigger the scanning function. Press the scanning key and laser light or supplementary light will be shown. The light will not go out until decoding is completed or scanning times out.
- Continuous mode—manually trigger the scanning function. In the continuous scanning mode, the scanning laser or supplementary image light will not go out after decoding. Instead, decoding will sustain.
- Manual mode—manually trigger the scanning function. Press the scanning key and laser light or supplementary light will be shown. Release the key and the light will go out. In addition, the scanning light will also go out after decoding.





### **Output Mode**

- 1, Broadcast Output.
- 2, Key Output.
- 3, Key and Broadcast Output.

| 03:02                            |                 | * 🗣 🛿 28%  |
|----------------------------------|-----------------|------------|
| Test                             | Symbologies     | Settings   |
| Basic settings                   |                 |            |
| Float Enable                     |                 | $\bigcirc$ |
| Scanner Enable                   |                 |            |
| Input Settings                   |                 |            |
| Trigger Mode                     |                 | >          |
| 1                                | Output Mode     |            |
| O Broadcas                       | t Output        |            |
| O Key Outpu                      | ıt              |            |
| Key and B                        | roadcast Output |            |
| Output Settings                  |                 |            |
| Output Mode<br>Key and Broadcast | Output          | >          |
| Broadcast Output                 | Settings        | >          |
| Scan Feedback<br>Sound   LED     |                 | >          |
| Append Char                      |                 |            |

## Output by Broadcast

Set broadcasting via a corresponding app to receive tag and motion data of the designated broadcast. If the scanned data match the app's broadcast tag and motion (tag and motion are editable), the data will be directly received by the Broadcast Receiver. Any intent transfer value may be separately output or handled in the background.





## Output by keyboard

Check this mode and the scanning results will be output to the app focus edit box in the foreground by keyboard. Cancel checking this mode and output will be done by broadcast.

| 03:15                           |                  | * * 🗣 🛿 30% |
|---------------------------------|------------------|-------------|
| Test                            | Symbologies      | Settings    |
| Scan Config                     |                  | >           |
| Multi barcode pa                | rameter          | >           |
| Reader params                   |                  | >           |
| Output Settings                 |                  |             |
| Output Mode                     |                  | >           |
|                                 | Output Mode      |             |
| O Broadcas                      | st Output        |             |
| 🖲 Key Outp                      | ut               |             |
| O Key and                       | Broadcast Output |             |
| Carriage Return                 |                  | >           |
| Keyboard Type<br>Auto text mode |                  | >           |
| Key event option                | s                | >           |
| Data Format                     |                  | >           |
| Advanced data f                 | ormatting        | >           |

1, Keyboard Type—include Auto text mode, Soft keyboard, always use simulated keystrokes, may result in different scanning results, so please choose with caution.

- Soft keyboard—If a focus input box arises in any app interface in the foreground, it will directly show all the data, otherwise the device will output scanning results character by character through keyboard simulation.
- Auto text mode—the device directly displays all the data in the input box through input method editor simulation.
- Soft keyboard only: the device outputs scanning data through Soft keyboard event simulation at any interface.
- Always Auto text mode: output through any non-Android input box, e.g., webpage or search box.

2, Sound Feedback—set the system's notification tone for scanning, which may be LED, Vibrating or Sound.

3, Append Char — None, Carriage return, Line feed or Tab. Add operational key characters behind scanning results through keyboard simulation.

- None: no operation.
- Carriage return: add an enter behind scanning results through keyboard simulation.
- Line feed: add an OK operation behind scanning results through keyboard simulation.
- Tab: add a Tab key operation behind scanning results through keyboard simulation.

#### Append Char

| O NONE          |
|-----------------|
| Carriage Return |
| O Line Feed     |
| О ТАВ           |



## Encode

The encode is UTF-8 by default. This option needs to correspond to the of 2D codes. Any mismatch between the two may lead to code garbling. Please use this function with care.

| Test       Symbologies       Settings         Encode       Common Encode       Image: Settings         Other Encode       Image: Settings       Image: Settings         Other Encode       Image: Settings       Image: Settings         Image: Settings       Image: Settings       Image: Settings       Image: Settings         Image: Settings       Image: Settings       Image: Settings       Image: Settings         Image: Settings       Image: Settings       Image: Settings       Image: Settings         Image: Settings       Image: Settings       Image: Settings       Image: Setings         Image: Settings | 03:24         |            |              | * 👎 🛿 30% |
|---|---------------|------------|--------------|-----------|
| Encode<br>Common Encode<br>UTF-8<br>O Auto<br>O UTF-8<br>O GBK<br>O BIG5<br>O Shift_JIS<br>O ISO-8859-1<br>O US-ASCII<br>O UTF-16<br>O Other  |               | Test       | Symbologies  | Settings  |
| Common Encode<br>Common Encode<br>Auto<br>O Auto<br>UTF-8<br>GBK<br>BIG5<br>Shift_JIS<br>ISO-8859-1<br>US-ASCII<br>UTF-16<br>O ther   | Enc           | ode        |              |           |
| Common Encode Auto UTF-8 GBK BIG5 Shift_JIS ISO-8859-1 US-ASCII UTF-16 Other  | Comr<br>UTF-8 | mon Encode |              |           |
| Common Encode<br>Auto<br>UTF-8<br>GBK<br>BIG5<br>Shift_JIS<br>ISO-8859-1<br>US-ASCII<br>UTF-16<br>Other   |               |            |              |           |
| <ul> <li>Auto</li> <li>UTF-8</li> <li>GBK</li> <li>BIG5</li> <li>Shift_JIS</li> <li>ISO-8859-1</li> <li>US-ASCII</li> <li>UTF-16</li> <li>Other</li> </ul>  | г             | С          | ommon Encode |           |
| <ul> <li>UTF-8</li> <li>GBK</li> <li>BIG5</li> <li>Shift_JIS</li> <li>ISO-8859-1</li> <li>US-ASCII</li> <li>UTF-16</li> <li>Other</li> </ul>  | 0             | Auto       |              |           |
| O GBK<br>O BIG5<br>O Shift_JIS<br>O ISO-8859-1<br>O US-ASCII<br>O UTF-16<br>O Other   | ۲             | UTF-8      |              |           |
| <ul> <li>BIG5</li> <li>Shift_JIS</li> <li>ISO-8859-1</li> <li>US-ASCII</li> <li>UTF-16</li> <li>Other</li> </ul>  | 0             | GBK        |              |           |
| <ul> <li>Shift_JIS</li> <li>ISO-8859-1</li> <li>US-ASCII</li> <li>UTF-16</li> <li>Other</li> </ul>  | 0             | BIG5       |              |           |
| O ISO-8859-1<br>O US-ASCII<br>O UTF-16<br>O Other   | 0             | Shift_JIS  | 5            |           |
| O US-ASCII<br>O UTF-16<br>O Other   | 0             | ISO-8859   | 9-1          |           |
| O UTF-16<br>O Other   | 0             | US-ASCI    | l            |           |
| O Other   | 0             | UTF-16     |              |           |
|   | 0             | Other      |              |           |
|   |               |            |              |           |
|   |               |            |              |           |
|   |               |            |              |           |
|   |               |            |              |           |
|   |               |            |              |           |

## Other settings

- Decode Timeout—laser duration for failing in single scanning, range of 50-60000 ms, 5000 ms by default.
- Repeat Decode Timeout—laser duration for failing in single scanning, range of 50-60000 ms, 3000 ms by default.
- Continue Scan Interval—laser duration for failing in single scanning, range of 0-5000 ms, 50 ms by default.

| 03:25                 |                    | * * 🗣 🖗 30% |
|-----------------------|--------------------|-------------|
| Test                  | Symbologies        | Settings    |
| Scan Config           |                    |             |
| Repeat Decode         |                    |             |
| Repeat Decode         | Timeout(50~60000 m | ns)         |
| Decode Timeou<br>5000 | t(50~60000 ms)     |             |
| Continue Scan I<br>50 | nterval(0~5000 ms) |             |
|                       |                    |             |
|                       |                    |             |
|                       |                    |             |
|                       |                    |             |
|                       |                    |             |
|                       |                    |             |
|                       |                    |             |



### **Reader params**

#### **Exposure Settings**

Different scanning heads vary from each other in the settings. HS7 scan engine is taken as example for illustration.

| 03:32                             |             | * 💎 🛿 31% |
|-----------------------------------|-------------|-----------|
| Test                              | Symbologies | Settings  |
| Exposure Settings                 |             |           |
| Lights Configurati<br>Alternating | on          |           |
| Lights Intensity(1-               | ~100)       |           |
| Exposure Mode<br>auto             |             |           |
| Max Exposure(20<br>20             | ~300)       |           |
| Max Gain(0~4)<br>0                |             |           |
| Image Contrast(1<br>120           | ~8000)      |           |
| OCR Mode                          |             |           |
| OCR Mode Setting                  | ]           |           |
| OCR Template                      |             |           |
| OCR Template Se<br>User Defined   | tting       |           |

#### 1, Lights Configuration

- Off: turn off illumination / aimer light.
- Aim Light Only: turn on aim light only.
- Illum Only: turn on illumination only.
- Alternating: turn on illumination and aim light in alternation.
- Concurrent turn on illumination and aim light at the same time.

2, Exposure Mode: auto/fixed. In the auto mode, the scanning head may automatically regulate the exposure value; in the fixed mode, the exposure value can be set.

3, Fixed Exposure: 20~300. The higher the value is, the brighter it will be.

#### **Decoding Windowing**

| tings |
|-------|
|       |
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|       |



- Configure Windowing—set the range of bar codes from any photo taken.
- Mode Configuration—Off, Around Aimer, or Field of View, Picklist Mode. To fit the view finder, select the Around Aimer mode.
- UpperLeftWindow X.
- UpperLeftWindow Y.
- LowerRightWindow X.
- LowerRightWindow Y.

## Data Format

Upon access of bar codes, the system may be available for additional functions: Formatting, Prefix, Suffix, Substitute, App Identifier, or Code Id Type.

| 03:56 🤀         |                       | ՝ ≭ 🐨 🛿 33% | 03:57 🕀         |              | * 🐨 🛿 33%  |
|-----------------|-----------------------|-------------|-----------------|--------------|------------|
| Test            | Symbologies           | Settings    | Test            | Symbologies  | Settings   |
| Code Id Type    |                       |             | Application Ide | ntifier Edit |            |
| Code Id Type    |                       |             | 0               |              |            |
| Code ld Type No | one                   |             | Character Setti | ing          |            |
| Application Id  | entifier              |             | Character Mode  | e            |            |
| Application Ide | entifier              | $\bigcirc$  | None            |              |            |
| GS1, DataMatri  | IX Code 128 Separator |             | Send as hex     |              | $\bigcirc$ |
| Application Ide | entifier Edit         |             | Replace String: |              |            |
| 0               |                       |             | Replace String  | Enable       | $\bigcirc$ |
| Character Set   | ting                  |             | 011001          |              |            |
| Character Mod   | le                    |             | Old String      |              |            |
|                 |                       | -           | New String      |              |            |
| Send as hex     |                       | $\bigcirc$  | Add Prefix and  | Suffix       |            |
| Replace String  | <b>j:</b>             |             | Prefix Enable   |              | $\bigcirc$ |
| Replace String  | Enable                | $\bigcirc$  | Drefu           |              |            |
| Old String      |                       |             | Frenx           |              |            |
|                 |                       |             | Suffix Enable   |              | $\bigcirc$ |
| New String      |                       |             | Suffix          |              |            |
|                 | 1 Cuffix              |             | Gunia           |              |            |

- 1, Tap "Data Format" and select the additional formatting type.
- 2, Suffix: select the mode and modify the suffix content, e.g.

| 8:42 PM        |   | * \$2 50 1                                   |
|----------------|---|--|
| Test           | Symbologies   | Settings                                     |
| Character Mode |   |  |
| s Suffix       |   |  |
| <u>aaa</u>     |   | _  |
| R              | CANCEL  | ок )   |
|                |   |  |
|                |   |  |
| > aaa          | AAA   | as 🌷   |
| $q^1 w^2 e^3$  | r <sup>4</sup> t <sup>5</sup> y <sup>6</sup> u <sup>7</sup> | i <sup>®</sup> o <sup>°</sup> p <sup>°</sup> |
| a s d          | fgh j   | k l  |
| ☆ z x          | c v b n   | m 🗵  |
| ?123 🖁 🌐       | English   | . 🔶  |
|                |   |  |

| 11:56 PM 🌣  |             | * Ø       |
|-------------|-------------|-----------|
| Test        | Symbologies | Settings  |
| 69032449507 | 56aaa       |           |
| I.          |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
|             |             |           |
| Type EAN13  | Time 28 ms  | Length 17 |
|             | CLEAR       |           |



| 8:47 PM        |             | * & ~ •  |
|----------------|-------------|----------|
| Test           | Symbologies | Settings |
| Character Mode |             |          |
| s Prefix       |             | )        |
| R              | CANCEL      | ок )     |
|                |             |          |
|                |             |          |
| < 🙂 🖬          | F 🖹 🌣       | ··· 🌵    |
| 1 2 3 4        | 4 5 6 7     | 8 9 0    |
| @ # \$         | & - +       | ()/      |
| =\< * "        | 1 : ; 1     | ? 🗙      |
| ABC , 12<br>34 | English     | . +      |

3, Prefix: select the mode and modify the prefix content, e.g.

4, Replace String: select the mode and modify the former character to be substituted and the substitute character and set the value of the substituted and that of substitute.

| 11:59 PM 🌣   | * 12 8                                       | 11:59 PM         | vi 🌣                            |                                 |                               | *                | \$ 6                |
|--|--|------------------|---------------------------------|---------------------------------|-------------------------------|------------------|---------------------|
| Test Symbologies   | Settings                                     | Te               | est                             | Symbolo                         | gies                          | Setting          | js                  |
| Application Identifier<br>GS1、DataMatrix Code128 Separator | $\bigcirc$                                   | Char             | acter Settin                    | g                               |                               |                  |                     |
| A Old String   | - 1  | C<br>N N         | lew Strin                       | g                               |                               |                  | I                   |
|  |  | s –              |                                 |                                 | CANOFI                        | 01/              | )                   |
| CANCEL   | UK   |                  |                                 | _                               | CANCEL                        | UK               |                     |
| None   |  | Replac           | ce String E                     | nable                           |                               |                  | $\bigcirc$          |
| Send as hex  | $\bigcirc$                                   | Old Str          | ring                            |                                 |                               |                  |                     |
| < 🕑 GIF 📋 🌣  | ··· 🌷  | <                | 😨 GI                            | F 🗒                             | \$                            |                  | Ŷ                   |
| $q^{1} w^{2} e^{3} r^{4} t^{5} y^{6} u^{7}$                | i <sup>®</sup> o <sup>°</sup> p <sup>°</sup> | q <sup>1</sup> w | v <sup>2</sup> e <sup>3</sup> 1 | r <sup>4</sup> t <sup>5</sup> y | / <sup>6</sup> u <sup>7</sup> | i <sup>®</sup> o | p°                  |
| asdfghj  | k l  | а                | s d                             | f g                             | h j                           | k                | L                   |
| ☆ z x c v b n  | m 🗵  | 仑                | z x                             | c v                             | b n                           | m                | $\overline{\times}$ |
| (?123 ), (D) English                                       | . 🛩  | ?123             | ; ⊕                             | Eng                             | lish                          |                  | 4                   |
|  |  |                  |                                 |                                 |                               |                  |                     |

5, Application Identifier: select the mode and add an app identifier to some bar codes, e.g., Code 128.

6, App Delimited Identifier: select the mode and set "()" as the app delimited identifier by default, which may be substituted by any other identifier.

7, Code ld Type: select the mode and add a Code ld (Code ld Type None, Code ld Type Aim (add an Aim in front bar codes) or Code ld Type Symbol (add an identifier in front of bar codes)) to some bar codes.



## Symbology settings

| 12:08 AM 🌣      |             | * 12 0   |
|-----------------|-------------|----------|
| Test            | Symbologies | Settings |
| QSearch         |             |          |
| AZTEC           |             |          |
| CHNPOST         |             |          |
| CODABAR         |             |          |
| CODE11          |             |          |
| CODE128         |             |          |
| CODE32          |             |          |
| CODE39          |             |          |
| CODE93          |             |          |
| CODEBLOCK       |             |          |
| COMPOSITE       |             |          |
| selected partia | ally        |          |

Modify code system type parameters in the list, e.g., bar code length, check bit or transfer character.

| 2:11 AM 🌣             |             | * 12 3   | 12:12 AM 🌣  | * 22       |
|-----------------------|-------------|----------|---|------------|
| Test                  | Symbologies | Settings | Test Symbologies  | Settings   |
| < AZTEC               |             |          | CODE39  |            |
| Enable                |             |          | Enable  |            |
| Data Minimum Le<br>1  | ength       | >        | Append  | $\bigcirc$ |
| Data Maximum L<br>500 | ength       | >        | Transmit Start/Stop Characters                          | $\bigcirc$ |
|                       |             |          | Full ASCII Output                                       | $\bigcirc$ |
|                       |             |          | Check Enable  | $\bigcirc$ |
|                       |             |          | Transmit Check Digit                                    | $\bigcirc$ |
|                       |             |          | Data Minimum Length<br>4                                | >          |
|                       |             |          | Data Maximum Length<br>48                               | >          |
|                       |             |          | Reduced Quiet Zone<br>Disallow short quiet zone symbols | >          |

- Enable: enable.
- Data Minimum Length: minimum length.
- Data maximum Length: maximum length.
- Transmit Check Digit: check bit in transfer.

# MEFERI

### Reset

| 12:36 AM 🏟 🖙                        | * 12 3      |            |  |
|-------------------------------------|-------------|------------|--|
| Test                                | Symbologies | Settings   |  |
| Encode<br>UTF-8                     |             | >          |  |
| Identify and ju                     | mp to web   | $\bigcirc$ |  |
| Copy to clipbo                      | ard         | $\bigcirc$ |  |
| Replace edit                        |             | $\bigcirc$ |  |
| Import Export                       | Settings    |            |  |
| Export config<br>Export config file |             | >          |  |
| Import config<br>Import config file | e           | >          |  |
| Reset profile<br>Load factory pro   | file        | >          |  |
| Other                               |             |            |  |
| Scanner Info                        |             | >          |  |



## Import config/Export config

| 12:36 AM 🍄 🖙                        |             | * & 0      |
|-------------------------------------|-------------|------------|
| Test                                | Symbologies | Settings   |
| Encode<br>UTF-8                     |             | >          |
| Identify and ju                     | mp to web   | $\bigcirc$ |
| Copy to clipboa                     | $\bigcirc$  |            |
| Replace edit                        | $\bigcirc$  |            |
| Import Export                       | Settings    |            |
| Export config<br>Export config file |             | >          |
| Import config<br>Import config file | 2           | >          |
| Reset profile<br>Load factory pro   | file        | >          |
| Other                               |             |            |
| Scanner Info                        | >           |            |







# Wireless

This chapter provides information on the wireless features of the device.

The following wireless features are available on the device:

- Wireless Local Area Network (WLAN)
- Bluetooth

## Connect to WLAN

After the wireless function is enabled, CIAO will automatically display all the available wireless networks nearby in the wireless network list. To connect to a certain wireless network, please click the network's SSID in the list and tap Connect.

Note: For some networks, network security key or password needs to be entered for connecting. To connect to such networks, please contact the network admin for corresponding network security keys or passwords.

#### 1, Open Settings - "Network & internet" or pull down the status bar to enter the quick access panel for operation;



#### 2, Touch to turn on the wifi function.




#### 3, Enter the password and tap "connect".

| 22:53         |        |       |     |     |      |       | * 6   | 100%                    |
|---------------|--------|-------|-----|-----|------|-------|-------|-------------------------|
| ÷             | ME     | FERI  |     |     |      |       |       |                         |
| Password      |        |       |     |     |      |       |       |                         |
| ·····         |        |       |     |     |      |       |       |                         |
| Show password |        |       |     |     |      |       |       |                         |
| Advan         | ced op | tions |     |     |      |       |       | ~                       |
|               |        |       |     |     |      | Cance | el Co | onnect                  |
| 1 2           | 2 3    | 3 4   | 4 5 | 5 6 | 5 7  | 7 8   | 3 9   | 0                       |
| q v           | ve     | e r   | t   | : ) | /ι   | J i   | ic    | р                       |
| а             | s      | d     | f   | g   | h    | j     | k     | 1                       |
| 仑             | z      | х     | с   | v   | b    | n     | m     | $\overline{\mathbf{X}}$ |
| ?123          | ,      | ⊕     |     | Eng | lish |       | ·     |                         |
| ~             |        |       |     |     |      |       |       |                         |

- Check "Show Password" to display the hotspot password to check whether the password input is wrong.
- Check "Advanced" Settings for advanced settings, including agent and IP settings.

| 22:55                        |        | * 🛿 100% |
|------------------------------|--------|----------|
| ← MEFERI                     |        |          |
| Password                     |        |          |
|                              |        |          |
| Show password                |        |          |
| Metered                      |        |          |
| Detect automatically         |        | •        |
| Proxy                        |        |          |
| None                         |        | •        |
| IP settings                  |        |          |
| DHCP                         |        | -        |
| Privacy                      |        |          |
| Use randomized MAC (default) |        | •        |
|                              |        |          |
|                              | Cancel | Connect  |
|                              |        |          |
|                              |        |          |
|                              |        |          |

4, Check whether connection is done: 'Connected' indicates that connection is done.



## Removing a Wi-Fi Network

Remove a remembered or connected Wi-Fi network.

1, Go to Settings.

2, Touch "Network & Internet" > "Internet".

3, Scroll down to the bottom of the list and touch "Saved networks".



4. Touch the name of the network.

#### 5. Touch "Forget".





# Manually Adding a Wi-Fi Network

Manually add a Wi-Fi network if the network does not broadcast its name (SSID) or to add a Wi-Fi network when out of range.

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- 1, Go to Settings.
- 2, Touch "Network & Internet" > "Internet".
- 3. Slide the Wi-Fi switch to the On position.



- 4. Scroll to the bottom of the list and select "Add network".
- 5. In the Network name text box, enter the name of the Wi-Fi network.





6. In the Security drop - down list, set the type of security to:

- None
- Enhanced Open
- WEP
- WPA/WPA2-Personal
- WPA3-Personal
- WPA/WPA2/WPA3-Enterprise
- 7. If the network security is None or Enhanced Open, touch Save.
- 8. If the network security is None, touch Save.

9. If the network security is WEP, WPA3-Personal, or WPA/WPA2 Personal, enter the required password and then touch Save.

10. If network security is WPA/WPA2/WPA3 Enterprise:

a) Touch the EAP method drop-down list and select one of the following:

- PEAP
- TLS
- TTLS
- PWD

b) Fill in the appropriate information. Options vary depending on the EAP method chosen.

- When using the EAP methods PEAP, TLS, or TTLS, specify a domain.
- Touch Advanced options to display additional network options.
- 11, If the network security is WPA3-Enterprise 192-bit:
- Touch CA certificate and select a Certification Authority (CA) certificate. Note: Certificates are installed using the Security settings.
- Touch User certificate and select a user certificate. Note: User certificates are installed using the Security settings.
- In the Identity text box, enter the username credentials.

12, Touch Save. To connect to the saved network, touch and hold on the saved network and select Connect to network.

### Network preferences

Use the network preferences to configure advanced network settings. From the internet screen scroll down to the bottom of the screen and touch network preferences.

- Turn on Wi-Fi automatically—When enabled, Wi-Fi automatically turns back on when near high-quality saved networks.
- Notify for public networks —When enabled, notifies when a high-quality public network is available.
- Install Certificates—Touch to install certificates.



## Bluetooth

Any device with Bluetooth is available for wireless communication to transmit and receive data by wireless radio frequency (2.4 GHz).

Device with the Bluetooth function such as printer, access point and other mobile computer can exchange data (e.g., file, date or task) after turning on the Bluetooth function.

CIAO supports BLE (Bluetooth low energy). BLE is oriented to healthcare, health, safety and home entertainment apps. It remains a standard Bluetooth coverage while reducing power consumption and saving cost.

1, Pull down the status bar and long press the Bluetooth icon or click "Settings" - "Connected devices" to enter the page.

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# Change Bluetooth Device Name

1, Click "Pair new device".



2, Tap "Device name" can change visible name to another.





#### **Bluetooth Connection**

1, Tap "Pair new device" to search for Bluetooth devices nearby.



2, Tap the device to be connected and enter PIN code for verifying pairing or request for entering PIN code.



#### **Management Paired Devices**

1, Click the previously connected device settings icon.





2, Can perform management operations such as "forget" and "connect" on previously connected devices.



# **Connection Preferences**

1, Set up Bluetooth, NFC, etc.





| 22:37 | 涍 *奪 ∎ 92%   |
|-------|--|
| ÷     | Connection preferences                                 |
| *     | Bluetooth  |
| e     | NFC<br><sub>Off</sub>                                  |
| 2     | Cast<br>Not connected                                  |
| •     | Printing<br>1 print service on                         |
| ᅳ     | Chromebook<br>Your phone is not linked to a Chromebook |
| ×2X.  | Nearby Share<br>Share files with nearby devices        |
| ۸     | Android Auto<br>Use apps on your car screen            |



# Accessories

## Introduction

This chapter describes CIAO accessories.

# List of Standard Accessories



Improve Device Protection

Protective Boot



Battery for CIAO



CIAO Standard Holder

Standard Capacity 3.7V, 6800mAh Battery

- Sliding mount for any trolley
- Rainwater outlet



# List of Optional Accessories



3-Slot Cradle



Power Adapter



• Part of the charging wall, with automatic lock

- Input: 100-240V 50/60Hz 2.0A
- Output: 12.0V—10.0A 120.0W



- CIAO AI Connect(Smart Holder)
- CIAO AI Connect/RK1109 mainboard/lidar sensor 2MP camera/5180mAH Battery/Wi-Fi 2.4G/Bluetooth
- Al fraud recognition camera/Sliding mount for any trolley/Replaceable
  Pogo pin connectors/Rainwater outlet



- 5.0V—2.0A for CIAO AI Connect
- Power Adapter



USB Cable

• For CIAO AI Connect



# List of Optional Accessories



• Standard Capacity 3.85V, 5180mAh Battery

Battery for CIAO AI Connect(Smart Holder)



Additional protection against scratches and damage

Screen Protector



# Maintenance and Troubleshooting

# Introduction

This chapter sets forth the device's maintenance methods and troubleshooting solutions to help users use the product appropriately.

# Maintenance

To ensure that the device does not break down, please abide by the following instructions while using CIAO:

- Do not scratch the screen of CIAO. While using CIAO, please use a recognized touch pen or any other pen which is fit for touching with point made from plastics. Please do not use a real pen, pencil or anything sharp to touch the screen of CIAO.
- The screen of CIAO is made from glass. So please do not make CIAO fall on the ground or get hit.
- Prevent CIAO from bearing too high or low temperature. Do not put the device on any automotive instrument panel in hot weather. Keep it away from any heat source.
- Do not use CIAO anywhere dusty, dump or moist.
- Clean the scanning head and camera of CIAO by soft lens cloth. If the screen of CIAO gets dirty, please clean the screen by soft cloth with diluted glass cleaning solution.

# **CIAO** cleaning

#### Housing

Scrub the housing by cloth with alcohol, including keys.

#### **Display screen**

Scrub the display screen by alcohol wipes but be sure that no liquid drops nearby the edge of the display. Immediately dry the display screen by soft and abrasive-free cloth to prevent mark left.

#### Camera and scanning window

Please scrub the camera and scanning window by lens wipers or other materials made for cleaning optical materials (e.g., glasses).



# Troubleshooting

CIAO troubleshooting.

| Problem   | Reason  | Solution   |  |
|---|---|--|--|
| When pressing the power button the  | The battery is not charged.   | Charge the battery in CIAO.  |  |
| device does not turn on.  | The system crashes.   | Execute resetting.   |  |
|   | The battery breaks down.  | Replace the battery.   |  |
| The battery is not charged.   | The battery's temperature is exceptional.                             | Contact for technical support.   |  |
| During data communication via Wi-Fi,  | Wi-Fi communication is not enabled.                                   | Turn on Wi-Fi communication.   |  |
| no data are transferred or not all data are transferred.                              | The device is out of the range of the access point.                   | Move closer to the access point.   |  |
| During data communication via   | Bluetooth communication is not enabled.                               | Turn on Bluetooth communication.   |  |
| not all data are transferred.   | The device is out of the signal range of another Bluetooth device.    | Move within 10m (32.8ft) range of another device.  |  |
| No sound.   | Volume setting is too low or turned off.                              | Adjust volume.   |  |
| CIAO is off.  | CIAO is at inactive state.  | Not use for a while, the display will<br>automatically turn off. Set the duration<br>to be longer, such as 15 s, 30 s, 1 min,<br>2 min, 5 min, 10 min or 30 min. |  |
|   | The device runs out of battery.                                       | Charge the battery.  |  |
| Tapping a window button or icon<br>but fail to trigger the corresponding<br>function. | The device does not respond.  | Reset the device.  |  |
| A message pops up, indicating that<br>CIAO's storage is full.                         | Too many files are saved in CIAO.                                     | Delete unused memos and records.<br>If necessary, save such records in the<br>host (or use SD Card as additional<br>memory).                                     |  |
|   | Too many apps are installed in CIAO.                                  | Uninstall unused apps in CIAO to recover storage capacity.   |  |
|   | The bar code is unreadable.   | Check the barcode is not damaged.  |  |
| CIAO fails to decode while reading a bar code.  | The distance between the laser scanning window and bar code is wrong. | Put CIAO within proper scanning range.   |  |
|   | Battery low.  | Check battery capacity.  |  |