CipherLab User Guide

ImageToText for Android Mobile Computer RS35 RS36 RK25 RK26 RK95

Version 1.0



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Website: <u>http://www.CipherLab.com</u>

RELEASE NOTES

| Version | Date | Notes |
|---------|------|-------|
| | | |

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INTRODUCTION

This manual provides a detailed introduction of **ImageToText**'s setup and usage.

ImageToText is an advanced software application that transforms scanned documents and images into editable and searchable text. It does not only streamline data digitization processes, but automates tasks for increased efficiency and accessibility.

In the chapters that follow, this guide will delve into the intricacies of ImageToText, exploring its features and capabilities.

For ImageToText License consultation, please <u>contact the local sales representative</u>.

Thank you for choosing CipherLab products.



FEATURES

- Support CipherLab mobile computers:
 - RS35 Mobile Computer (Android 10 & Android 11)
 - RS36 Mobile Computer (Android 12)
 - RK25 Mobile Computer (Android 7 & Android 9)
 - RK26 Mobile Computer (Android 12)
 - RK95 Mobile Computer (Android 9 & Android 12)

Smart Text Extraction

Effortlessly capture text in defined regions at once using filter rules.

Capture with Code Reader or Camera

Quickily switch to capture text according to different usage demands.

High Accuracy in Recognition

Work well in low light conditions and rainy days.

Multi-Language Reading Support

Easily extract multilingual text and data with precision.

- Easy Deployment and Integration
 Enable keyboard emulation and API to integrate with the existing systems.
- Simple and Easy Installation and Activation

An intuitive user interface that enables easy navigation through system features.

Chapter 1

CHAPTER 1: SETUP

This chapter covers the setup and installation process for ImageToText, as well as the compatible devices, including the required Android version, code readers, and cameras, to ensure proper functionality.

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1.1 INSTALLING IMAGETOTEXT ON YOUR MOBILE COMPUTER

1.1.1 PREREQUISITE

Before downloading and installing ImageToText, please review the lists below to ensure that your device is compatible.

| ImageToText Supported Devices that Scan with the Code Reader | | | |
|--|-----------------|--|--|
| Model | Android Version | Code Reader | |
| RS35 | Android 10 | SE4100, SE4770 | |
| RS36 | Android 12 | SE4770 | |
| RK95 | Android 9 | SE4750SR (with non-camera version only) | |

| ImageToText Supported Devices that Scan with the Camera | | |
|---|---------------------|--|
| Model | Android Version | |
| RS35 | Android 10 or later | |
| RS36 | Android 12 | |
| RK25 | Android 9 or later | |
| RK26 | Android 12 | |
| RK95 | Android 9 or later | |

If your device is not listed, it may either not be compatible with ImageToText or it could be a recently released model.

If you need additional information regarding your device's compatibility with ImageToText, please contact <u>CipherLab Support</u>: Support@cipherlab.com

Note:

(1) To find the information about the model and Android version on your mobile computer,

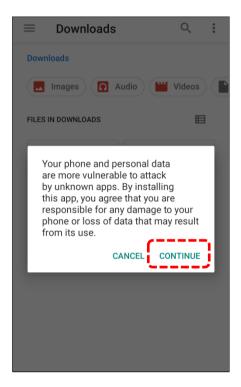
Access Settings > About phone

(2) To find the information about your mobile computer's code reader,

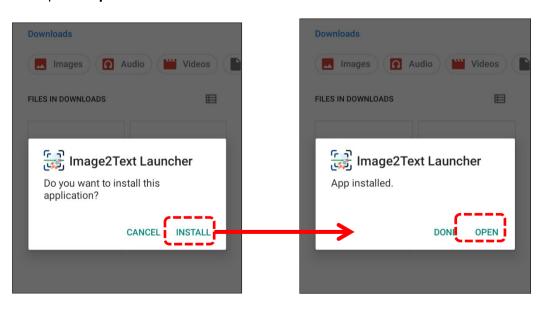
Access ReaderConfig > Click : > About

1.1.2 INSTALLATION

- Contact your <u>local sales representative</u> for the installation files, including "Image2TextLauncher.apk" and "ImageToText.apk."
- 2) Download and install both files on your mobile computer.
- 3) If prompted, tap on "CONTINUE".



4) If you're asked, "**Do you want to install this application?**", tap on "**INSTALL**" and then tap on "**Open**".

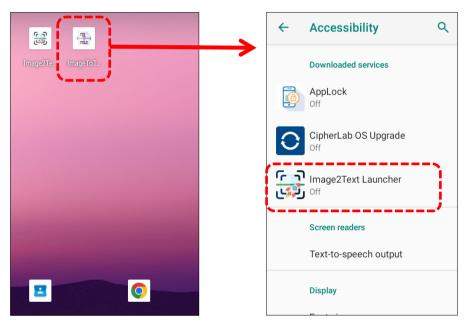


1.2 LAUNCH OPTIONS

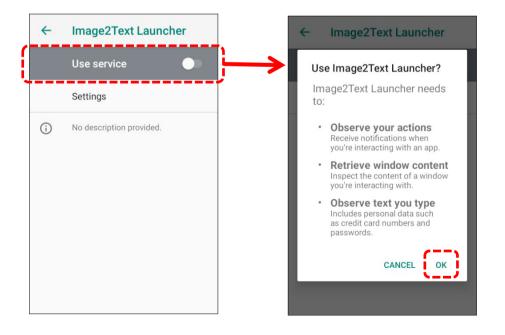
Launch options in "**Image2Text Launcher**" are used to optimize ImageToText and enhance the user experience before running it. The following descriptions provide step-by-step instructions for setting up the launcher on various Android versions.

1.2.1 FOR ANDROID 9 VERSION

- 1) Open the "Image2Text Launcher" and you will be redirected to the "Accessibility" setting page.
- 2) Tap on "Image2Text Launcher".

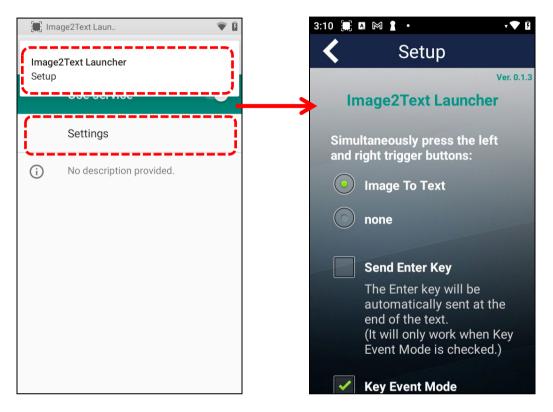


3) Tap on "Use service" and than tap "OK" to grant access to "Image2Text Launcher".



Once the popup notification appears, you are able to <u>initiate **ImageToText** with buttons</u> configured in the launcher.

4) Tap on "Settings" or the popup notification to enter "Setup" page within "Image2Text Launcher" to complete the settings.



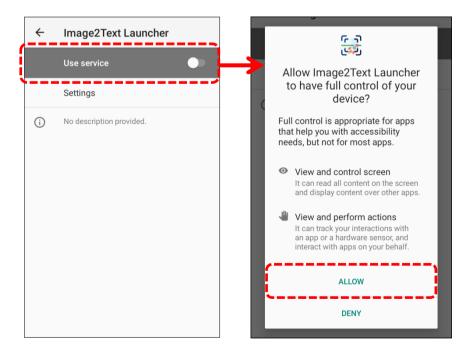


1.2.2 FOR ANDROID 10 VERSION

- Open the "Image2Text Launcher" and you will be redirected to the "Accessibility" setting page.
- 2) Tap on "Image2Text Launcher".

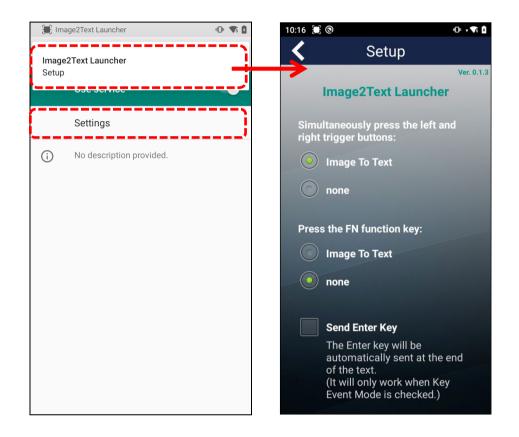
| | | ÷ | Accessibility | ۹ |
|---|---|----|---|---|
| imageTo Image2T | | | Volume key shortcut TalkBack | |
| | | | DOWNLOADED SERVICES | |
| | | Ø | AppLock Off | |
| | | | Image2Text Launcher Off | j |
| | | | SCREEN READERS | |
| | 1 | ۳. | Select to Speak Off / Hear selected text | |
| Image: Second second | | | TalkBack Off / Speak items on screen | |
| | | | Text-to-speech output | |
| G y @ | | | DISPLAY | |
| · · · | | | Font size | |

3) Tap on "Use service" and proceed to select "ALLOW" when asked "Allow Image2Text Launcher to have full control of your device?".



Once the popup notification appears, you are able to <u>initiate **ImageToText** with buttons</u> configured in the launcher.

4) Tap on "Settings" or the popup notification to enter "Setup" page within "Image2Text Launcher" to complete the settings.



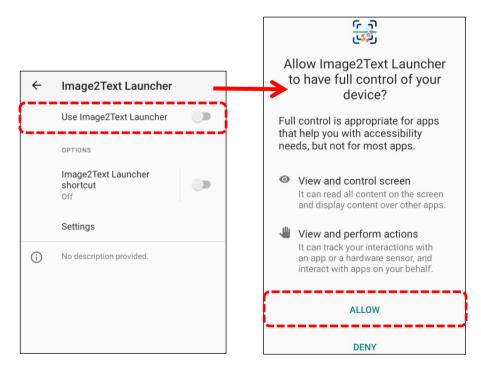


1.2.3 FOR ANDROID 11 VERSION

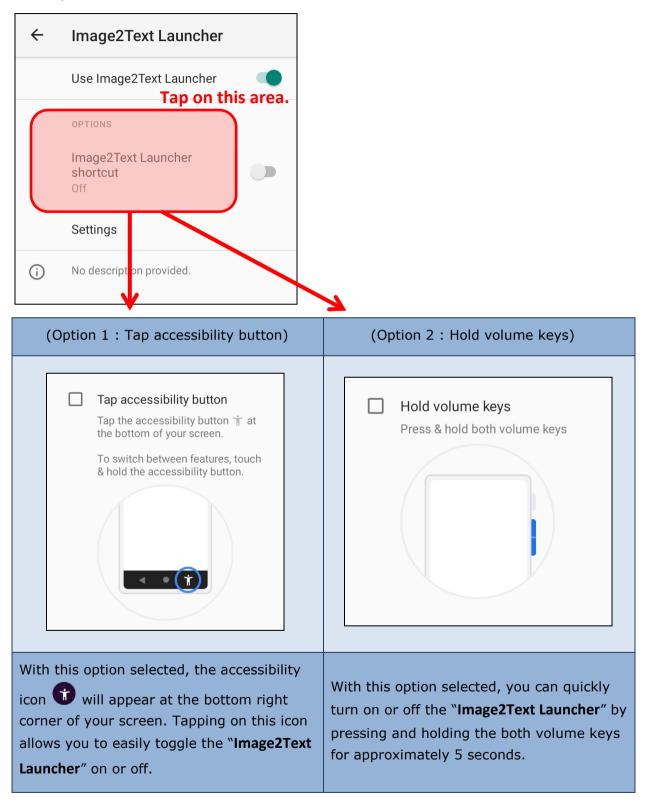
- Open the "Image2Text Launcher" and you will be redirected to the "Accessibility" setting page.
- 2) Tap on "Image2Text Launcher".

| | ÷ | Accessibility | α |
|------------------|-------|---|---|
| ImageTo Image2Te | | DOWNLOADED APPS | |
| | ٥ | AppLock Off | - |
| | ولي ا | Image2Text Launcher Off | |
| | | SCREEN READERS | |
| | • | Select to Speak Off / Hear selected text | |
| | | TalkBack Off / Speak items on screen | |
| | | Text-to-speech output | |
| | | DISPLAY | |
| G 🌵 💿 | | Font size Default | |

3) Tap on "Image2Text Launcher" and proceed to select "ALLOW" when asked "Allow Image2Text Launcher to have full control of your device?".



4) Tap "Image2Text Launcher shortcut" (not the toggle button) to open the settings. Choose from the two options to quickly enable or disable "Image2Text Launcher" based on your selection.





After the "Image2Text Launcher shortcut" is set, you are ready to turn on or off the launcher by pressing and holding the shortcut keys:

With "accessibility button" enabled, tapping in the corner of the screen will prompt the launcher to turn on or off. Alternatively, with "volume keys" enabled, you can also turn on or off the launcher by pressing them.

Initiate Launcher with Accessibility Button





Tap and hold the icon.

Once the launcher is turned on, a notification appears on the screen, and an icon will appear on the upper left corner of the screen.

5) <u>Press the trigger buttons or the FN function</u> key to initiate **ImageToText**.

OR

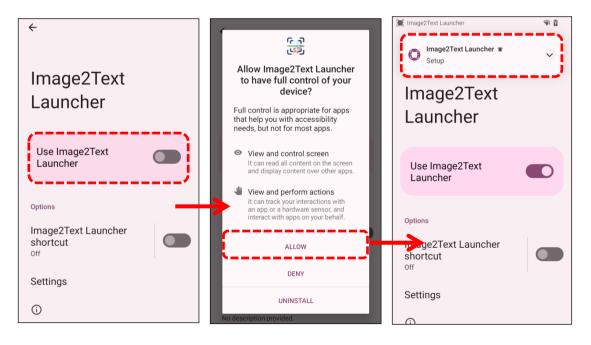
Tap on the notification and you will be guide to the **Setup** page within "**Image2Text Launcher**" to change the settings.

1.2.4 FOR ANDROID 12 VERSION

- Open the "Image2Text Launcher" and you will be redirected to the "Accessibility" setting page.
- 2) Tap on "Image2Text Launcher".

| | ÷ |
|--------------------------------------|-------------------------|
| Image2Te ImageToT D.M.Date TW Licens | Accessibility |
| | Downloaded apps |
| | AppLock Off |
| | D.M.Date OCR |
| | اmage2Text Launcher Off |
| | TW License Plate |
| | Screen reader |

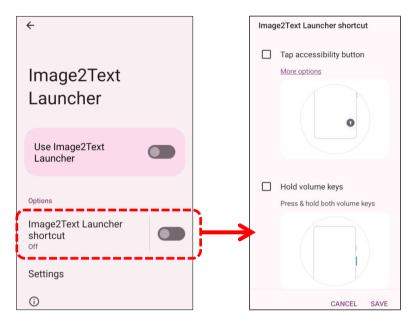
3) Tap on "Use Image2Text Launcher" and proceed to select "ALLOW" when asked "Allow Image2Text Launcher to have full control of your device?". You will now be directed to the "Setup" page of the launcher.



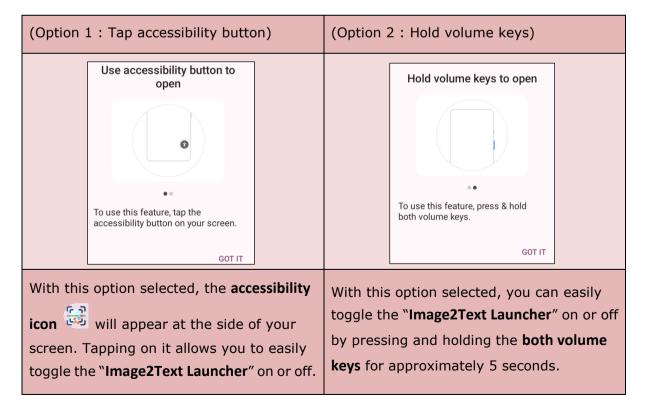


To configure "Image2Text Launcher shortcut" settings:

- 1) Tap on "Image2Text Launcher shortcut".
- Select the desired button(s) as shortcut to initiate Image2Text Launcher, and tap "SAVE".

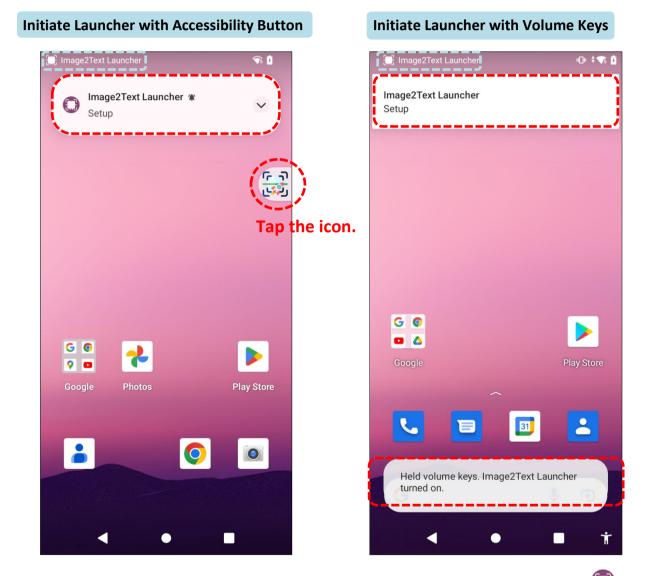


The two options are "accessibility button" and "volume keys", shown in the following table.



After the "Image2Text Launcher shortcut" is set, you are ready to turn on or off the launcher by pressing and holding the shortcut keys:

With "accessibility button" enabled, tapping will prompt the launcher to turn on or off. Alternatively, with "volume keys" enabled, you can also turn on or off the launcher by pressing them.



Once the launcher is turned on, a notification appears on the screen. , and an icon O will appear on the upper left corner of the screen.

6) <u>Press the trigger buttons or the FN function key</u> to initiate "ImageToText".

OR

Tap on the notification and you will be guide to the **Setup** page within "**Image2Text Launcher**" to change the settings.

1.3 SETTING UP LAUNCH KEYS

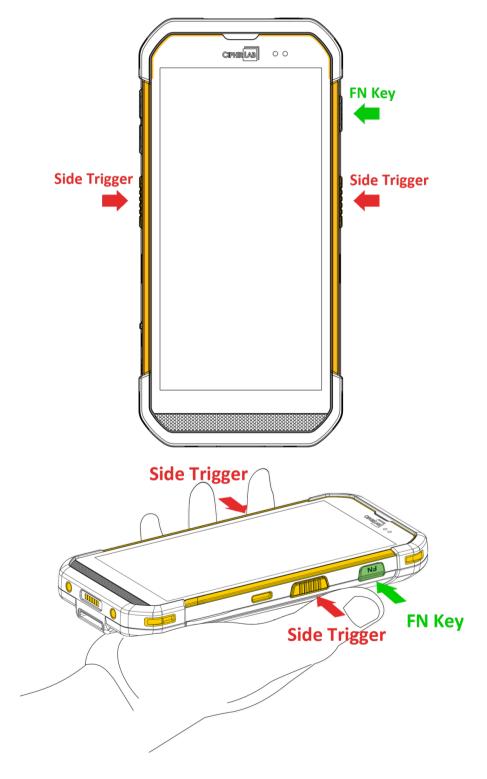
On the "**Setup**" page, select your preferred keys as trigger buttons to initiate ImageToText:

| | K Setup |
|---|--|
| | Ver. 0. 년 Image2Text Launcher |
| Select "ImageToText" to quickly launch the App by pressing both trigger buttons at the same time. | Simultaneously press the left and right trigger buttons: Image To Text none |
| Select "ImageToText" to quickly launch the App by pressing the FN function key. | Press the FN function key: |
| ~ | Image To Text |
| Select "Send Enter Key" is allowed, the function of enter key will be | none |
| automatically executed after sending the ImageToText's results. | Send Enter Key |
| Namely, after sending the ImageToText's results, the text cursor will be sent to the next line, or a certain command will be executed, such as searching and | The Enter key will be automatically sent at the end of the text. (It will only work when Key Event Mode is checked.) |
| submitting. | Key Event Mode |
| This mode allows you to send the ImageToText's results to the browser or terminal emulator. | Enable it if using a browser or terminal emulator such as telnet. |
| Note that ImageToText will only work with English text and digits for this mode. | 2. It can only receive English or numeric text. |

1.4 KEY LOCATION AND PRESSING FOR APP LAUNCH

After configuring the launcher options, you can launch ImageToText using the specified keys. The images below illustrate the key positions and the corresponding key presses.

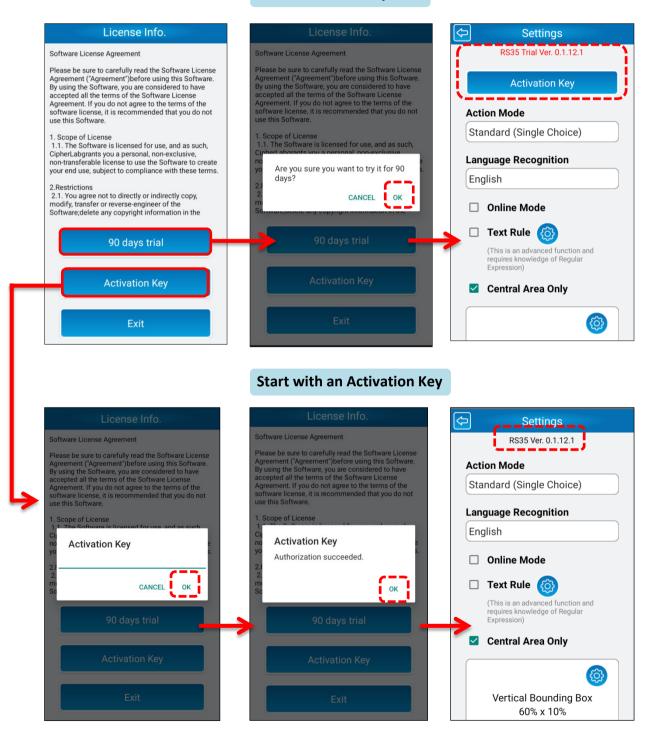
Press the left and right trigger buttons at the same time or press the FN function key to launch ImageToText according to your configuration.



1.5 LICENSE INFORMATION

Begin your project with a 90-day ImageToText free trial. Simply go through the Software License Agreement and you can access full functionality of ImageToText during this trial period. To inquire about ImageToText licensing, please contact <u>the local sales</u> <u>representative</u> for purchasing an Activation Key.

Start with a 90-Day Trial



Chapter 2

CHAPTER 2: GETTING STARTED

This chapter provides an overview of the primary user interface of ImageToText.

IN THIS CHAPTER

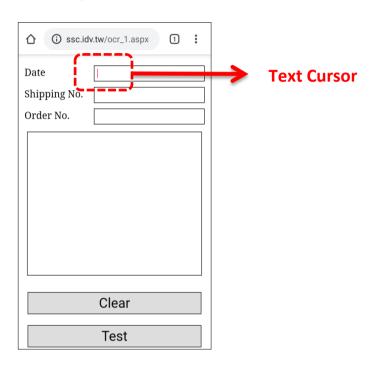
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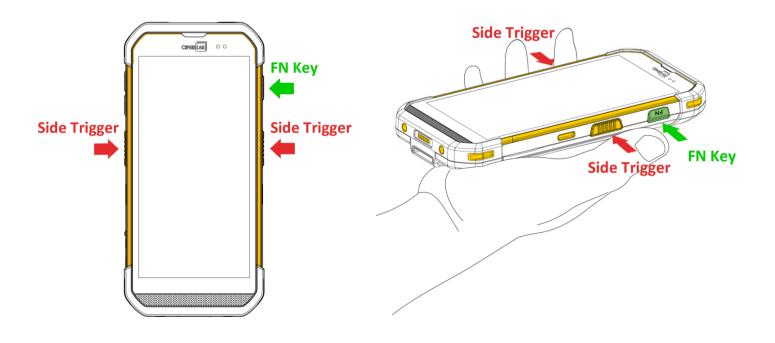
2.1 POSITIONING THE TEXT CURSOR

After configuring the launch options, you can initiate ImageToText by pressing the pre-configured trigger button. For improved convenience in tasks such as data entry and text extraction, please follow the following steps:

 Open the relevant App/Website where you intend to input text and place the text cursor in the designated input field.

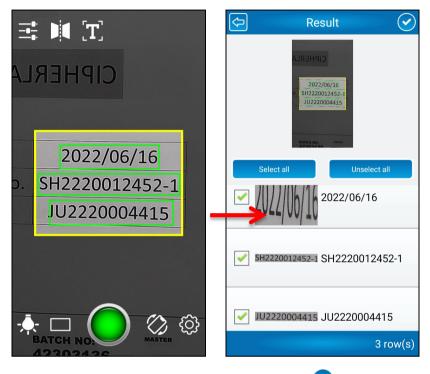


2) Activate ImageToText using your pre-configured trigger button.



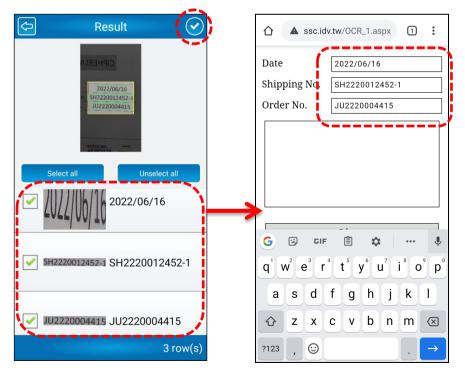
3) Aim the camera/reader to the desired texts and tap the shutter button \bigcirc to capture the image.

After capturing the image, the recognized texts will be listed on the result page.



4) Select the desired texts and then tap on \checkmark .

As shown in the following screenshot, the text will be automatically extracted and placed to the previously selected input field.



2.2 USER INTERFACE OVERVIEW

The screenshot below presents the main user interface within ImageToText. The on-screen icons provide quick access to various actions, which are described in the following table.



| lcon | ltem | Description |
|------------|-------------------------------|---|
| | Brightness/Contrast | To adjust brigtness and contrast by tapping the \bigcirc and \bigcirc icons or dragging the sliders. |
| | Image Horizontal Flip Mode | To enable reading and recognizing horizontally reversed text. |
| [T] | Text Rule | To identify and capture text that follows a particular structure based on Regular Expression. |
| - . | Flashlight | To enhance visibility and accuracy when scanning in low-light environment. |
| | Bounding Box Shortcut | To quickly select or set up a customized bounding boxes. |
| \bigcirc | Shutter Button | To serve as a trigger for initiating the scanning or image-capturing process. |
| \Diamond | Screen Orientation Lock | To fix the screen's orientation to either portrait or landscape mode. |
| ැටූ | Settings | To configure and adjust the device's overall settings. Please refer to <u>Settings</u> for more details. |

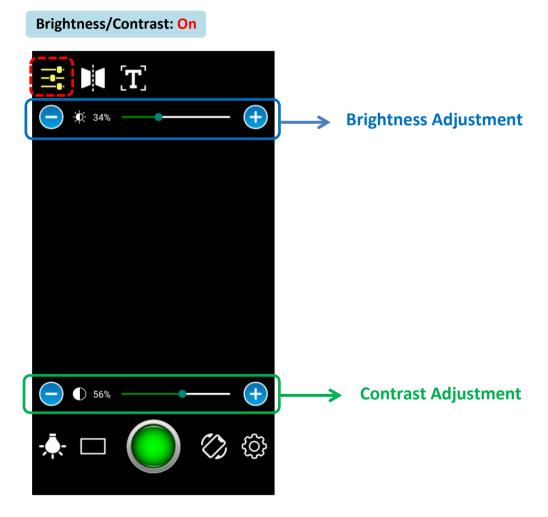
2.2.1 BRIGHTNESS/CONTRAST

The Brightness/Contrast functions improve image quality and appearance. Increasing brightness helps in low-light conditions, while adjusting contrast enhances text legibility.

1) First tap the Brightness/Contrast icon 茸 to bring up the sliders.

The upper panel allows you to adjust brightness, and the lower panal for contrast adjustment.

- 2) Tap the \bigcirc and \bigcirc icons or slide the respective control ——— to achieve your desired image capture conditions.
- 3) Tap the shutter button \bigcirc to capture the image.





2.2.2 IMAGE HORIZONTAL FLIP MODE

When capturing images with reversed text or horizontally flipped words, tap to enable **Image Horizontal Flip Mode** icon

- 1) Aim the camera or the reader at the target text.
- 2) Tap the shutter button \bigcirc to capture the image.

The result page will then appear, automatically restoring the reversed text or flipped words to their regular orientation, as demonstrated in the following pictures.

Note:

Normal text may be illegible or incorrectly recognized with Image Horizontal Flip Mode enabled.

2.2.3 TEXT RULE

The "**Text Rule**" feature allows you to extract specific information by using filter criteria based on Regular Expressions.

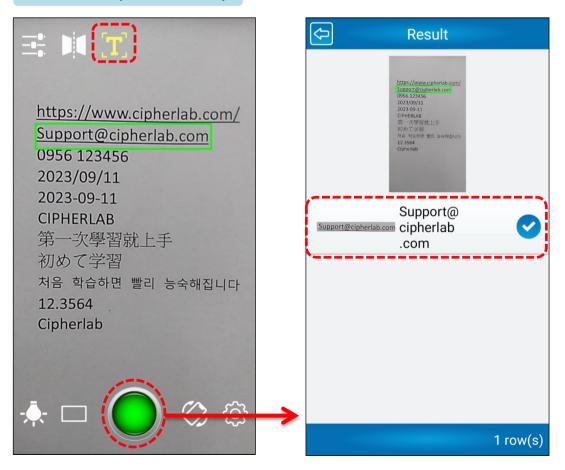
We provide nine predefined filter templates, including Date, Time, Number, Uppercase Character, and more, to make it easier to capture the data you need.

- 1) Tap on Settings 🙆 | Text Rule | 🚳
- 2) Select the desired filter in the settings, for example, "E-mail" For more detailes, please refer to <u>3.3 Text Rule</u>. [™]
- 3) Tap on 2 twice to return to the camera/reader page.
- 4) Tap the icon 🗰 to enable Text Rule.
- 5) Aim the camera or the reader at the target text and tap the shutter button $\label{eq:starget}$

0.

The result page will then appear, automatically presents the captured information, as demonstrated in the following pictures.

Text Rule: **On** (Filter: "E-Mail")





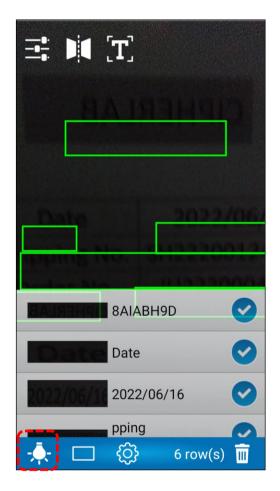
2.2.4 FLASHLIGHT

Flashlight provides additional lighting to ensure improved image quality in low-light conditions.

Tap the flashlight icon 🔯 to enhance visibility during image captureing.

The following pictures illustrate the difference between capturing an image in a low-light condition with and without a flashlight.





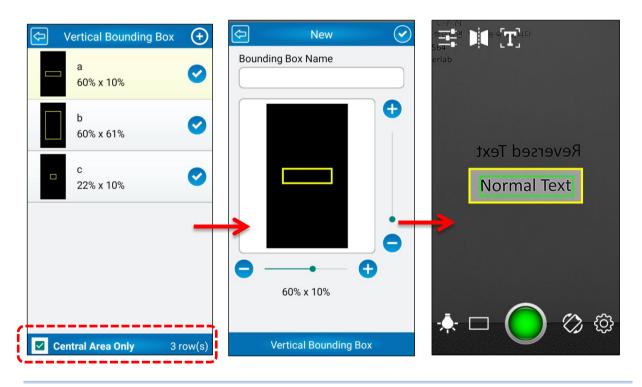
| T] 🔰 \Xi LAB | CIPHER |
|-----------------|---------------------------|
| Date | 2022/06/16 |
| Shipping No. | SH2220012452-1 |
| Order No. | JU2220004415 |
| | |
| DateDat | e42303136 |
| | pping No. 2220012452-1 |
| Order No. Ord | er No. |
| | 20 17 row(s) |

Flashlight : On

2.2.5 BOUNDING BOX SHORTCUT

Different sizes of bounding boxes are designed to accommodate a diverse range of text sizes and layouts. To accurately capture the text or filter out irrelevant information, select a customized bounding box that suits your needs.

- 1) Tap on the Bounding Box Shortcut icon . This action will bring up either a Vertical Bounding Box page or a Horizontal Bounding Box page based on your screen orientation.
- 2) Tap the vicon to select a bounding box that you have customized previously, or tap the icon in the upper-right corner to add a new one. Adjust the sizes of the box by tapping and cicons or dragging the respective contro _____.
- 3) Tap \checkmark to select your desired bounding box, and you will be guide to the main page to start capturing information with the selected bounding box.



Note:

Ensure you check "**Central Area Only**" on the bottom-left page to enable Bounding Box on the main page.



2.2.6 SCREEN ORIENTATION LOCK

Screen Orientation Lock allows users to maintain a fixed display orientation for a consistent and convenient viewing experience.

Tap the **Screen Orientation Lock** icon to set the screen's orientation to either portrait or landscape mode. The icon changes to when Screen Orientation Lock is enabled.

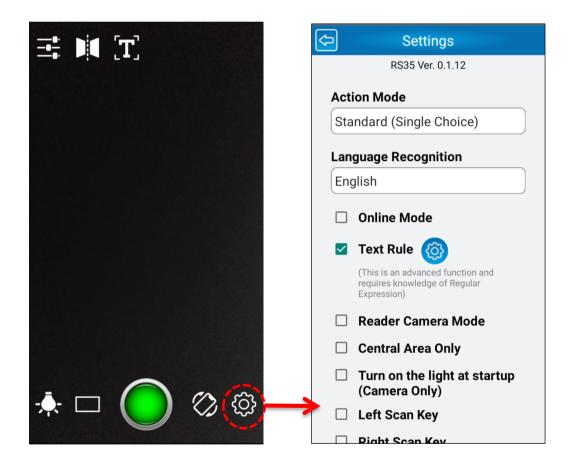
2.2.7 SETTINGS

To configure and adjust the device's overall settings, tap the **Settings** icon 0.



The **Settings** page provides access to a range of configurable options and preferences.

For more details, please refer to the following chapter.



Chapter 3

CHAPTER 3: SETTINGS

This chapter carries the introduction of how to use ImageToText to recognize texts.3.1

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3.1 ACTION MODE

Action Mode offers users customizable OCR modes, enabling personalized text extraction to enhance user efficiency. You have the flexibility to switch the OCR mode at any time.



1) Tap to enter the "**Settings**" page.

2) Tap to unfold the option list.

3) Tap \checkmark to select the mode that best suits your needs.

| ¢ | Settings |
|-----|---|
| | RS36 Ver. 0.1.12 |
| Act | ion Mode |
| Re | al-Time Text Recognition |
| Lan | guage Recognition |
| En | glish |
| | Online Mode |
| | Text Rule 👸 |
| | (This is an advanced function and requires knowledge of Regular |

| 🕞 Language Recog | | | | | | |
|------------------|---|--|--|--|--|--|
| English | 0 | | | | | |
| Chinese | 0 | | | | | |
| Japanese | 0 | | | | | |
| Korean | 0 | | | | | |
| Cancel | | | | | | |

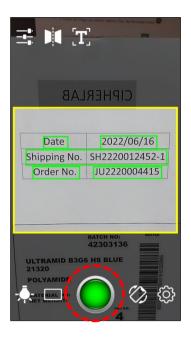
The options available are as follows:

| Mode | Description |
|--|---|
| Standard (Single Choice) | Click the shutter button to generate OCR results. You can select one text result to send. |
| Standard (Multiple Choice) | Click the shutter button to generate OCR results. You can select multiple text results to send. |
| Real-Time Text Recognition | The OCR results will be generated and displayed on the screen immediately when the image is scanned. You can select one text result to send. |
| Album Photo (Single Choice / Multiple Choice) | Upload a photo from the album to generate OCR results. You can select either one or multiple results to send depending on the mode you use. |

STANDARD (SINGLE CHOICE)

To generate OCR results in Standard (Signle Choice) Mode:

1) Frame the image you want to capture and tap the shutter button \bigcirc .





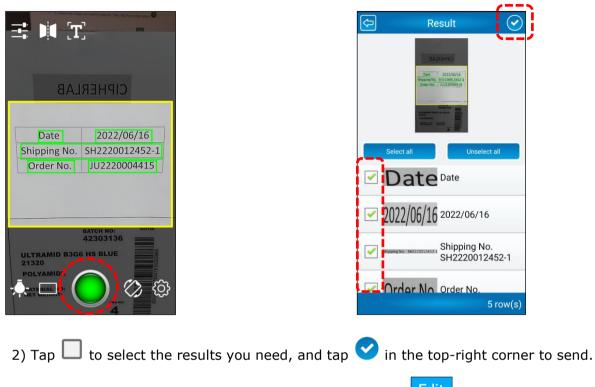
- 2) Tap \checkmark to select and send the result you need.
- 3) If necessary, slide the needed result to the right and tap Edit to edit the result. When done, tap 🗸 to confirm the changes and send the edited result.

| Result | ¢ | | | Ed | it Te | ext | | | \bigcirc | | ← [| Due <u>D</u> | ate | | | | | | × |
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STANDARD (MULTIPLE CHOICE)

To generate OCR results in Standard (Multiple Choice) Mode:

1) Frame the image you want to capture and tap the shutter button igsquare



3) If necessary, slide the needed result to the right and tap Edit to edit the result. When done, tap 🗸 to confirm the changes.

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|--|--|-----------------------------------|-------------|---|
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| Order No. 5 row(s) | ☆ Z X ?123 , ☺ | cvbnn | n 🗵 | 5 row(s) |

REAL-TIME TEXT RECOGNITION

To generate OCR results in Real-Time Text Recognition Mode:

1) Frame the image you want to capture, and the OCR results will be immediately displayed at the bottom.

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| Shipping No. | SH2220012452 | -1 | | | |
| Order No. | JU222000441 | 5 | | | |
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| 20230919 1549T CIPHERLAB | | | | | |
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| MATERIAL NO: NET WEIGHTS Shipping No. SH222001245241 SI | hipping No. | 000000000000000000000000000000000000000 | | | |

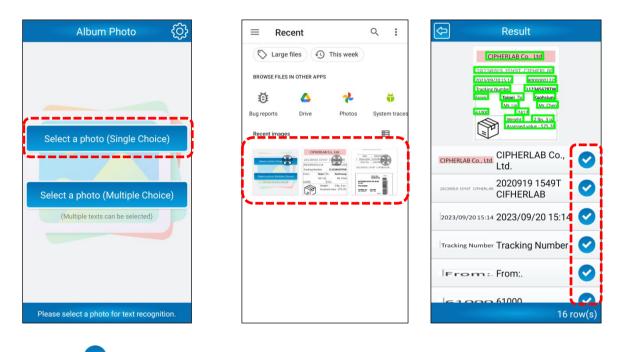
- 2) Tap \checkmark to select and send the result you need.
- 3) If necessary, slide the needed result to the right and tap Edit to edit the result. When done, tap \checkmark to confirm the changes and send the edited result.

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ALBUM PHOTO (SINGLE CHOICE)

To generate OCR results in Album Photo (Single Choice) Mode:

1) Tap "Select a photo (Single Choice)" and select a photo to upload.



- 2) Tap \checkmark to select and send the result you need.
- Edit to edit the result. When 3) If necessary, slide the needed result to the right and tap done, tap \checkmark to confirm the changes and send the edited result.

| C Result | Edit Text |
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| CIPHERLAB COLtd SPESSAGES LELICE CIPHERLAB 2022/07/201512 Fractions Yoursel Tables Tabl | 2023/09/20 Wednesday 15:14 |
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| Erem: From: | asdfghjk |
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| 16 row(s) | ?123 , 😳 . |

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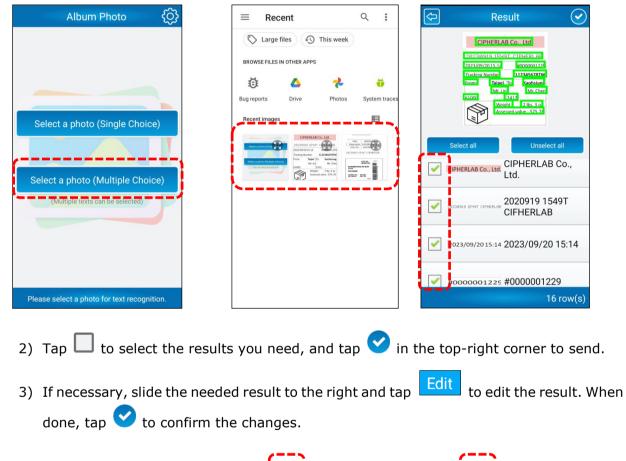
. ←

b n m 🗵

ALBUM PHOTO (MULTIPLE CHOICE)

To generate OCR results in Album Photo (Multiple Choice) Mode:

1) Tap "Select a photo (Multiple Choice)" and select a photo to upload.



| C Result | 🗢 Edit Text | C Result | Date 2023/09/20 Wednesday 15 |
|--|---------------------------------|---|------------------------------|
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| CIPHERLAB CO., Ltd. CIPHERLAB CO., Ltd. | | Select all Unselect | tall |
| 2020919 1549T | | 2023/09/20 2023/09/20 15:14 Wednesday | |
| Edit 2023/09/2015:14 2023/09 | 응 로 대 🖹 🌣 🏟 q¹w²e³r⁴t⁵y⁰u²i³ | #0000001225 #000000122 | 29 |
| From: From: | asd fghjk | | mber |
| 16 row(s) | ☆ z x c v b n m ?123 , ☺ | CL12345678TW CL12345678 | |
| 1610w(s) | | | o row(s) |

3.2 LANGUAGE RECOGNITION

The recognition engine of ImageToText supports the recognition of multiple languages.

You can change the recognition language through the "Language Recognition" setting.

- 1) Tap to enter the "**Settings**" page.
- 2) Tap to unfold the option list.
- 3) Tap \checkmark to select the language that best suits your needs.

| ¢ | | Settings |
|---|-----|--------------------------|
| | | RS36 Ver. 0.1.12 |
| | Act | ion Mode |
| | Rea | al-Time Text Recognition |
| | Lan | guage Recognition |
| į | Enç | glish |
| | | Online Mode |
| | | Text Rule 👸 |
| | | |

| Language Reco | g |
|---------------|---|
| English | 0 |
| Chinese | 0 |
| Japanese | 0 |
| Korean | 0 |
| Cancel | |

The options available are as follows:

English:

Recognizes English text and digits.

Chinese:

Recognizes Traditional and simplified Chinese text, English text, and digits.

Japanese:

Recognizes Japanese text, English text, and digits.

Korean:

Recognizes Korean text, English text, and digits.

3.3 TEXT RULE

The **Text Rule** feature allows you to extract specific information by using filter criteria based on Regular Expressions. We provide nine filtering templates, including Date, Time, Number, Uppercase Character, and more, to make it easier to capture the data you need.

Text Rule Filtering Templates

| 🗢 Text Rule | (+) | | ¢ | Text Rule | (|
|---------------------|-------------|---|----------|--------------------|------|
| D1.Date | Edit | | 🗌 05.Upp | percase Character | Edit |
| 02.Time | Edit | - | 06.Lov | vercase Character | Edit |
| 03.Number (Integer) | Edit | - | 🗌 07.Cha | aracter and Number | Edit |
| 04.Number (Float) | Edit | | 08.E-M | lail | Edit |
| | | - | 09.Http | p URL | Edit |

To extract desired information based on Regular Expressions:

- 1) Tap on Settings 😳 | Text Rule | 🧐.
- 2) Select the desired filtering template in the settings, for example, "E-mail"

🔽 08.E-Mail

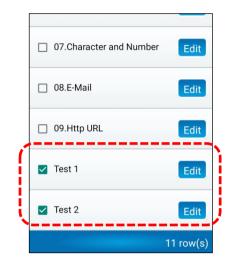
You can also add your own filter by tapping \bigcirc to define a rule name and its filter criteria based on Regular Expressions.

| 01.Date Edit 02.Time Edit 03.Number (Integer) Edit 04.Number (Float) Edit | ¢ | Text Rule | • |
|---|---|---------------------|------|
| O3.Number (Integer) Edit | | 01.Date | Edit |
| | | 02.Time | Edit |
| 04.Number (Float) Edit | | 03.Number (Integer) | Edit |
| | | 04.Number (Float) | Edit |
| | | | |

Add a New Filter

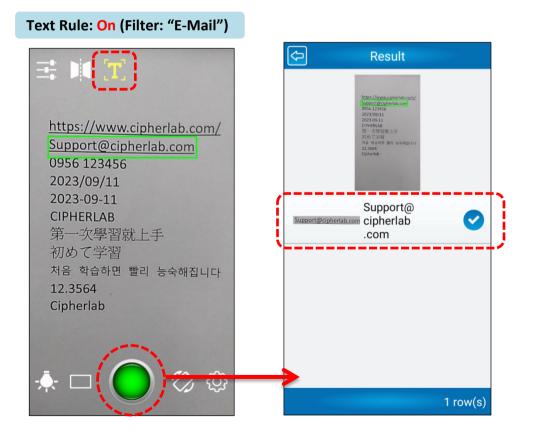


Your newly added filters will be listed below the nine filtering templates.



- 3) After sellecting your desired filter(s), tap \bigcirc to return to the camera/reader page.
- 4) Tap the icon **T** to enable "**Text Rule**" or select the option **Text Rule** in the "**Settings**" page.
- 5) Aim the camera or the reader at the target text and tap the shutter button

The result page will then appear, automatically presents the captured information, as demonstrated in the following pictures.

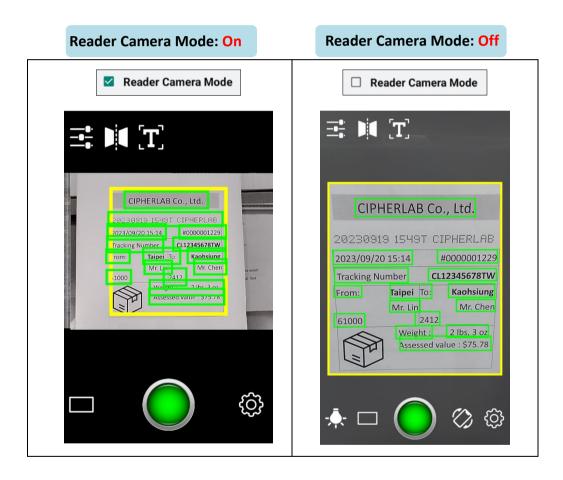


3.4 READER CAMERA MODE

By default, the input source for capturing images is the camera, but when "**Reader Camera Mode**" is activated, it switches to the barcode reader.

Follow the steps to activate "Reader Camera Mode":

- 1) Tap to enter the "**Settings**" page.
- 2) Tap the checkbox next to "**Reader Camera Mode**" to enable this function.



Note:

When Reader Camera Mode is enabled, certain functions like Flashlight, Bounding Box Shortcut, and Screen Orientation Lock are deactivated.

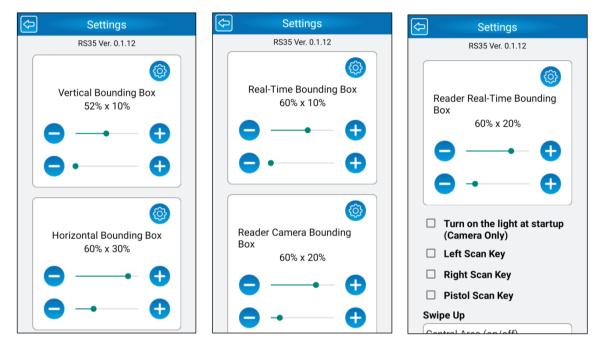


3.5 CENTRAL AREA ONLY

By applying "**Central Area Only**", users can selectively recognize text within a defined region, reducing irrelevant content and enhancing accuracy in text extraction.

1) Tap 😳 to the "Settings" page and scroll down to select the option

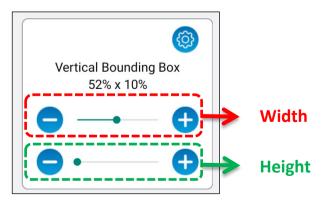
The adjustment options for Vertical/Horizontal/Real-Time/Reader Camera and Reader Real-Time Bouding Boxes will appear on the screen.



To promptly adjust the sizes of the bounding box:

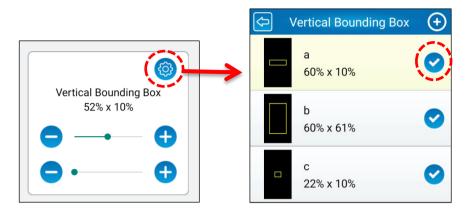
2) Tap the \bigcirc and \bigcirc icons or drag the sliders $_$

Note that the upper slider is for width adjustment and the lower slider for height.

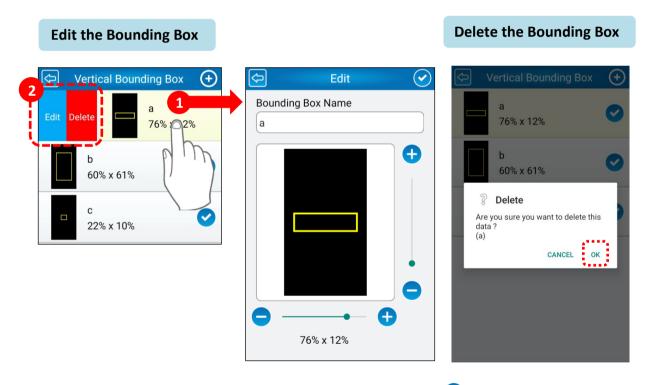


3) Tap 🔄 to return to the camera page, and your adjusted bounding box will be applied.

You can also tap the settings icon 0 to select a bounding box you customized previously.



To adjust the sizes of the customized bounding box, swipe right on the screen and tap on "**Edit**". Swipe right to tap "**Delete**" if you want to delete the bounding box.



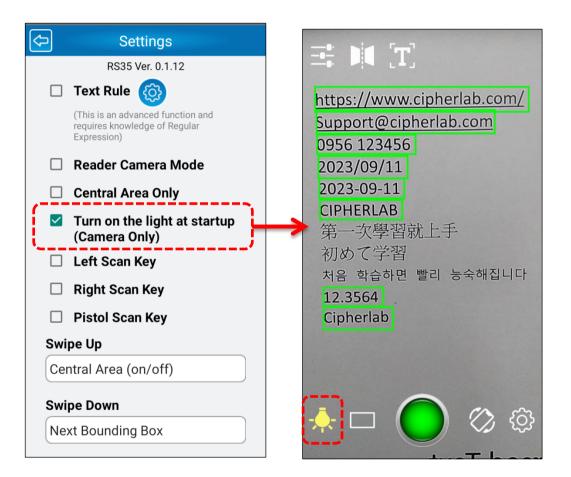
After compete editing the sizes of the bounding boxes, tap \checkmark to return to the camera/reader page, and your selected bounding box will be applied.



3.6 TURN ON THE LIGHT AT STARTUP (CAMERA ONLY)

"**Turn on the Light at Startup**" enables users to automatically activate the light source as soon as they launch ImageToText, ensuring optimal visibility in low-light or dark environments.

Tap the **Settings** icon and swipe down to select the option **Turn on the light at startup**".



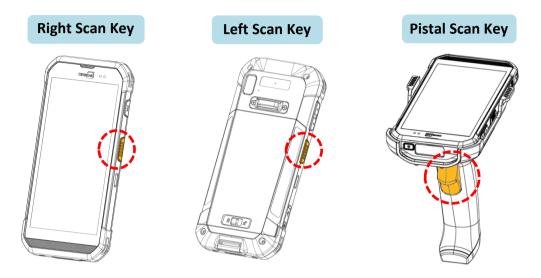
The flashlight is automatically turned on at startup.

Note:

- (1) The flashlight is exclusively designed for use in camera mode.
- (2) You are required to restart ImageToText to apply the changes to this setting.

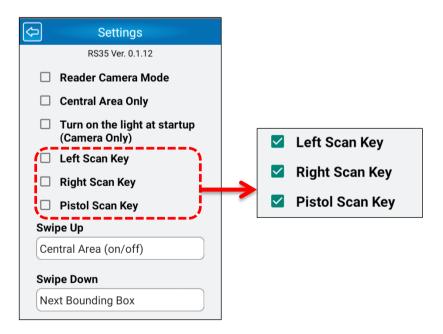
3.7 SCAN KEY

In addition to the shutter button \bigcirc , there are more scan keys available for capturing images, including Left, Right, and Pistol Scan Keys.



To enable the scan keys as trigger:

- 1) Tap 😳 to enter the "Settings" page and scroll down to the Scan Key options.
- 2) Select your preferred scan keys to trigger image capture.



3) Tap 🔄 to return to the camera/reader page, and you are ready to capture images with the selected skan keys.

3.8 QUICK BOX SWITCHING

"Quick Box Switching" allows you to effortlessly switch between customized bounding boxes with a simple swipe of your fingers.

By swiping fingers in different directions, you can quickly switch between customized bounding boxes or to adjust their width and height.

The following pictures display a list of gestures and their assignable actions.

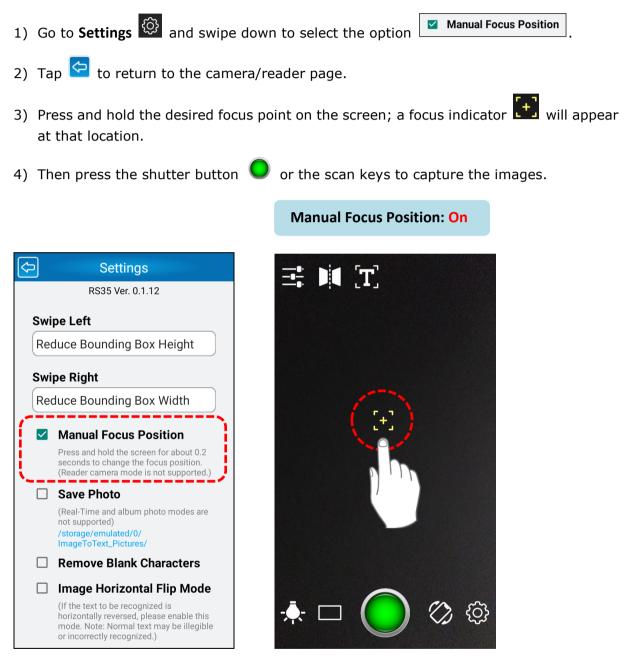
| Touch Gestures | Assignable Actions | |
|---|--|--|
| 11:20 ✿ ⑧ • ● | 11:21 ✿ ֎ ● | 11:21 ♀ ۞ ● ■ |
| Settings RS35 Ver. 0.1.12 Right Scan Key Pistol Scan Key Swipe Up Previous Bounding Box Swipe Down | Settings RS35 Ver. 0.1.12 Right Scan Key Swipe Up NONE Central Area (on/off) | Settings RS35 Ver. 0.1.12 Right Scan Key Swipe Up Increase Bounding Box Height Reduce Bounding Box Height |
| Next Bounding Box Swipe Left Reduce Bounding Box Height Swipe Right | Previous Bounding Box Next Bounding Box | s Increase Bounding Box Width Reduce Bounding Box Width |
| Reduce Bounding Box Width Manual Focus Position Press and hold the screen for about 0.2 seconds to change the focus position. (Reader camera mode is not supported.) Save Photo | Cancel Manual Focus Position Press and hold the screen for about 0.2 seconds to change the focus position. (Reader camera mode is not supported.) Save Photo | Cancel Manual Focus Position Press and hold the screen for about 0.2 seconds to change the focus position. (Reader camera mode is not supported.) Save Photo |

- 1) Go to **Settings** 3 and swipe down to the listed gestures.
- Choose your preferred gesture and tap on the white column below it. A list of assignable actions appears.
- 3) Tap \checkmark to assign an action.
- 4) Finally, tap 🔄 to return to the camera/reader page.

Now, you are ready to switch between bounding boxes or adjust their sizes using the assigned gestures.

3.9 MANUAL FOCUS POSITION

"Manual Focus Position" allows users to manually adjust focus settings for capturing clear and accurate text.



Note:

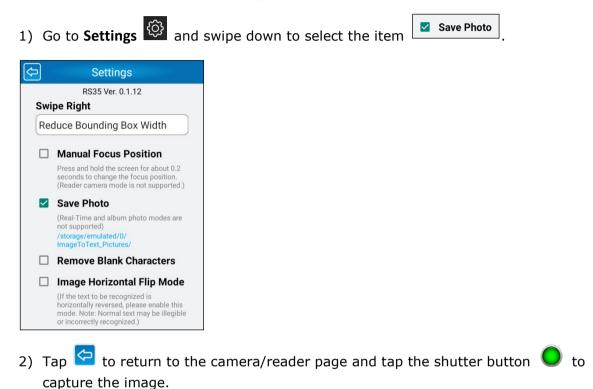
Manual Focus Position is not supported in Reader Camera Mode.



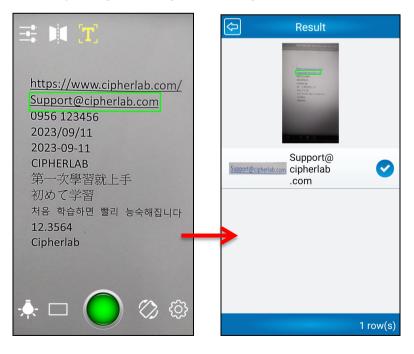
3.10 SAVE PHOTO

Saving photos within ImageToText enhances data management, security, accessbility, and overall usability of the captured content.

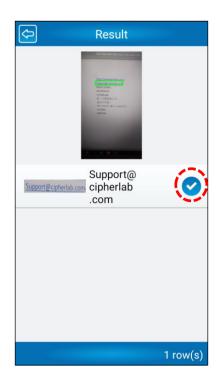
To save photos when capturing images:



After capturing the image, the recognized text will be listed on the result page.



3) Make sure you tap on \checkmark to select the desired text and complete the process of saving the photo.



To retreive your saved photos:

Open the file on your device and proceed to the designated path for access:

/storage/emulated/0/ImageToText_Pictures/.



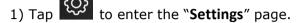
Note:

The options for **Real Time Text Recognition** and **Album Photo** modes in Action Mode are not supported.

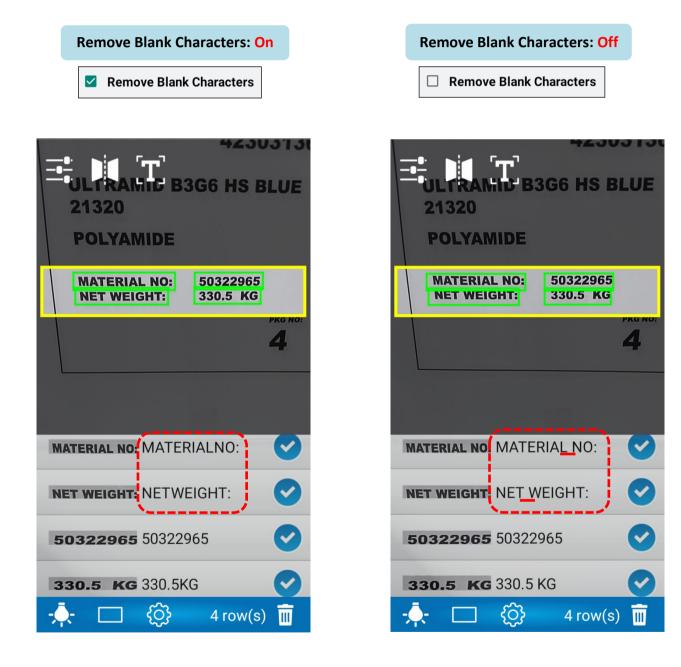


3.11 REMOVE BLANK CHARACTERS

You can use this function to remove all of the blank characters from the generated ImageToText result.



2) Tap the checkbox 🛄 of "**Remove Blank Characters**" to enable this function.



3.12 IMAGE HORIZONTAL FLIP MODE

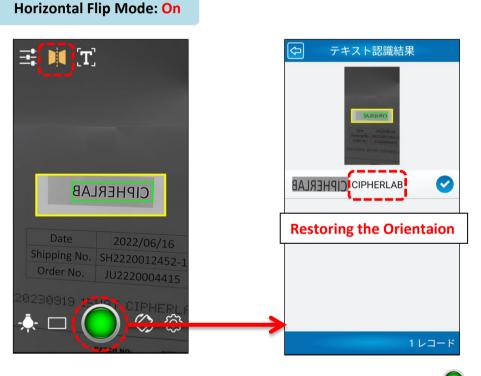
"Image Horizontal Flip Mode" is a preprocessing technique that involeves flipping an image of text horizontally before text recognition. It is often applied to enhance character recognition accuracy, especially when dealing with texts written in a mirrored orientation.

To extract horizontally flipped text:

1) Tap on the Image Horizontal Flip Mode icon 🚺 on the main user interface or tap the



Once the feature is applied, the icon on the main user interface turned \blacksquare



2) Aim the camera/reader to the text and tap the shutter button 💙 to capture the image. The result page will then appear, restoring the flipped text to their regular orientation.

3) Tap \checkmark to send the recognized characters or to save photos for data management.

Note:

Normal text may be illegible or incorrectly recognized with Image Horizontal Flip Mode enabled.

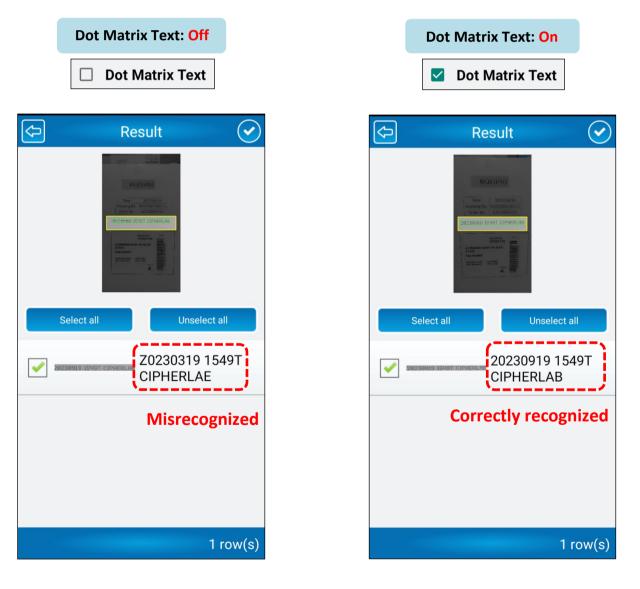
3.13 DOT MATRIX TEXT

"**Dot Matrix Text**" is designed to accommodate the unique characteristics of dot matrix text. It enhances character recognition for dot matrix text by handling irregularities in dot density and placement, resulting in more accurate and reliable text extraction from documents printed in this format.

To enable **Dot Matrix Text**, go to **Settings** and scroll down to select the option

Dot Matrix Text

Take the dot matrix text 20230919 1549T CIPHERLAB for example, as seen in the pictures provided, the recognition of the dot matrix text is improved when the feature is enabled.



3.14 IMAGE SIZE

Whether you need high-resolution images for detailed analysis or smaller file sizes for streamlined storage, you can adjust the size of <u>the photo you saved</u> through the "**Image Size**" setting.

| | Original size. 16:9 | | | | |
|-----------------------------|--|--|--|--|--|
| lmage Size | Medium O Approx. 1920x1080 | | | | |
| ⊖ Small Approx. 1280x720 | | | | | |
| dimensions a | (Standard mode: image capture size, dimensions are approximate. Reader camera mode not supported.) | | | | |

The options available are as follows:

| Image Size | Description |
|-------------------------------|--|
| Original size 16:9 | To save the photo in a 16:9 aspect ratio. The image size matches the device's maximum 16:9 resolution, which may vary depending on the device's camera model. |
| Medium (Approx. 1920x1080) | To save the photo with an approximate resolution of 1920x1080 pixels. |
| Small (Approx. 1280x720) | To save the photo with an approximate resolution of 1280x720 pixels. |

3.15 SOUND EFFECT

The "**Sound Effect**" feature enhances user interaction and experience by adding auditory cues to key actions. When enabled, this feature provides distinct sound feedback for initiating ImageToText, capturing images, and generating OCR results.

Note:

You are required to restart ImageToText to apply the changes to this setting.

3.16 ASK BEFORE EXITING THE APP

The **"Ask Before Exiting the App**" function promps to confirm users' intent before closing the application.

After activating this setting, a confirmation dialog "**Are you sure you want to quit ImageToText App?**" will appear when you attempt to exit ImageToText. Tap "**OK**" to exit.



Note:

You are required to restart ImageToText to apply the changes to this setting.