





Handheld Scanners

Version: V1.0

User Guide

Disclaimer

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Please read the manual carefully before using the product and operate it according to the manual. It is advised that you keep this manual for future reference.

Do not disassemble the device or remove the seal label from the device; doing so will void the product warranty provided by Newland Europe BV.

All pictures in this manual are for reference only, and the actual product may differ.

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Newland Europe BV

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Revision History

Version	Description	Date
V1.0	Initial Release.	2024-02-23

Contents

Chapter 1 About This Guide	1
Introduction	1
Documentation Set	1
Chapter Descriptions	1
More Information	2
Chapter 2 Getting Started	3
Introduction	
Getting Started	3
The MT95	
Charging the Battery	5
Keys	6
System Navigation	7
Installing Nano SIM Card	10
Chapter 3 Basics	
Introduction	
Switching On/Rebooting/Switching Off the MT95	
Locking/Unlocking the MT95	12
Home Screen	13
Status Icons	14
Installing App	15
Uninstalling App	15
Date & Time	
Display	17
Ringtones	
Restoring Factory Settings	19
Language & Input Method	20
Floating Button Settings	21
Shortcuts to Apps	
Widgets	
Chapter 4 Scanning Barcodes	23
Introduction	23
Scanning 1D Barcode	23
Scanning 2D Barcode	24
Programming Scanner	25
Enable Scan	

Output Mode	27
Scan Mode	
Scan Trigger	
Prefix & Suffix	
Good Read Indicator	
Encoding	
Data Edit	
Broadcast-output Settings	
Symbologies	
Chapter 5 Bluetooth	
Introduction	
Pair Bluetooth	
Chapter 6 Wi-Fi	40
Introduction	
Wi-Fi Settings	
WI-FI Settings	
Metered	
Proxy	
IP Settings	
Add Network	
Wi-Fi Preferences	
Saved Networks	
Wi-Fi Data Usage	
Chapter 7 Mobile Network	51
Introduction	
Mobile Network Settings	
APN Settings	
Chapter 8 Others	54
Camera	54
GPS	
NFC	
Chapter 9 Whitelist Manager	
Introduction	
Logging in to Whitelist Manager	
Chapter 10 System Update	
Introduction	
Online Update	

Local Update	59
Chapter 11 App Development Guide	61
Development Environment	61
Use of Non-standard Interfaces	61
Chapter 12 Maintenance & Troubleshooting	
Introduction	
Important Safety & Handling Information	
Disassembly and Retrofit	
External Power Supply	
Abnormal Situation	
Drop Damage	
LCD Screen	
Stacking Heavy Objects	
Mounting Location	
Wireless Functionalities	
Use & Maintenance	
Troubleshooting	64
FCC Warning	65

Chapter 1 About This Guide

Introduction

This guide provides instructions for programming and operating the NLS-MT95 portable data collector (hereinafter referred to as "**the MT95**" or "**the terminal**").

Documentation Set

The documentation set for the MT95 includes:

- NLS-MT95 Portable Data Collector Quick Start: Describes how to get the NLS-MT95 up and running.
- ♦ NLS-MT95 Portable Data Collector User Guide: Describes how to program and use the NLS-MT95.
- Newland APP User Guide: Describes how to install/uninstall, or use the APPs developed by Newland (For GMS Version Only).

Chapter Descriptions

∻	Chapter 1 About This Guide	Provides a general description of this manual.
Ŷ	Chapter 2 Getting Started	Provides information on getting the MT95 up and running for the
		first time.
¢	Chapter 3 Basics	Describes how to program the MT95 for the use of its basic
		features.
Ŷ	Chapter 4 Scanning Barcodes	Provides the instructions as to how to scan 1D/2D barcodes and how
		to program the scanner.
¢	Chapter 5 Bluetooth	Explains how to use Bluetooth functionality.
¢	Chapter 6 Wi-Fi	Explains how to use Wi-Fi functionality.
Ŷ	Chapter 7 Mobile Network	Explains how to use Mobile Network functionality.
Ŷ	Chapter 8 Others	Explains how to use Camera, GPS, and NFC apps
∻	Chapter 9 Whitelist Manager	Explains how to use the whitelist management tool.

♦ Chapter 10 System Update	Explains how to update the system.
♦ Chapter 11 App Development Guide	Describes the app development environment and the use of
	non-standard interfaces.
♦ Chapter 12 Maintenance & Troubleshooting	Provides troubleshooting solutions for issues that might occur when
	using the MT95.

More Information

For more product and support information, please visit our website: <u>http://www.newlandaidc.com</u>.

Chapter 2 Getting Started

Introduction

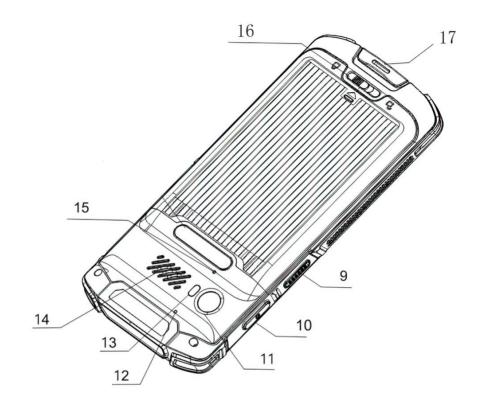
This chapter lists the parts for the MT95 and explains how to charge the battery and power on the MT95 for the first time.

Getting Started

The MT95



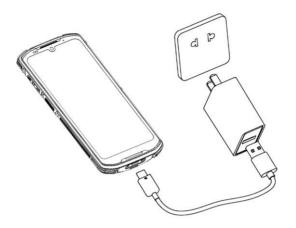
1	Volume+	2	Volume-
3	Left Scan Key	4	Light/Proximity Sensors
5	Front Camera	6	LED
7	Main Microphone	8	USB/Cradle Connector



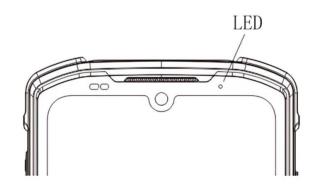
9	Right Scan Key	10	Power Key (Fingerprint Optional)
11	Rear Camera	12	Noise Reduction Microphone
13	Flashlight	14	Speaker
15	Barometer Sensor Hole (Optional)	16	Battery Cover Latch
17	Lanyard Hole		

Charging the Battery

Connect the MT95 to a power outlet using the included AC adapter or USB cable. When the terminal's battery is less than 5%, it takes about 4 hours to fully charge it (The terminal is shut down or in sleep mode).



When charging the MT95 with an AC adapter or USB cable, the user is notified of the charging status by the LEDs on the terminal.



LEDs on the MT95			
Green LED on Fully charged			
Red LED on	Charging in progress		
Red LED flashes constantly	Low-battery alert		
Blue LED flashes constantly	Incoming call/message reminder		

Note:

- 1. If the MT95 battery is completely drained, please press the power key to turn it on after 15 minutes of being charged.
- 2. When charging, make sure that the indoor temperature is above 0 degrees Celsius (32 degrees Fahrenheit). The device will stop charging at a low temperature for safety consideration.

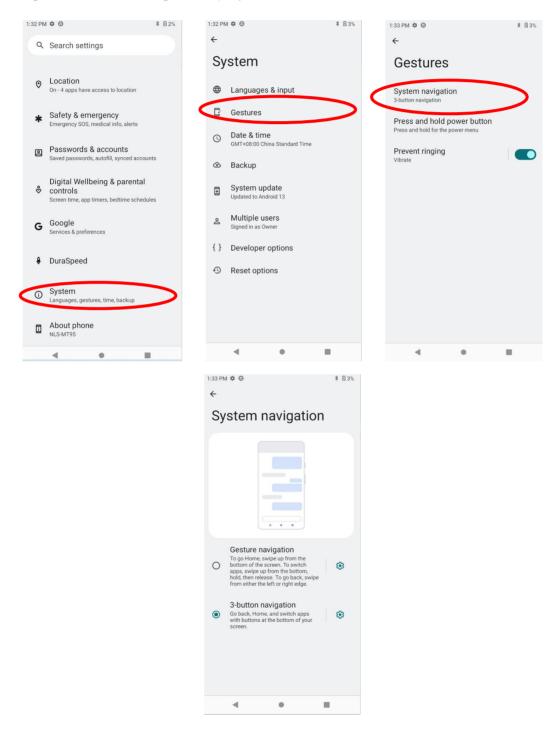
Keys

The MT95 has five physical keys, with Volume+/Volume-/Scan keys on the left side and Power/Scan key on the right side.

Note: Except the Power key, other keys are user programmable.

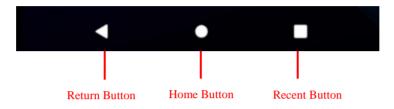
System Navigation

Set the system navigation: Tap the app icon and then "System" -> "Gestures" -> "System navigation" and set Gesture Navigation or 3-button Navigation as per your needs.



Gesture Navigation: To go back to the Home screen, swipe up from the bottom of the screen; To open the recent apps, swipe up from the bottom, hold then release; To go back to the previous screen, swipe inward from either edge on the screen.

3-button Navigation: There will be 3 buttons (Return Button, Home Button, Recent Button) displayed at the bottom of screen.



- ♦ Return Button: Tap it to go back to the previous screen.
- ♦ Home Button: Tap it to go back to the home screen.
- ♦ **Recent Button:** Tap it to display a list of thumbnail images of apps you've worked with recently.

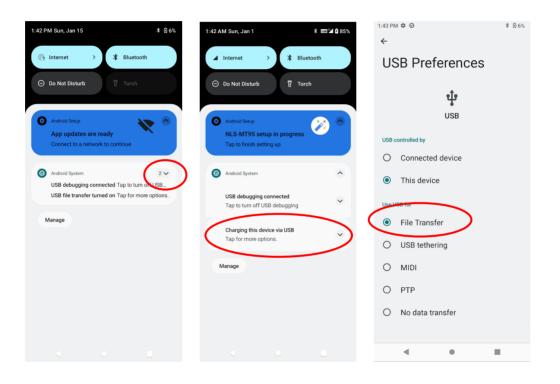
Communicating with PC

Step 1: Connect the Micro USB port on the MT95 to your computer with the included USB cable.

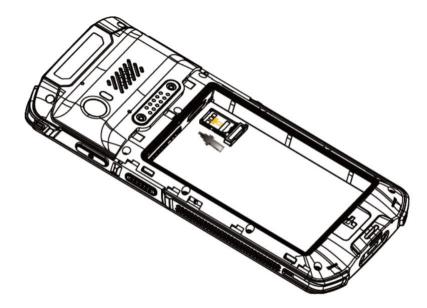
Step 2: Switch MT95 on. On the home screen, swipe from the top to open the notification bar.

Step 3: Tap "Android System" then "Charging this device via USB, Tap for more options".

Step 4: Select "Transfer Files". Navigate to the "My Computer" section of your computer and look for the newly added drive. Double-click it and you will be connected to the MT95. Then you may handle the files on the terminal through your computer.



Installing Nano SIM Card



Step 1: Slide the battery cover latch to the unlock position and remove the cover and battery.

Step 2: Place the Nano SIM into the tray and then gently push the tray all the way into the slot until it locks in place.

Note: There are three kinds of SIM cards in the market:

- 1. SIM: Size 25mm×15mm×0.8mm
- 2. Micro SIM: Size 12mmx15mm×0.8mm
- 3. Nano SIM: Size 12.3mm × 8.8mm × 0.7mm

MT95 can only support Nano SIM.



Chapter 3 Basics

Introduction

This chapter provides the basics of setting and using the MT95

Switching On/Rebooting/Switching Off the MT95

After being installed with the SIM card and fully charged, you can start to use the MT95.

Switch the MT95 on: Hold down the Power key on the right side of the terminal until the Android logo is displayed. Note that the initialization is going to take some time before the MT95 displays the Home screen.

Reboot the MT95: Hold down the Power key on the right side of the terminal until the window below pops up, then tap "Restart".

Switch the MT95 off: Hold down the Power key on the right side of the terminal until the window below pops up, then tap "Power off".



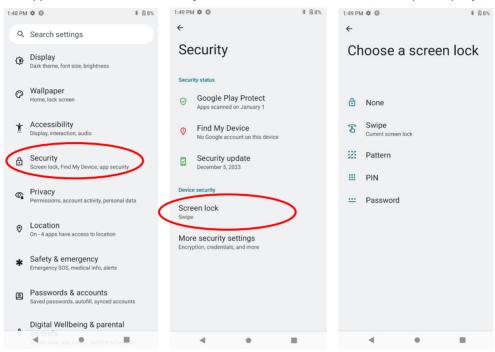
Locking/Unlocking the MT95

Ó

Lock the MT95: Briefly press the Power key on the right side of the terminal. If no operation is performed on the MT95 for a preset period, the MT95 locks automatically. You can change how long it takes for the MT95 to lock.

Unlock the MT95: Briefly press the Power key on the right side of the terminal and swipe up from the bottom of the screen

to unlock. Tap the app icon setures and then "Security" -> "Screen lock" and set the unlock sequence per your needs.

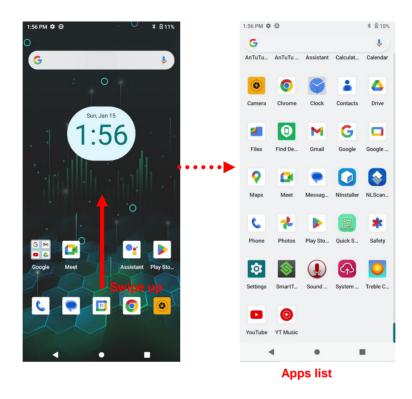


Home Screen

View another Home screen: Swipe left or right.

Open an app: Tap it.

View all apps/Open apps list: Swipe up from the bottom of the screen to view all the apps.



Add an app icon to the Home screen: Swipe up from the bottom of the screen to view all the apps. Tap and hold your desired app until it appears on the Home screen, and then drag it into a blank area.

Delete an app icon on the Home screen: Tap and hold your desired app on the Home screen until "X Remove" appears, then drag the app into it. Note that this operation only removes the icon from the Home screen. To remove the app from the MT95, see the **Uninstalling App** section.

Status Icons

The icons in the notification bar at the top of the screen give information about the MT95.

Status Icon	Description	Status Icon	Description
((1)	WLAN on	56	Signal Strength
*	Bluetooth on	*	Airplane Mode on
Android System Android System Charging this device via USB Tap for more options.	USB Connected	Android System VSB debugging connected Tap to turn off USB debugging	USB Debugging
č	Missed Calls	Ċ	Battery Charging in Progress
Ð	New Message	0	Hotspot & Tethering
0	Positioning	Đ	Power Saving Mode
Θ	Don't Disturb Mode	ı D ı	Vibrate on

Installing App

Use one of the following methods to install a new app on the MT95:

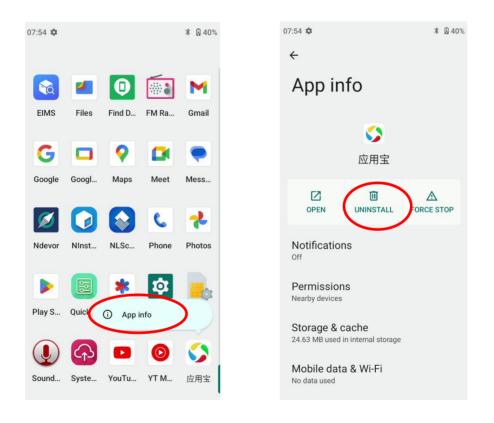
- 1. Download an APK file from the online app store and install it.
- 2. Download software package onto PC and copy it to your terminal. Then install it with File Manager.
- 3. Install a new app using a mobile assistant (such as Baidu Mobile Assistant) installed on the PC.

Uninstalling App

Follow the procedure below to remove an app from the MT95:

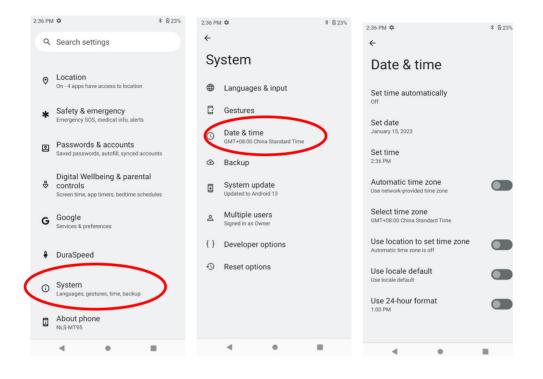
Swipe Home screen from bottom to top with one finger in one smooth motion to view all the apps. Tap and hold your desired app until "App info" appears, then tap "UNINSTALL" and uninstall it

*The application that comes with the system cannot be uninstalled.



Date & Time

Set the date and time: Tap the app icon icon and then "System" -> "Date & time" and set the date and time on the screen shown below as per your needs.



Display

Tap the app icon and then "Display", and set the brightness level, dark theme, night light, adaptive brightness, and other parameters on the screen shown below as per your needs.

2:37 PM	¢ :	\$ 124%	2:37 PM 🌣		* 🛿 24%
Q	Search settings		÷		
	22% USEU - 49.30 GB IIEE		Display		
4)	Sound & vibration Volume, vibration, Do Not Disturb		Brightness		
٩	Display Dark theme, font size, brightness		Brightness level		
			Adaptive brightnes	ss	
Ø	Wallpaper Home, lock screen		Lock display		
Ť	Accessibility Display, interaction, audio		Lock screen Show all notification conte	ent	
⋳	Security Screen lock, Find My Device, app security		Screen timeout		
			Appearance		
6	Privacy Permissions, account activity, personal dat	а	Dark theme Will never turn on automat	tically	
0	Location On - 4 apps have access to location		Display size and te	ext	
*	Safety & emergency Emergency SOS, medical info, alerts		^{Color} Night Light		
	Passwords & accounts		Will never turn on outomot	iaallu 📕	

Ringtones

Tap the app icon -> "Sound". Then set the ringtones and other notification sounds as per your needs.

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0	۹. Search settings		÷		
	22% useu - 49.90 GD Tiee		So	und & vibration	
	Sound & vibration Volume, vibration, Do Not Disturb)	ľ	Media volume	•
ζ	Display Dark theme, font size, brightness		R	Call volume	
¢	Wallpaper Home, lock screen		Ļ	Ring & notification volume	•
1	Accessibility Display, interaction, audio		Ø	Alarm volume	
ć	Screen lock, Find My Device, app sect	urity	Do N Off	lot Disturb	
0	Privacy Permissions, account activity, person	al data		ne ringtone y Phone	
(On - 4 apps have access to location		Med Show p		
×	Safety & emergency Emergency SOS, medical info, alerts		Vibra ^{On}	ation & haptics	
				tcat to prevent inging	

Restoring Factory Settings

 $\mathbf{\hat{o}}$ -> "System" -> "Reset options" -> "Erase all data (factory reset)" -> "Erase all data". After this Tap the app icon operation, the terminal will be reset to factory defaults and all the personal data on the internal storage, such as music and photos, will be deleted.

2:48 PM	\$	* 127%	2:48 PM	\$		∦ 🕅 28%	2:49 PM 🌣		* 🛿 28%
٩	Search settings		÷				÷		
			Sy	stem			Reset opti	ions	
	Location On - 4 apps have access to location			Languages &	input		Reset Wi-Fi, mobi	le & Bluetooth	
	Safety & emergency Emergency SOS, medical info, alerts		Ŀ	Gestures			Reset app prefere	nces	
	Passwords & accounts Saved passwords, autofill, synced ar	ccounts	0	Date & time GMT+08:00 China	Standard Time	•	Erase all data (fac	ctory reset)	>
			۲	Backup					
ŝ	Digital Wellbeing & parent controls Screen time, app timers, bedtime sc		¥	System upda Updated to Android					
	Google Services & preferences		ß	Multiple user Signed in as Owne					
ŧ	DuraSpeed		{}	Developer op					
	System Languages, gestures, time, backup	> <	Ð	Reset options					
	About phone NLS-MT95								
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		2:4	9 PM 🌣		X	≥ <u>1</u> 28%			

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Erase all data (factory reset)

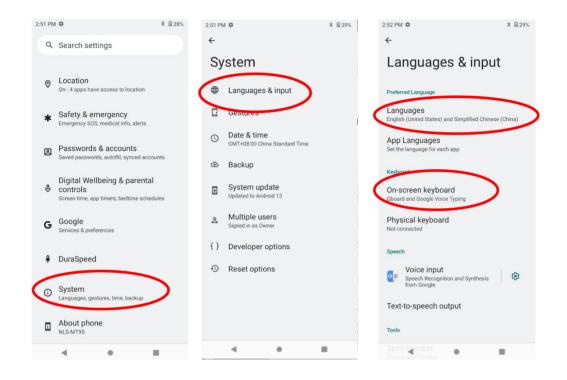
This will erase all data from your phone's internal storage, including:

- Your Google Account
 System and app data and settings
 Downloaded apps
- Music
- Photos
 - Other user data



Language & Input Method

Tap the app icon .-> "System"-> "Languages & input". Then set the language and input method as per your needs.

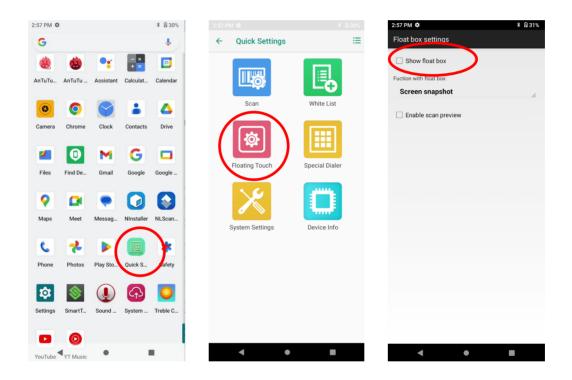


Floating Button Settings

Tapping the floating button can perform tasks such as scanning barcode (**Scan**), turning on/off flashlight (**Flashlight**), taking a screenshot (**Screen snapshot**), turning off screen (**Screen off**), going to the Home screen (**Home**), or switching between level and continue scan mode (**Toggle level and continue scan mode**), showing device name (**Show device name**) or previewing scan image (**Scan preview**).

Holding down the floating button can make it movable.

Show/Hide the floating button: Tap the app icon -> "Floating Touch" -> select/unselect "Show float box".



Shortcuts to Apps

Create a shortcut to an app on your Home screen: On the home screen, swipe up from the bottom to top with one finger in one smooth motion to view all apps. Tap and hold your desired app and then drag it into the Home screen.

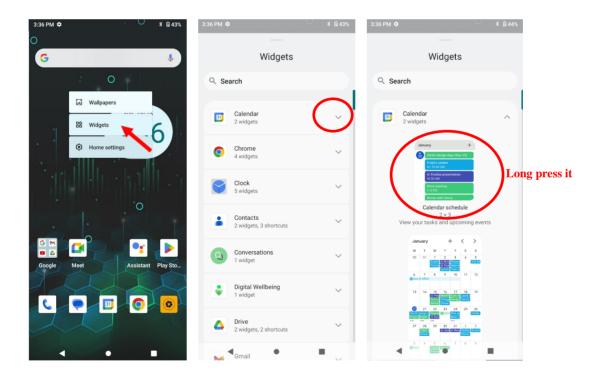
Widgets

View all widgets: Tap and hold on a blank area of the Home screen and then tap.

Open a widget: Tap it.

Add a widget icon to the Home screen: Tap and hold the Home screen and then tap

and then long press to move the widget.



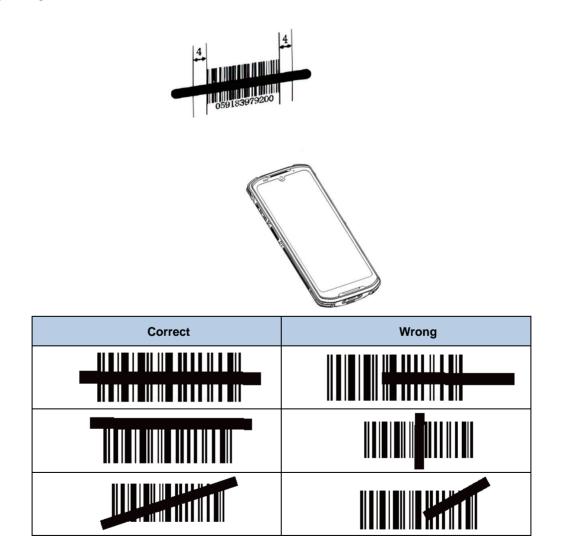
Chapter 4 Scanning Barcodes

Introduction

This chapter includes scanning tips and instructions for setting up the scanner.

Scanning 1D Barcode

Adjust the scan angle or the distance between the MT95 and the target barcode to ensure the length of the laser beam is roughly 8mm greater than that of the barcode, as shown below.

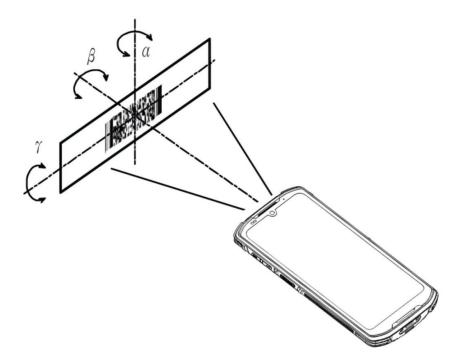


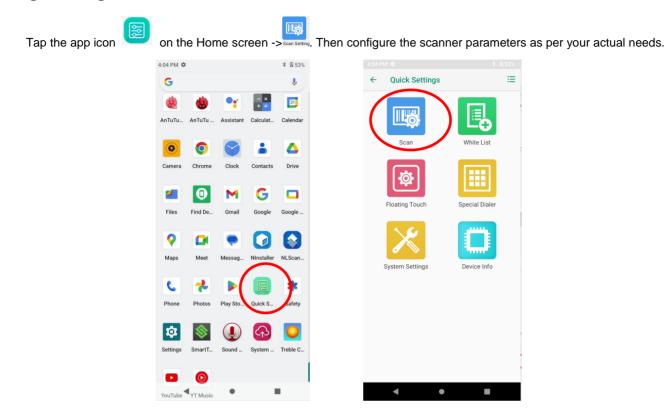
Scanning 2D Barcode

Adjust the scan angle and the distance between the MT95 and the target barcode to make them fall into the following ranges:

- 1. Point the MT95's focus lamp at the center of the barcode.
- 2. Move the MT95 until you find the appropriate scan distance.
- 3. Optimum scan angles:

Skew (α) < 45° (0° preferably) Pitch (γ) < 45° (5°- 20° preferably) Roll (β) = 0°- 360°

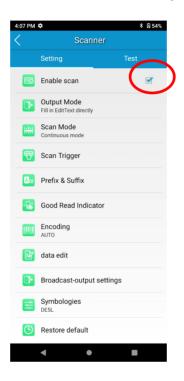




Programming Scanner

Enable Scan

Check or uncheck the "Enable scan" item to enable or disable the scanning feature of the MT95.



Output Mode

The MT95 provides three output modes: Simulate keystroke, Output via API, and Fill in EditText directly.

1. Simulate keystroke: Output scanned data to keyboard buffer to simulate keyboard input.

Character interval (ms): A character interval of 0-100 milliseconds may be placed between the transmissions of each character of scanned data.

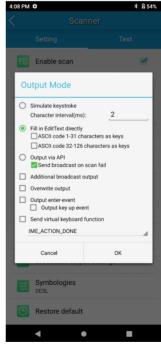
- 2. Output via API: Application acquires scanned data by receiving system broadcasts.
- 3. Fill in EditText directly: Output scanned data at the current cursor position in EditText.

Overwrite output: Clear the text input box before sending the barcode currently scanned to make sure only the most recently scanned data is present in the text input box. This feature is available only when **Simulate keystroke** or **Fill in EditText directly** is selected.

Output enter-event: Send an Enter Key after each barcode is scanned.

Send virtual keyboard function: Make send virtual keyboard function as "action done", "action search", "action previous", action search, etc.

) PM	Scanner	¥ 0)55%	4:08 PN
	Setting	Test	
	Enable scan		
ŀ	Output Mode Fill in EditText directly	$\mathbf{>}$	0
	Scan wode Continuous mode		0
T	Scan Trigger		۲
Am	Prefix & Suffix		0
· 🔒	Good Read Indicator		
	Encoding AUTO		
ľ	data edit		Ŀ
ŀ	Broadcast-output settin	ngs	
۴ ۴	Symbologies DE5L		
Ŀ	Restore default		C
	4 •		



Scan Mode

The MT95 provides the following four scan modes:

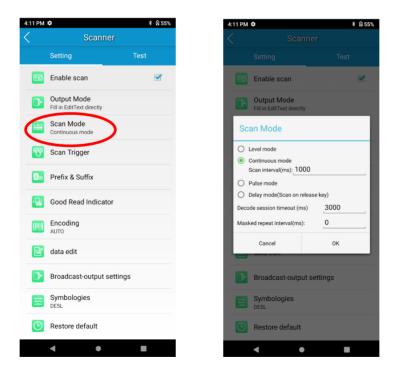
- 1. Level mode: Press and hold the scan trigger to start a decode session which continues until the trigger is released.
- 2. **Continuous mode:** Press the scan trigger to continuously read barcodes. To suspend or resume scan operation, simply press the scan trigger.

Scan interval (ms): This parameter sets the timeout between decode sessions.

- 3. Pulse mode: Press the scan trigger to start a decode session which continues until the decode session timeout expires.
- 4. Delay mode (Scan on release key): Press and hold the scan trigger to aim at barcode then release it to start a decode session which continues until the decode session timeout expires or a barcode is decoded. It is advised to use this scan mode and the Acuscan Decoding feature to ensure that only the desired barcodes are read if multiple barcodes are placed closely together.

Decode session timeout (ms): This parameter sets the maximum time decode session continues during a scan attempt.

Masked repeat interval (ms): This parameter sets the time interval between two successive reads on the same barcode.



Scan Trigger

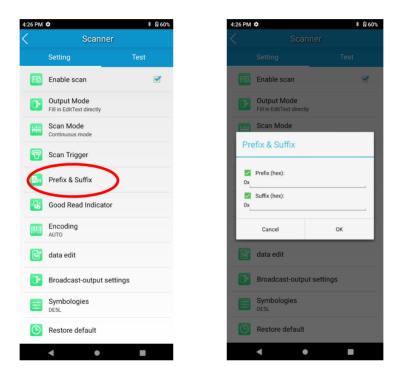
The two can keys on the terminal and the trigger on the pistol grip can all serve as scan trigger. Enable or disable them as per your actual needs.

- 1. Left/Right SCAN key: Use the Scan key on the left/right side of the terminal as scan trigger.
- 2. Stock SCAN key: Use the trigger on the pistol grip attached to the terminal as scan trigger.

4:26 PM	\$	* 0.60%
<	Scanner	
	Setting	Test
	Enable scan	
	Output Mode Fill in EditText directly	
	Scan Mode Continuous mode	
3	Scan Trigger	
	Prefix & Suffix	
B	Good Read Indicator	
	Encoding AUTO	
ľ	data edit	
	Broadcast-output set	tings
Ť¢†	Symbologies	
(Restore default	
	< ●	

Prefix & Suffix

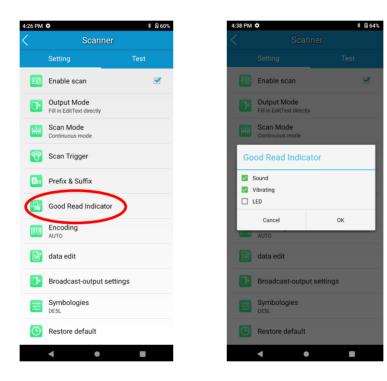
To set the prefix/suffix, enter the hexadecimal value of a desired prefix/suffix, and then tap "OK". For example, if you want to add a Line Feed character after each barcode, set the suffix to "0A"; if you want to add a Carriage Return character after each barcode, set the suffix to "0D".



Good Read Indicator

The terminal can use sound/vibration/LED to indicate a good read. Choose one or more options as per your actual needs.

- 1. Sound: The MT95 issues a short beep to indicate a good read.
- 2. Vibrating: The MT95 vibrates to indicate a good read.
- 3. LED: The blue LED on the MT95 flashes once to indicate a good read.



Encoding

Choose a character encoding to interpret barcode data.

1. **AUTO:** The terminal determines automatically if the target barcode uses UTF-8, GBK, ISO-8859-1, or windows-1251 encoding. If the terminal produces the wrong output, you may need to choose or enter a specific character encoding.

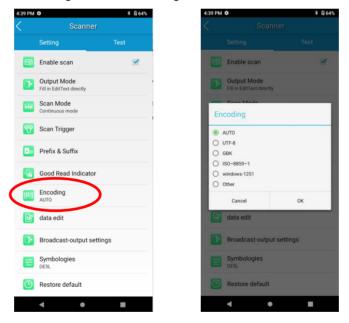
2. UTF-8: Dominant Unicode encoding.

3. GBK: A character encoding for Chinese characters.

4. ISO-8859-1: A common character encoding that covers Western European languages.

5. **windows-1251:** A character encoding designed to cover language that uses the Cyrillic alphabet such as Russian, Bulgarian, Serbian Cyrillic, and other languages.

6. **Other:** Enter a different character encoding when UTF-8, GBK, ISO-8859-1, and windows-1251 are not applicable. If the terminal does not support the encoding entered, this setting will fail.



Data Edit

This feature allows you to edit barcode data with a script.

Tap "load script" and then select the desired script file on the terminal, or scan the 2D barcode that contains a script, to load the script. Then select "exec script" and tap "OK".

4:40 PM	\$	≱ Ձ65%
<	Scanner	
	Setting	Test
	Enable scan	
] •	Output Mode Fill in EditText directly	
	Scan Mode Continuous mode	
Ţ	Scan Trigger	
	Prefix & Suffix	
B	Good Read Indicator	
	Encoding AUTO	
	data edit	
	Broadcast-output settir	igs
Î Î	Symbologies	
C	Restore default	
	•	

Broadcast-output Settings

When using broadcast as the scan output method, the MT95 will output the scan information with the specified broadcast ACTION and EXTRA.

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Scan	ner	< Scar	
Setting	Test	Setting	
💌 Enable scan		Enable scan	
B Output Mode Fill in EditText directly		Cutput Mode	
Scan Mode Continuous mode		Broadcast-output set	tings
😗 Scan Trigger		Broadcast action: nlscan.action.SCANNER_RESL	ILT
Prefix & Suffix		Result 1 extra: SCAN_BARCODE1 Result 2 extra:	
Bood Read Indic	ator	SCAN_BARCODE2 Barcode type Extra SCAN_BARCODE_TYPE	
Encoding AUTO		Barcode type name Extra: SCAN_BARCODE_TYPE_NAME	1
🛐 data edit		Cancel	ОК
Broadcast-outpu	t settings	Broadcast-outpu	t settings
Symbologies DE5L		Symbologies DE5L	
Bestore default		C Restore default	
		4	_

Symbologies

Note that supported symbologies depend on the scan engine integrated in the terminal. Here we will take DE5L for example.

1D code: Enable or disable 1D symbologies and set other barcode parameters.

Below are remarks for Security Level:

- 1) The higher the security level, the lower the error rate of 1D code.
- 2) The barcode reading performance at the higher security level is not as smooth as that at low security. Therefore, the default security level is 1. Increase the security level only when the error rate is high.

2D code: Enable or disable 2D symbologies and set other barcode parameters.

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<	Scanner		<	Symbologies	3	<	1D Comm	on Config
	Setting	Test	1D code	2D code	Advanced	Security Level		
	Enable scan		selected partia	lly		1		
₽	Output Mode Fill in EditText directly	3	1D Common	-	Detail	2		
	Scan Mode Continuous mode	1	Common 1D I	barcodes		3		
ę	Scan Trigger		Code 39		Detail			
	Prefix & Suffix	<	Code 128		Detail			
•	Good Read Indicator	5	CodaBar		Detail			
	Encoding AUTO	F	Z EAN-8		Detail			
ľ	data edit		EAN-13		Detail			
₽	Broadcast-output setting	S	RSS		Detail			
	Symbologies DE5L				Detail			
C	Restore default		-	_	Detail	Ca	ncel	ок
	◀ ●		Matrix 2 or	•	Datail	•	•	

Advanced: The features listed here are designed to improve the scanning performance and energy efficiency of the terminal.

- 1. Acuscan Decoding: When selected, the terminal only decodes the barcode aimed squarely by the aiming pattern. It is advised to select it to ensure that only the desired barcodes are read if multiple barcodes are placed closely together.
- 2. **Multiple Barcodes:** When selected, the terminal can decode multiple barcodes at the same time, and the maximum number of the barcodes can be set per actual needs.
- 3. Other: Tap DETAIL to access the following parameter settings.

Noise Reduction: This feature is designed to reduce noise in images produced by the terminal. However, the terminal shows a slight decrease in scanning speed when using this feature. It is recommended to enable it only when necessary.

Exposure Level: Select high, middle or low level per actual need.

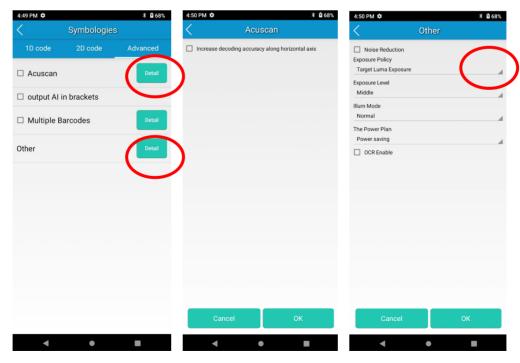
Illum Mode: Select normal or no light per actual need.

Power Plan: Two options are provided.

Power Saving: The terminal's built-in scanner turns off automatically after 3 seconds of inactivity.

High-performance: The terminal's built-in scanner turns off automatically after 15 seconds of inactivity.

OCR Enable: Select this check box when reading passports (compliant with ICAODoc9503 standards, TD1/TD2/TD3 supported).



Chapter 5 Bluetooth

Introduction

This chapter describes how to connect the MT95 to other Bluetooth devices.

Pair Bluetooth

You can set up a Bluetooth connection between the MT95 and other Bluetooth devices, such as PC, and mobile phones. Note that the Bluetooth connection works better if there are no obstacles between them.

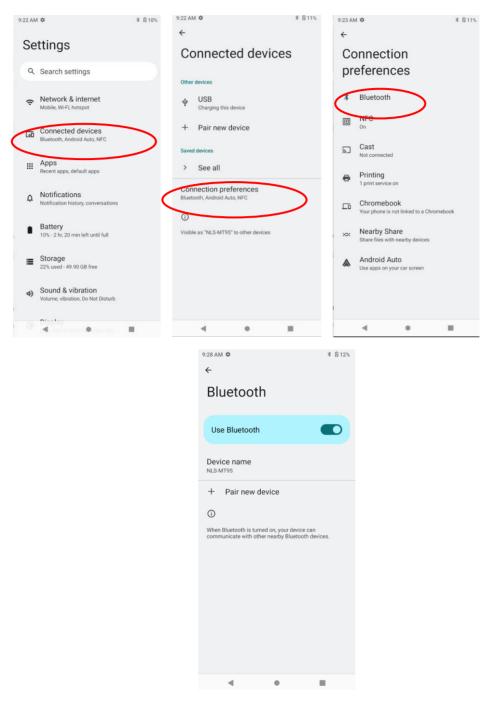
Before you can use a Bluetooth device with the MT95, you must first pair them.

1. Make the Bluetooth device visible to the MT95.

2. Tap the app icon then "Connected devices" -> "Connection preferences" -> "Bluetooth", and turn Bluetooth on to search for available Bluetooth devices.

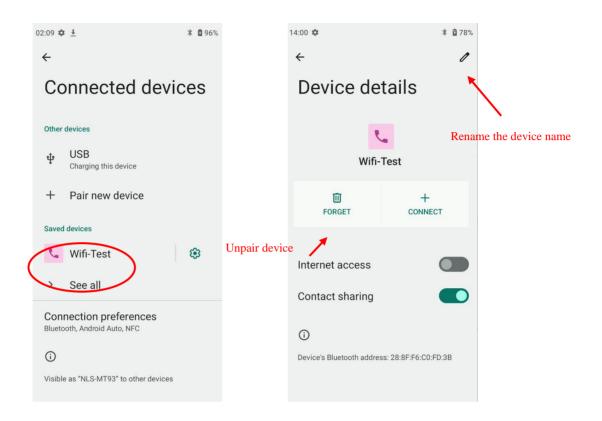
3. Select the device from the search results to pair.

4. If prompted, input the pairing code and then tap "OK"; or if the pairing code is given automatically, then tap "PAIR".



Unpair/rename a paired Bluetooth device: To rename the paired Bluetooth device, tap the desired device name -> then

tap to edit its name manually-> tap "RENAME". To unpair it, tap "FORGET".



Chapter 6 Wi-Fi

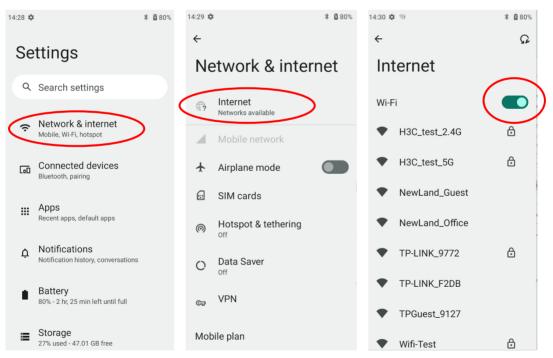
Introduction

This chapter describes how to connect the MT95 to a Wi-Fi network.

Wi-Fi Settings

Join a Wi-Fi network:

- 1. Tap the app icon then "Network & Internet" -> "Internet" -> "Wi-Fi", and turn Wi-Fi on to find available Wi-Fi networks. If Wi-Fi is already ON, then the terminal will automatically search for available networks.
- 2. Tap a network and then enter the password.
- 3. Tap "CONNECT".





WI-FI Settings

To set the "Metered", "Proxy", or "IP setting", follow the first two steps of joining a Wi-Fi network, tap "Advanced options", then select the desired option.

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14:33 🏚 🚯 👔 81%	14:34 🗳 🔧 🖄 81% Security WPA/WPA2/WPA3-Personal Password
Wifi-Test	Wifi-Test
Security WPA/WPA2/WPA3-Personal	Show password
Password	Metered
	Detect automatically -
	Proxy
Show password	None 🗸
	IP settings
Advanced options V	DHCP 🗸
CANCEL CONNECT	1 2 3 4 5 6 7 8 9 0
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qwertyuiop	a s d f g h j k l
<pre>a s d f g h j k l</pre>	asd fghjkl
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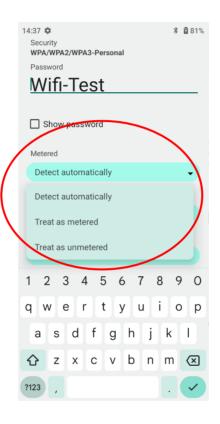
Metered

"Metered" can help us better understand the WI-FI network data usage of MT95.

1. Detect automatically: Set a Wi-Fi connection as metered or unmetered automatically.

2. **Treat as metered**: Set the Wi-Fi connection to a limited data plan. You can set your connection as metered to avoid additional charges.

3. Treat as unmetered: Set the Wi-Fi connection to unlimited data access.



Proxy

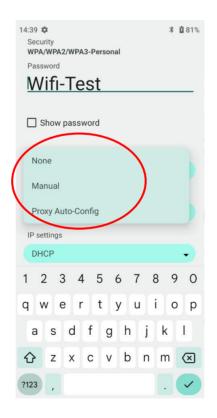
The MT95 Provides three types of Proxy: "None", "Manual", "Proxy Auto-Config". To use the proxy function, you need a proxy server first. The address and port of the proxy server should be consulted with the proxy service provider.

With the "proxy" setting, you can change from **direct access** to **transit through a proxy server to access the network**. Through the network strategy of the proxy server, the firewall can enhance the privacy and security of the network.

- 1) None: No proxy.
- 2) Manual: Manually enter proxy server settings.

Following parameters are needed to be filled:

- a. Proxy hostname
- b. Proxy port
- c. The bypass proxy for: Such as local addresses, LAN addresses.
- 3) Proxy Auto-Config: Automatically detect the appropriate settings for your network



IP Settings

1. Select "DHCP" to automatically obtain an IP address from the router through the DHCP service. The DHCP service should be turned on in the router, otherwise the IP address cannot be obtained.

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Wifi-Test	
Show password	
Metered	
Detect automatically	•
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None DHCP	-
Static	
CANCEL	ONNECT
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asdfghj	k I
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2. Select "Static" to customize the IP address. This will help to avoid the network failure caused by the duplication of the IP address in the LAN or the disable of the DHCP service in the router etc.

Note: To manually set a static IP address, you need to set it according to the range of IP addresses set in the router.

07:12 🌞 🕴	≱ ₫ 76%	07:12 🌣 🕴	* 🛙 76%
Wifi-Test		Wifi-Test	
Show password		IP settings	
Metered		Static	•
Detect automatically	-	IP address	
		192.168.1.128	
Proxy		Gateway	
DHCP	-	192.168.1.1	
\frown		Network prefix length	
Static		24	
CANCEL C	ONNECT	DNS 1 (unless overridden by Private DNS) 8.8.8.8	
1 2 3 4 5 6 7 8	9 0	1 2 3 4 5 6 7 8	9 0
qwertyu i	o p	q w e r t y u i	o p
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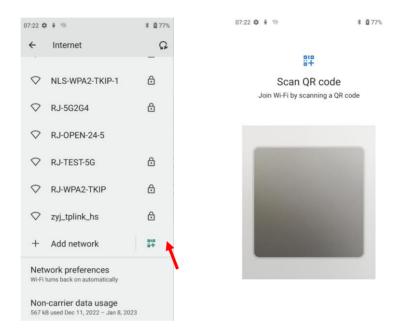
Add Network

Tap the app icon

then "Network & Internet" -> "Add Network". There are two methods to add network:

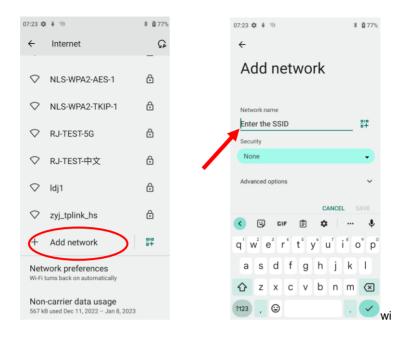
1. Method One: Tap

to add a network by scanning a QR code.



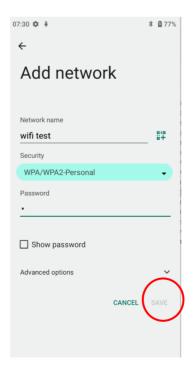
2. Method Two: Manually add network

Step 1: Tap and fill in the network name you want to add.



Step 2: Select the corresponding security option according to the encryption type of the router. Supported security types: Enhanced Open, WEP, WPA/WPA2-Personal, WPA3-Personal, WPA/WPA2/WPA3-Enterprise, WAPI PSK, WAPI Certificate.

Step 3: Enter the password and complete the other parameter per the actual network configuration. Then click "Save" to complete the Wi-Fi addition.



Wi-Fi Preferences

Tap the app icon the "Network & Internet" -> "Internet" -> "Network preference", and then you can enable functions like **turn on the WI-FI automatically** and **Notify for public networks** per actual need.

- a) **"Turn on WI-FI automatically":** Wi-Fi will automatically connect to a saved high-quality network. Note: To enable this function, you need to turn on the WLAN first.
- b) "Notify for public networks": Notify when a high-quality public network is available.

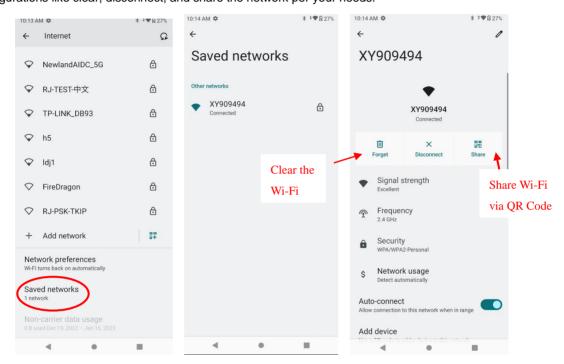
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	+	Add network	81 1
(rork preferences	>
		carrier data usage used Dec 11, 2022 – Jan 8, 2023	

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Saved Networks

Tap the app icon then "Network & Internet" -> "Internet" -> "Saved networks", then you can view the networks saved, or set configurations like clear, disconnect, and share the network per your needs.



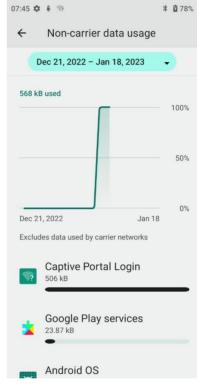
Wi-Fi Data Usage

Tap the app icon

then "Network & Internet" -> "Internet" -> "Non-carrier data usage", and then you can review the Wi-Fi

data usage, including carrier data accounting and APP data usage.

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	÷	Internet	Ω
	\Diamond	H3C_WiFi5_D3B4D7 _5G	⋳
	\Diamond	NLS-WPA2-AES-1	⋳
	\Diamond	NLS-WPA2-TKIP-1	⋳
	\Diamond	RJ-TEST-5G	۵
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	+	Add network	810 8+
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(Save 1 netwo	d networks	
		carrier data usage used Dec 11, 2022 – Jan 8, 2023	



Chapter 7 Mobile Network

Introduction

The MT95 can also use a 5G network to connect to the internet. To establish a 5G connection, you must have a SIM card installed in your MT95.

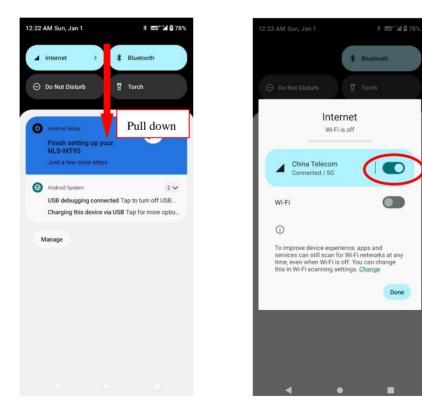
This terminal can support 5G/4G/3G/2G network provided by Telecom, Unicom, or Mobile

Mobile Network Settings

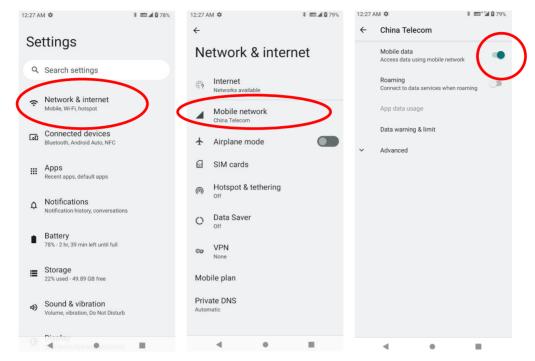
If no Wi-Fi networks are available, or if you have turned Wi-Fi off, then the MT95 connects to the Internet via your cellular data network when available.

Turn on the cellular network:

- 1. Swipe down from top to bottom on the home screen and it will display the drop-down list. Find mobile network and tap it to turn Cellular data on.
- 2. Or Go to Settings-> "Network & Internet" -> turn on "Mobile network"



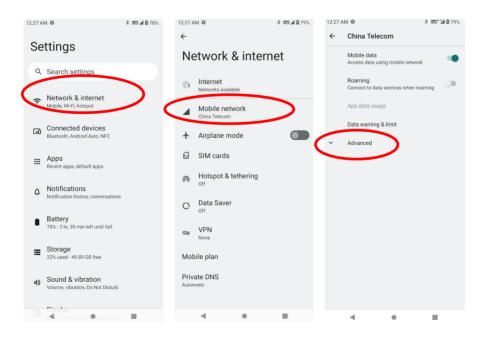
Option Two:



APN Settings

If you cannot connect to the internet when using your terminal's cellular data, you may need to change your APN settings on the MT95 to fix it:

1. Go to Settings -> "Network & Internet" -> "Mobile network" -> "Advanced" -> "Access Point Names".



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←	China Telecom	
	Mobile data Access data using mobile network	•
	Roaming Connect to data services when roa	iming
	App data usage	
	Data warning & limit	
	Preferred network type 5G (recommended)	
	Calling	
	Carrier video calling	
	Network	
	Automatically select network	
	Choose network China Telecom — 中国电信	
	Access Point Names	>
	۰ ا	

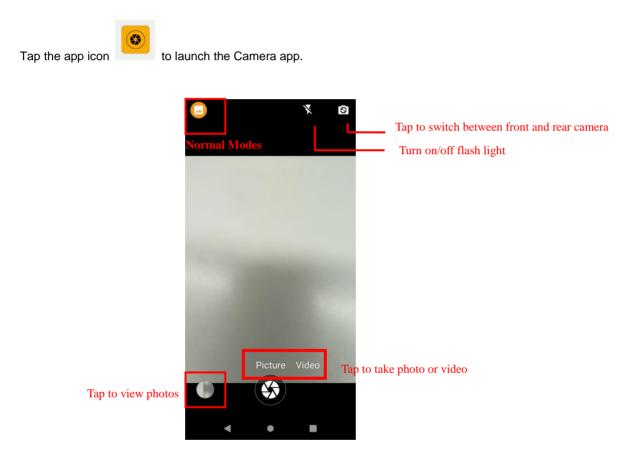
2. Tap ⁺ in the top right corner of the screen or tap the carrier of your SIM card on the screen. Then manually enter the APN settings. You can contact your carrier or visit their website to get the correct APN settings, or check the APN settings on a mobile device that can access the internet using the SIM card.

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APNs	-	Edit access poin	t
CTNET ctnet	۲	Name Not set	
CTWAP ctwap		APN Not set	
IMS IMS		Proxy Not set	
		Port Not set	
		Username Not set	
		Password Not set	
		Server Not set	
		MMSC Not set	
		MMS proxy Not set	
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3. Press the Return key on the MT95 to go back to the previous screen and then select the APN you just added.

Chapter 8 Others

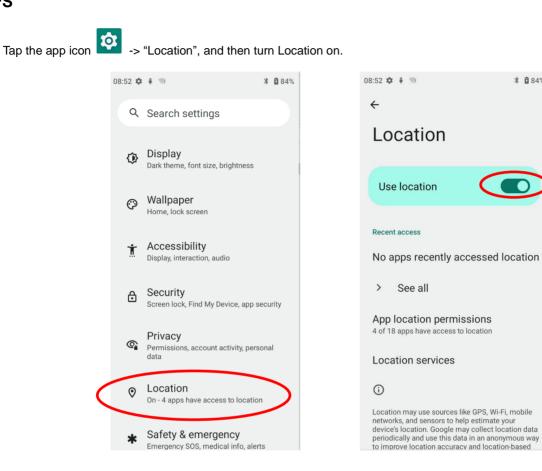
Camera



Tap the normal modes icon up -> Tap settings , then the user can set parameters such as scene mode, self timer, picture size, shutter sound, ZSD, white balance, ISO, Anti flicker, etc.

You can also download a camera app from the internet or develop an app for the camera feature.

GPS



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NFC

To enable the NFC feature, tap the app icon Connected devices" -> "Connection preferences" -> "NFC", and then turn on NFC.

Then you can install an NFC writer on the MT95 to read and write NFC tags.

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	Se	ttings		← Co	nnecte	d devic	es	← Co	onnectio	on	
	٩	Search settings						pre	eferenc	es	
	(ŗ	Network & internet Mobile, Wi-Fi, hotspot		Other ਪ੍ਰੈ	devices USB Charging this dev	vice		*	Bluetooth NFC		
(60	Connected devices Bluetooth, Android Auto, NFC		+	Pair new de	vice			On		
		Apps Recent apps, default apps		Saved	devices See all			8	Cast Not connected		
	¢	Notifications Notification history, conversations	C		nection prefe oth, Android Auto,		>	- -	1 print service or Chromeboo Your phone is no	k	mehook
		Battery 90% - 31 min left until full		(j) Visible	eas "NLS-MT95" to	o other devices		~~	Nearby Sha	re	THE DOOK
	≡	Storage 22% used - 49.87 GB free						۸	Android Aut Use apps on you		
	4)	Sound & vibration Volume, vibration, Do Not Disturb									
		Display Mak theme, font siz@orightness			•	•				•	

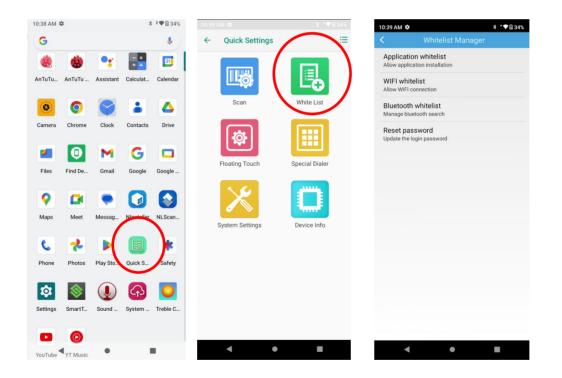
Chapter 9 Whitelist Manager

Introduction

The Whitelist Manager app is used to specify the apps that users can install on the MT95.

Logging in to Whitelist Manager

Tap the app icon on the Home screen then by, enter the password (default: 112233), and tap "Login" to log in to the whitelist manager. Then set up your whitelist as per actual needs.



Chapter 10 System Update

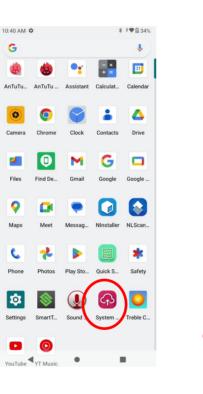
Introduction

This chapter introduces two methods to update the system software of the terminal: Online update and local update.

(A

Online Update

Update the system online: Tap system updates icon



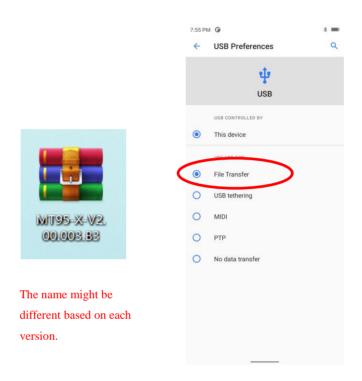
-> "CHECK FOR UPDATES".



Local Update

Zip File to the MT95 Drive

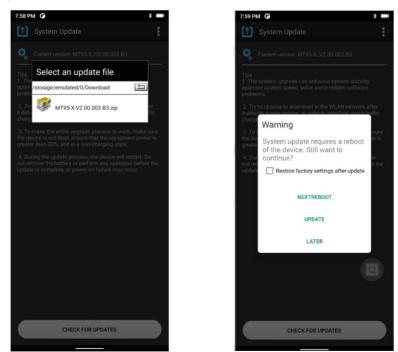
1. Connect the terminal to PC with the included USB cable. Swipe down from top to bottom with one finger in one smooth motion to open the notification bar. Tap "USB for file transfer". Then select "Transfer files".



- 2. Copy the update zip file to the MT95 drive.
- 3. Tap to access the System Update screen.
- 4. Tap in the top right corner of the System Update screen then select "Local Update".

10:42 AM 🌣	≱ ≑♥Ձ 35%
System Update	:
Current version: MT95-GL_V3.00	Settings
Tips 1. The system upgrade can enhance syst optimize system speed, solve some hidd problems;	
 Try to choose to download in the WLA it detects a new version, in order to avoid charges; 	
 To make the entire upgrade process to the device is not Root, ensure that the equipment of the equipment of the equipment of the equipment of the entire of the equipment of the entire of the entin entire of the entire of the entire of the entire of the en	uipment power is
 During the update process, the device not remove the battery or perform any op update is complete, or power-on failure n 	eration before the
Check for updates	
• •	

5. Select the update zip file. Then select "NEXTREBOOT" or "UPDATE".



Chapter 11 App Development Guide

Development Environment

The MT95 runs on the Android 13 operating system, so you should use Android SDK 13 or lower when developing apps for the MT95.

Use of Non-standard Interfaces

See Newland Android PDA API Handbook.

Chapter 12 Maintenance & Troubleshooting

Introduction

This chapter includes important safety and handling information and provides troubleshooting solutions for issues that might occur when using the terminal.

Important Safety & Handling Information

Disassembly and Retrofit

Do not attempt to disassemble or retrofit the terminal yourself. Unauthorized disassembly or retrofit will void the warranty.

External Power Supply

Use only the included AC adapter. Otherwise, there is a risk of damage to the terminal.

Abnormal Situation

Keep the terminal away from fire or heat sources. If there is unusual odor, overheating or smoke during charging, immediately cut off the power and disconnect the AC adapter, and contact your dealer or Newland customer service center. Continued use in this case may result in fire or electric shock.

Drop Damage

If the terminal is damaged due to a drop from a high place, immediately cut off the power and contact your dealer or Newland after-sales service center.

LCD Screen

Do not press against or strike the LCD screen. Otherwise, it may damage the screen. When handling a cracked or shattered screen, do not touch the liquid that has leaked from it to avoid skin burn or infection.

Stacking Heavy Objects

Do not place heavy objects on the terminal as those objects may fall and cause injury.

Mounting Location

Do not place the terminal on unstable or uneven surfaces as it may fall and cause injury. Do not expose the terminal to humidity or dust as this may cause fire or electric shock. Do not expose the terminal to direct sunlight for extended periods.

Wireless Functionalities

Do not use the terminal's wireless functionalities where wireless device use is prohibited or where it may cause interference or danger, such as in aircrafts, petrol stations.

Use & Maintenance

- ♦ Do not use damaged or faulty AC adapters. Use only the battery and AC adapter provided by Newland.
- ♦ Do not dispose of terminals in a fire as they may explode.
- ♦ Do not continue to charge a battery that is fully charged. Overcharging will shorten battery lifespan.
- Charge the device before the battery is exhausted; Excessive battery discharge will have a bad impact on the device.
 In severe cases, it may cause the device to fail to boot normally.
- Avoid charging in a low or high-temperature environment. The most suitable temperature for charging is at 5 C-45 C (41 F-113 F), and it cannot be charged below 0 C (32 F).
- If the device is not used for a long time, it will discharge slowly. During the storage, it is recommended to shut down the device and regularly recharge it (at least every six months). Ideally, Battery should be stored between 30% to 50% state of charge.
- ♦ If the battery is swelling, bulging, or having other abnormalities, please stop using it immediately.
- ♦ If the battery life is significantly shortened, please replace it with a new battery.
- If the terminal cannot be switched on after experiencing a sudden or unexpected power loss or other abnormalities, immediately contact your dealer or Newland after-sales service center
- Do not throw, drop, or strike the terminal. Doing so may damage the LCD display, interrupt running programs, cause data loss in memory, and result in malfunction.
- Clean the scan window regularly. Do not touch it with hands. Scratched or smudged window may degrade reading performance.
- ♦ Do not tap the touch screen with sharp objects. Doing so may damage the screen or cause internal short circuits.
- Use only dry soft cloth to clean the terminal. Cleaning it with a wet cloth or benzene/ thinner/ other volatile chemicals may deform and shorten the service life of the terminal's shell.
- Sudden temperature drops may cause condensation on the shell, which could cause malfunction. Care should be taken to avoid condensation. If condensation occurs, dry the terminal before use.
- ♦ Properly dispose of and recycle terminals. Do not dispose of them as household garbage.

Troubleshooting

Problem		
Туре	Description	Possible Cause & Solution
Battery	Charging LED is OFF when charging.	Ensure the AC adapter is plugged in properly.
	Stop charging or charging slowly in a low-temperature environment.	Charging protection is enabled when the temperature is lower than 0 degrees Celsius. To continue charging at normal speeds, please move to a warmer environment before charging your device.
	Noticeably short battery life.	 Check the battery level. If the battery is almost depleted, recharge it. Restart the terminal, if the problem remains, please contact the after-sales service center.
	Fully charged battery is depleted after the terminal is switched on.	Restart the terminal, if the problem remains, please contact the after-sales service center.
USB	USB communication failure	 Ensure that the USB cable connections are secure. Ensure that there is no contaminant inside the USB port. If the problem remains, please contact the after-sales service center.
LCD Screen	No display	 Ensure the terminal is switched on. If the terminal is in sleep mode, press the Power key to wake it up. Check the battery level. If the battery is depleted, recharge it. If the problem remains, please contact the after-sales service center.
System	Cannot switch on	 Check the battery level. If the battery is depleted, recharge it. Switch the terminal on after using the included AC adapter to connect it to a power outlet. If the problem disappears, then continue to charge the terminal. If the problem remains after charging the terminal for a while, please contact the after-sales service center.
	System halted	 The problem may be caused by bugs on downloaded apps. Ensure that only reliable apps are used. The problem may be caused by a sudden or unexpected power loss. Long press the power key for 10 seconds, and then restart the terminal. If the problem remains, please contact the after-sales service center.

FCC Warning

FCC Warning: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -- Reorient or relocate the receiving antenna. -- Increase the separation between the equipment and receiver. -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -- Consult the dealer or an experienced radio/TV technician for help. FCC RF warning statement: The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

SCANNING MADE SIMPLE

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@NewlandEMEA