



A series of

NLS-PT950 Portable Data Collector

User's Manual

Version 1.0



Tel: 510 490 3888

Fax: 510 490 3887

<http://www.newlandna.com>

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 WARNING

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment."



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1 Standard Configuration

- 1、 A NLS-PT950 portable (barcode) data collector



- 2、 A touch pen



- 3、 A lithium batteries



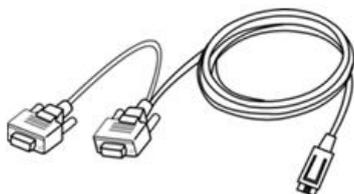
4、

A 4.8V power adapter



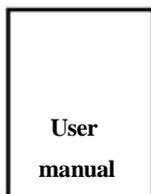
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RS232 and USB Data cable



6、

User manual



2 Warning

2.1 Cautions

■Disassembly and Modification

Please do not try to disassemble or modify the device in any way, for the company does not guarantee to keep it in good repair if damage resulted in there out.

■External Power

Please use the power adapter attached to the device, or it will cause the danger of damage.

■Abnormal Conditions

Far away from anything flammable. If the device become hot or emit a strange odor or smoke, immediately turn off power or remove the plug from the socket of alternating current, and contact your dealer or our center of client service. Continued use creates the danger of fire and electrical shock.

■Dropping and Damage

If drop the device and damage it, immediately turn off power and contact your dealer or our center of client service.

■LCD Screen

Do not apply strong pressure to the screen or subject it to strong impact, or it can crack the LCD panel glass.

Should the LCD panel glass ever break, never touch the liquid leaked. Or that will cause skin irritation and inflammation.

■Heavy Objects

Do not place heavy objects on top of the unit, or it can create the danger loss of balance and the object falling, which can cause personal injury.

■Location

Do not locate the device on a surface that is unstable or uneven, because that will cause the danger of the device falling, which can cause personal injury.

Do not locate the device in an area subjected to large amounts of humidity or dust, for it can create the danger of electrical shock and fire.

Do not leave the device for long periods somewhere in direct sunlight.

■Area to use

Since the electromagnetic wave radiated by the wireless module of the device is able to affect the usage of some apparatus, it is forbidden to use a wireless device in certain areas specified, such as: airplane, gasoline station, etc. So please do not use the wireless function of a cell phone in such a situation.

It is also forbidden strictly to charge or communicate in a dangerous area with both wireless and wire communication.

2.2 Handling Precautions

„ If the device can not be turned on because of the electricity cut or some abnormal condition, it should be reset. Plug the touch pen into the reset hole and then turn the device on.

„ Do not throw or drop the Data Collector or otherwise subject it to strong impact, for it can damage the LCD screen, interrupt program execution, corrupt memory contents, or otherwise interfere with proper operation.

„ Please clean the glass regularly. Please do not touch the glass for penetrating, or it may scrape or blur the glass, resulting in a weak function to read.

„ Please do not use something sharp to operate keyboard, in order to avoid damage in keyboard or internal short circuit.

„ Use a soft, dry cloth when to clean the Data Collector. Do not wipe with a wet cloth. Do not use benzene, thinner, or other volatile chemicals, which can result in deformation and deterioration of the materials used in the keys and case.

„ Please do not lay the Data Collector down with its keyboard downwards. Or it runs the risk of accidental key operation, which can cause malfunction.

„ Please do not remove the battery while the device power is turned ON. Or it can cause all data in memory to be lost.

„ Sudden temperature changes can cause condensation to form on the device case. Operating the device while condensation is present can interfere with proper operation. Take care to avoid conditions that cause the formation of condensation. If condensation does form, wait until it dries completely before using the device.

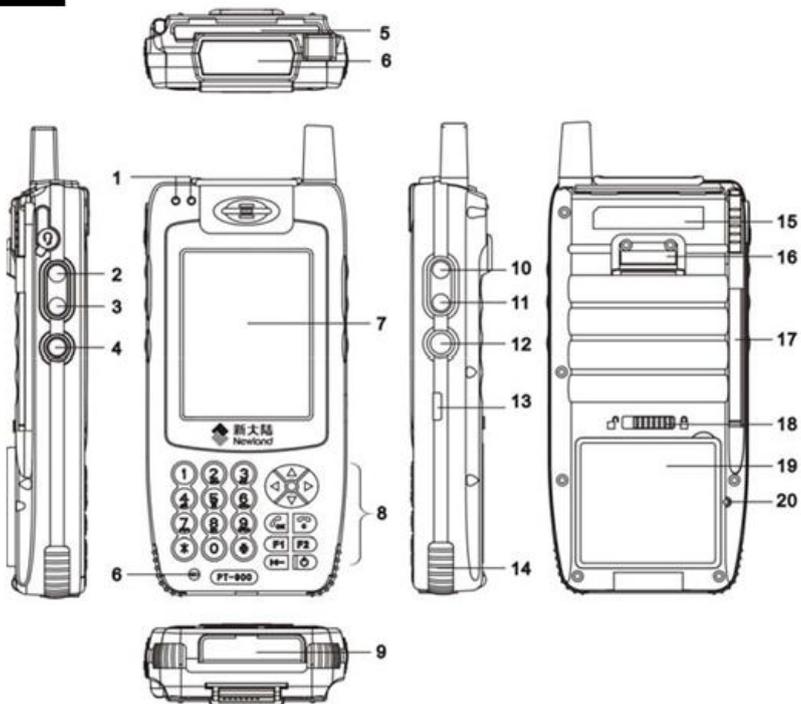
2.3 Battery

| | |
|---|--|
| " | Never throw the battery into fire which will result in explosion ! |
| " | Only experiences charge and discharge for 2-3 times can the new battery has the best capability ! |
| " | The battery can at least charge and discharge for 500 times. and when finally the use time of battery become short, please by a new one. |
| " | Only use the battery and the adapter which admitted by the manufacturer. |
| " | Please remove the adapter from the jack when the adapter is not used. Do not charge the battery for over a week, for over-charge could shorten the life of it, the full charged battery will discharge if it is not been used. |
| " | Charge the battery after it has not power at all. Discharge the battery by turning on the device until it turn off automatically. Please do not use other way to discharge it. |
| " | Do not use the disabled battery or adapter. |
| " | Please reclaim and dispose the battery in a correct way, do not dispose it as city life garbage. |

3 Specification

| | | |
|---------------------|--|--|
| CPU | Intel XScale 32 bit RISC, 312MHZ | |
| Memory | 64M SDRAM, 32M NOR Flash ROM, 32M NAND Flash ROM | |
| Display | 2.8 inch, 260K colors, backlight | |
| Key Board | 22keys on the right face, 3 keys on both sides | |
| Interface | RS232 | RS232 9.6~115.2Kbps |
| | IrDA | IrDA 1.0, 9.6~115.2Kbps |
| | USB | Slave 1.1 |
| | GPRS | Dual-Frequency, 900/1800MHz, 85.6Kbps (Max) NOTE: The SIM socket is under the battery. |
| Reading Mode | Laser | |
| Symbologies | Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2/5, China Post2/5, Code 93 etc. | |
| Precision | ≥ 3 mil | |
| PCS | ≥ 30% | |
| Roll, Pitch, Yaw | ±35° , 60° , 60° | |
| Light Source | Visible Laser Diode 650 nm | |
| Light Intensity | 1000 LUX (in 130mm) | |
| Illumination | 0~100,000 LUX | |
| Depth of field | 45mm - 650mm | |
| Battery | 1600mAH | |
| Battery last | > 150 hours (standby) | |
| Scan Times | > 3000 | |
| Power Adapter | DC4.8V, 1.5A AC Power: AC100~240V, 50~60HZ | |
| Power Consumption | 1.5W | |
| Operate Temperature | -5°C ~ + 45°C | |
| Storage Temperature | -20°C ~ + 55°C | |
| Operating Humidity | 5%~95% RH (no condensation) | |
| Drop | 1.2 m | |
| Dimensions | 151(L) * 73(W) * 28(H) mm | |
| Weight | 300g | |
| Operating System | ARM Linux/WinCE | |
| Developing tool | CE ,FCC | |

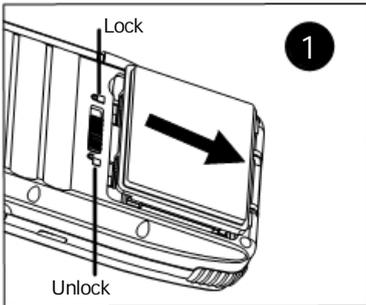
4 Familiar With The Product



- | | |
|----------------------------|---------------------------------|
| 1. Indicator | 11. F6 |
| 2. F9 | 12. F4 |
| 3. F5 | 13. Infrared communication port |
| 4. F3 | 14. Protect rubber |
| 5. IC Card(Optional) | 15. Label |
| 6. Scan Window | 16. Hand strap |
| 7. LCD | 17. Touch Pen |
| 8. Key Board | 18. Battery cover lock |
| 9. Communicate\charge port | 19. Battery |
| 10. F10 | 20. Reset |

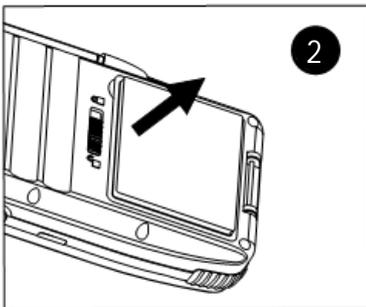
5 Power

5.1 How to load the battery



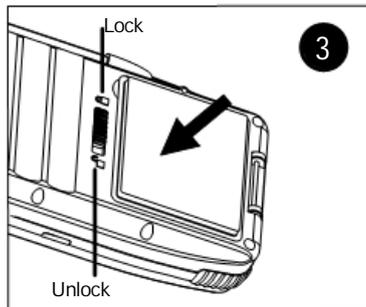
Step1 :

Push the battery compartment cover toward the unlock mark



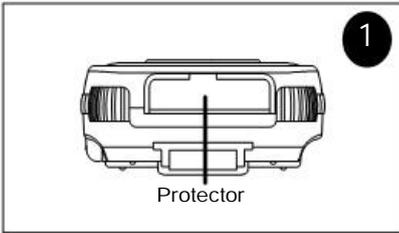
Step2 :

Move the cover away.

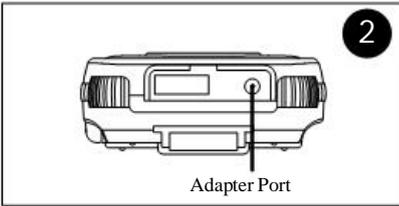


Step3 : Load the battery with the label down and install the cover, then lock the cover.

5.2 How to connect the power adapter



Step1 :
Open the protector on the button of
NLS-PT950



Step2 :
Plug the adapter in the adapter port.



Step3 :
Connect power adapter to a socket of
AC power.

6 Indicators And Keys

| | |
|--|---|
| | 1. Indicator |
| | 2. Charging indicator light When the battery is charging, the indicator light is red ; when charged fully, the light is green . When the adapter is plugged, but the batter has not been loaded, the indicator turns red to green. |
| | 3. Number, Letters, symbol “*” key defined as F7 “#” key defined as F8 |
| | 4. Direction Keys |
| | 5. Answer Key/OK Key |
| | 6. Stop Key/Cancel Key |
| | 7. Function key Defined by the user |
| | 8. Function key Defined by the user |
| | 9. Power Key Control turning the device on/off, dormancy. |
| | 10. Backspace Key |

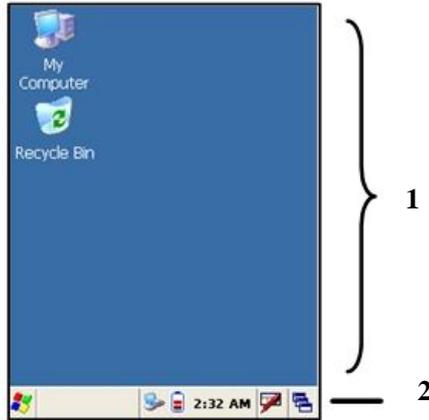
7 Turn On\Off , Stand By Mode, Charge

| | |
|---------------|---|
| Turn On | Press the power key of NLS-PT950 for 2-3 seconds to turn on it, then the system enter “running interface”. |
| Stand By Mode | Touch the power key after turning on the device, NLS-PT950 will in the state of stand by mode. Touch the power key again to quit the state of stand by mode. (Note: It must wait after 6-7 seconds.) |
| Turn Off | Press the power key of NLS-PT950 for 2-3 seconds to turn off it. NOTE: It must wait after 6-7 seconds to turn on again. |
| Charge | NLS-PT950 uses adapter to charge for the battery, the charging time is about 4 hours. When the charging indicator light changes from red to green, which shows the battery is fully charged. * Only use the adapter equipped with the NLS-PT950 or manufacturer admitted adapter. Please do not use the adapter without the admission of the manufacturer. |

8 Desktop

8.1 Desktop Introduction

The Desktop is divided into two parts as shown below:



First part :

My computer , Recycle BIN. This part is the shortcut for all applications and documents.

Second part : The taskbar(at the bottom of the screen) displays as below:

- < Start button : Open the Start menu for accessing Control Panel and programs.
- < Connection status icon : When collector use the USB cable connect to the PC , this icon will come out.
- < Battery status icon : indicates the battery status , double-click it to access “power management” interfaces.
- < Date/Time icon : indicates Date/Time properties , double-click it to access “Date/Time Properties” interface.
- < Input panel icon : double-click to use keyboard input.
- < Desktop icon : double-click it to access the Desktop

8.2 Taskbar introduction

| Taskbar | |
|--|--|
|  <p>1 2 3 4 5 6 7</p> | <ol style="list-style-type: none">1. Start button icon2. Active Program3. Connection icon4. Battery status icon5. Date/Time icon6. Input panel icon7. Desktop icon |

| Start button icon | |
|--|--|
|  | <p>Double-click this icon to access available programs and select the next menu.</p> |

Connection Status Icon



When the collector is connected to the PC , the connection icon will come out on the taskbar.

After a double click , the user can select “Hide or Disconnect”.

NOTE : When Collector(PT950) already use USB connect to PC,please don't dial GPRS,otherwise it will be not available.

Date/Time icon



Double click this to access “Date/Time Properties” interface ,

Alternately:
Start - >Settings - >Data/Time

After setting date and time, click the “apply” button.

Battery status icon



Double click this to access the “Power Management” menu.

Alternately:
Start->Setting->Power Management

Here you can set:
Inactive Mode
Sleep Mode
Keypad backlight interval

After setting, click the “apply” button.

Input Panel icon



Double click to use Keyboard input. Use the touch pen to touch the Soft Keyboard and input the letters.

NOTE : By default the Soft Keyboard input is lowercase letters, digits, and symbols such as “ = ”. If you need to input uppercase (capital) letters “*”, “+” etc. click “CAP” to shift.

Desktop Icon



Double-click the desktop icon. An icon will appear at the lower right of the screen. Click that, and the desktop will appear.

8.3 Control panel introduction

Control panel



Click My Computer ->Control panel or click Start ->Settings to open the control panel.

Auto Run



Setting when power on the program auto run.

Buz Configure



Setting the sound of keyboard.

Certificates



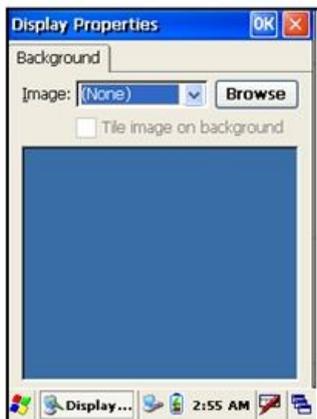
Certificates save from systems.

Dialing



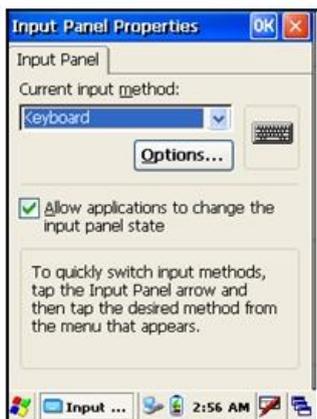
Setting Dialing parameter.

Display



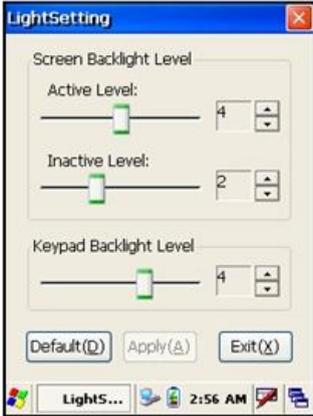
Can select the background what you want.

Input Panel



Setting Soft Keyboard Options

Light Setting



Can set Active Level 、 Inactive Level、 Keypad Backlight Level。

Network and Dial-up Connections



Configure the GPRS dialing link.

The first time you use GPRS , you need to make a new connection。



In the pop-up interface , you can modify “My Connection” to another name , such as GPRS.

See picture below.

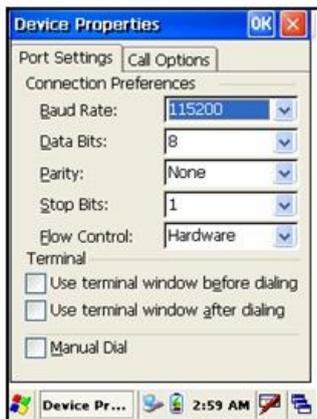


Click Next.



In “Select a modem”
Choose “Wireless modem Port”
Click “Configure”

You will get the screen below.



This page is for setting
configuration of parameters of the
modem.

Select “Port Settings”
Select Baud Rate 115200
Click“ Call Options”

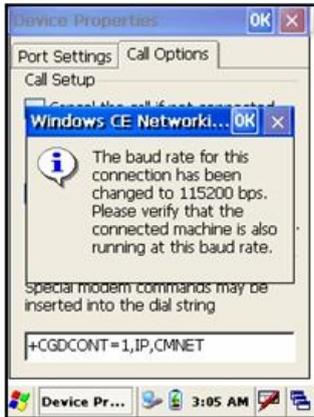
You will get the screen below.



For Extra Settings, input pane,
Write
“+CGDCONT=1,IP,CMNET”

Here the “CMNET” is APN, Access Point Name. For different GPRS service supplier, this value is different, Ask your supplier.

Click OK and you will get the screen below.



Click on the pop-up “OK”.

You will get the screen below.



Click “Next”

You will get the screen below.



Under “Phone number” there is a data entry field,

Write“*99***1#”

Click“ Finish”

You will get the screen below.



At this time you will see the “GPRS” on Connection ,

If want to dial GPRS , double-click the GPRS icon ,

You will get the screen below.



Click “Dial Properties”

You will get the screen below.

GPRS Connection



Click “Edit” to configure the dialing parameters.

You will get the screen below.



For each of the three fields,

Write “G”
click“OK” confirm it

This will bring you back to the screen below.



There is usually no need to write anything here.

Just click “Connect”
Wait 3 - 5 seconds

You should get the screen below.
Your GPRS service provider may require a user name, password and domain name here.

NOTE : While you dial GPRS connection, collector(PT950) not allow use USB connect to PC, otherwise it will be not available.



GPRS dialing finished.

Owner



Setting “Identification” ,
“Notes” and “Network ID”.

PC Connection



Setting whether to allow this device
connect to PC.

Power Management

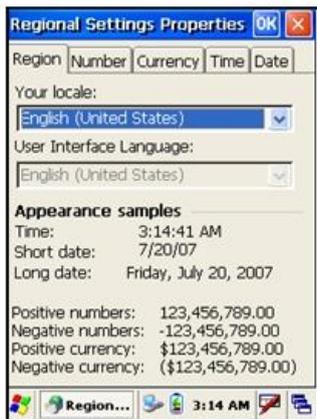


Power management screen.

You can set

Time for “Inactive mode”
Time for “Sleep mode”
Keypad backlight interval

Regional settings



This screen lets you set properties for:

Region
Number format
Currency format and symbols
Time and Date formats

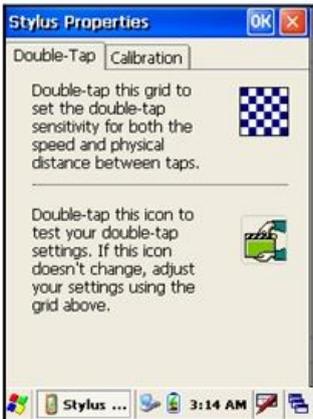
NOTE: Custom regional settings is not available for this version.

Remove Program



Remove the programs.

Stylus



Here you can adjust the sensitivity of the touch panel.

If the device isn't responding properly to your taps, you may need to recalibrate your screen.

Click "calibration",
In the pop-up interface
Click "Reaccelerate"
Click the center of "+"
Finish the calibration.

System



Examine the information about the system

Base
General
Memory
Device
Version

9 How to connect PT950 and PC

1. If you use the RS232 cable to transmit data with PC.

- 1 Connect the data communication cable to PT950.
- 2 Connect the other interface of the data cable to the PC.
- 3 Set the PC and PT950 for the same baud rate.
- 4 When finish above step , PT950 and PC can start communicate.

2. If you use the USB cable to transmit data with PC.

- 1 Install Microsoft ActiveSync. For details, see “Microsoft ActiveSync” help document.
- 2 Second, connect the USB cable to PT950.
- 3 Then, connect the other end of the USB cable to the PC.
- 4 According to the prompt of screen , install PT950 USB driver , Note , During install , select the driver from appointed place(this driver files are wceusbsh.sys and wceusbsh.inf, please find the data from SDK).
- 5 When finished the above step , click “ My Computer” of PC. You should see a “Mobile Device” icon. Click it , can operate the needy file in copy、paste、 delete.

NOTE : When Collector(PT950) already use USB connect to PC,please don't dial GPRS,otherwise it will be not available.

10

How To Read Barcode

Adjust the angle of device to barcode, and the distance between both of them, in order to let the width of laser beam enlarge a little bit to the width of barcode, and able to obtain a great effect to code reading.



Yes



NO



Yes



NO



Yes



NO

11

Troubleshooting

| Description | Simple Way To Remove |
|--|--|
| The LCD unable to display | <ol style="list-style-type: none">1、 Check whether the power is turn on, or the device is in the state of dormancy.2、 Check whether the battery has power or poor contact.3、 The program which has set may result in program crash. |
| Short period of operation after full charged | <ol style="list-style-type: none">1、 Check whether the battery is charged fully.2、 Check whether the battery is invalidation, if it is, please change another battery. |
| Can not communicate with PC | <ol style="list-style-type: none">1、 Check whether the communication port is connected.2、 Check whether the communication Baud Rate of PT950 and PC is compatible. |
| Receive error codes | <ol style="list-style-type: none">1、 Check whether the communication Baud Rate of PT950 and PC is compatible. |
| When charging, the indicator do not light | <ol style="list-style-type: none">1、 Check whether the adapter of PT950 contact well |
| Program crash | <ol style="list-style-type: none">1、 Press the reset key by the touch pen. |
| Unable to read barcode | <ol style="list-style-type: none">1、 The way to read barcode is wrong; please refer to the reading barcode section in the manual for correct way.2、 Whether the type of barcode has been set readable3、 This device unable to read this kind of barcode. |

Customer Service Center

| | Business | Support |
|----------|---|---------------------|
| E-mail | sindy@nlscan.cn | chh@mail.nlscan.com |
| TEL | +0086-591-83979219 | +0086-591-83979211 |
| FAX | +0086-591-83979208 | +0086-591-83979208 |
| Address | No.1 Rujiang Avenue, Mawei District, Fuzhou, Fujian, Mainland China, Newland Science & Technology Park | |
| Zip Code | 350015 | |