



## LP423N / LP433N USER MANUAL



User Manual : LP4 series

Issue Date : 2020/11/18

Version 4.2

## Declaration

The content of this manual is subject to change without prior notice and cannot be altered without written permission obtained from Wincode Technology Co., Ltd (hereinafter referred to as "Wincode"). No part of this manual may be reproduced or transmitted in any form by any means. This manual includes the installation instruction and detailed description of possible questions in the operation. Wincode has reserved the right to improve product including technology, components, software and hardware.

## Copyright

The Copyright of this manual is belonged to Wincode

Ver4.0, 08. 2018.

Printed in Taiwan

## Trademark



Our registered trademark: 

## Compliances

CE Class A

FCC Part 15, Class A

CB

Comply with RoHS regulation

### **Warning**

This is a Class A product. In the living environment, this product may cause radio interference. In this case, it may be necessary for the customer to take practical measures for interference.

## Safety Instructions

Please read the following instructions carefully.

1. Install printer on the flat and stable place. To avoid printer exposed in the high temperature or high humidity or polluted place.
2. Do not disassemble the printer and adapter under any circumstances.
3. Please check the voltage before printer is connected with power outlet; If printer is deemed to idle for a long time, please pull out the power cord to avoid voltage instability to cause printer damage.
4. If printer gets water or conductive material, please shut off the power immediately to ensure the safety of personnel and equipment.
5. To avoid printer to start printing while there is no label paper installed; otherwise the print head and platen roller would be damaged.
6. The print head is a thermal part, please do not touch it or its peripherals during printing or after printing.
7. Shut down the printer when connecting or disconnecting interfaces to avoid any damage happened.
8. Please choose designated adapter model of Wincode to connect printer accordingly.

## Contents

Declaration.....	- 1 -
Safety Instructions.....	- 2 -
Contents.....	- 3 -
1. Product Introduction .....	- 5 -
1.1 Unpacking and checking .....	- 6 -
1.2 Appearance .....	- 7 -
2. Setup .....	- 9 -
2.1 Setting up the printer .....	- 9 -
2.2 Ribbon Loading.....	- 10 -
2.3 Label Loading.....	- 16 -
2.4 Real Time Clock Battery Installation .....	- 19 -
2.5 Cutter Installation (Optional).....	- 20 -
2.5.1Label Installation .....	- 22 -
2.6 Peeler Installation (Optional).....	- 23 -
2.6.1Label Installation .....	- 26 -
3. Driver installation .....	- 27 -
3.1 Printer Installation .....	- 28 -
3.2 Install driver with “Add a Printer” in Microsoft.....	- 32 -
3.2.1 Printer Installation .....	- 33 -
3.3 Printing Setup (Driver Setup) .....	- 40 -
3.3.1 Page Setup .....	- 40 -
3.3.2 Media Settings.....	- 41 -
3.3.3 Sensor Calibration.....	- 43 -
3.3.4 Options .....	- 44 -
3.3.5 Image Processing.....	- 47 -
3.3.6 Tools .....	- 48 -
3.3.7 About.....	- 49 -
4. WinLabel tool suite.....	- 50 -
4.1 Software Introduction .....	- 50 -
4.2 Software Installation.....	- 51 -
4.3 WINLABEL Label Editing Software .....	- 52 -
4.4 Update settings and update check .....	- 53 -
4.5 Firmware update Tool.....	- 54 -
5. Printer Utility.....	- 55 -
5.1 Printing Summary .....	- 57 -
5.2 Settings.....	- 58 -

---

5.3 File Management.....	- 61 -
5.4 Send Command .....	- 62 -
6. LED indicators and button explanation.....	- 63 -
7. Maintenance .....	- 66 -
8. Appendix – LP4N series specification .....	- 67 -

# 1. Product Introduction

Thank you for purchasing Wincode's LP4N series label printer, this desktop label printer with reasonable price has reliable quality to provide user highly-efficient printing performance. The LP4 series printer not only can print label in text or graphic formats, but owns basic function and convenient operation interface.

In addition, LP4N series label printer with elegant bright black enclosure has cover open buffer design to avoid hand clamped in operation; The maximum 5" outside diameter label loading space; Dual ribbon loading design enables user to use 100m or 300m ribbon; It is also equipped 32 bit processor with highly efficient relevant configurations to make printing action smoothly and clearly so it can be applied in the different fields such as retailing, health care, manufacturing, logistics, warehousing and so on.

The bundled label design program as "WinLabel" provides completed label design tools and barcode resource for user to design ideal label format; Free database function can be connected with Excel, Access, Text file...etc. and get required information in the specified position of label. Standalone function can support advanced models LP4A series to produce standalone format label.

## 1.1 Unpacking and checking

Unpacking the package, and refer to the below packing list to check whether any part is damaged or missing in transit. If this incident has been happened, please contact with local dealer or distributor for further assistance.



Label Printer



CD Disc (Optional)



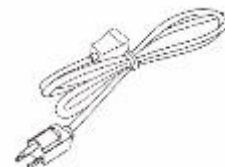
Quick Installation Guide



USB Cable



Adapter



Power Cord



Ribbon Supply Spindle  
Ribbon Take-up Spindle



Empty Paper Core (1" core)

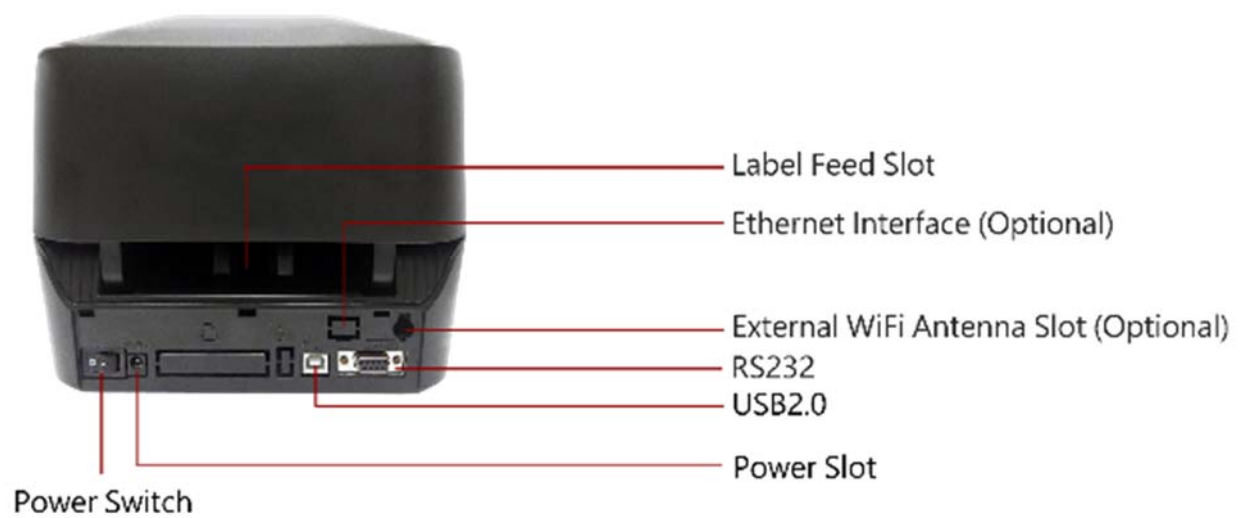


0.5" ribbon cap

## 1.2 Appearance



(Figure 1: Front View)



(Figure 2: Rear View)

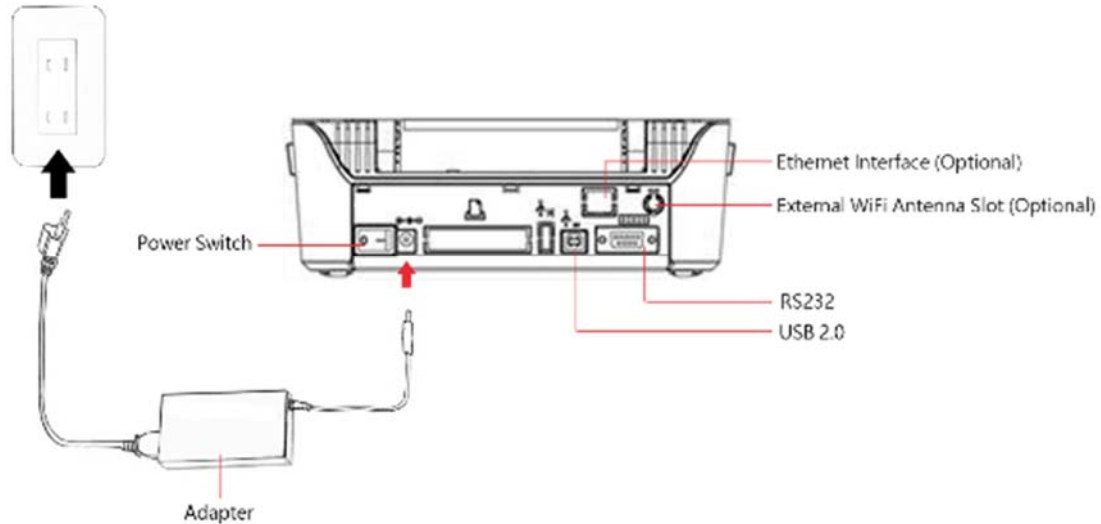




(Figure 3: Inside View)

## 2. Setup

### 2.1 Setting up the printer


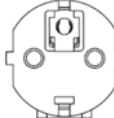



- 1.) Place the printer on the flat surface.
- 2.) Make sure the power switch is OFF.
- 3.) Choose corresponding cable (RS232 or USB 2.0) to connect printer with computer.
- 4.) Plug the DC power cord into the power slot and plug the AC power cord into a socket on the wall.

Note: Power Cord instruction

- To use 100-125 Voltage, please choose minimum rating power cord. (125V, 10A)
- To use 200-240 Voltage, please choose minimum rating power cord. (250V, 10-16A)
- Please select the power cord length less than 2 meter.
- Power cord is connected with adapter and have to plug in the jack as ICE-320-C13 as right figure.



Country/ Area	North America/Taiwan	Europe	China
Power cord Voltage and Electricity Spec.	125V, 10A SVT 18AWG	250V,10A H05VV-F	250V,10A RVV H05VV-F
Plug (Refers to the local plug standard)	 125V, 10A	 250V, 16A	 250V, 10A

## 2.2 Ribbon Loading

- 1) 1" core (300m length ribbon)

Open the ribbon cover and top cover; Install an empty paper core onto the ribbon take-up spindle; Install a ribbon onto the ribbon supply spindle.



0.5" core (100m length ribbon)

Open the ribbon cover and top cover; install the two 0.5" ribbon caps on the right white holders.



- 2) Pull back the pressing lever, then load the right side of ribbon first into the ribbon supply mechanism.

The left side of ribbon supply spindle needs to be connected with bulge part of left supply mechanism completely (Turn the gear until the bulge part in the notch of spindle).



- 3) Load the right side of paper core first into the ribbon take-up mechanism.  
The left side of ribbon take-up spindle needs to be connected with bulge part of take-up mechanism completely. (Turn the gear until the bulge part in the notch of spindle).

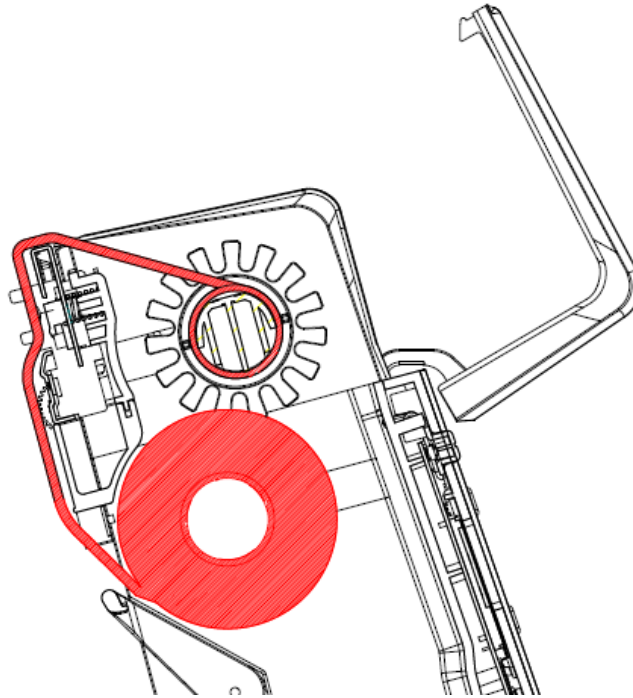


- 4) Pull the ribbon to bypass print head and then attach the ribbon leader on the empty paper core with tapes, then rotate the ribbon rewind wheel until ribbon surface has no wrinkle; Close the ribbon cover to finish ribbon installation.





## 6. Ribbon Installation Path





## 2.3 Label Loading

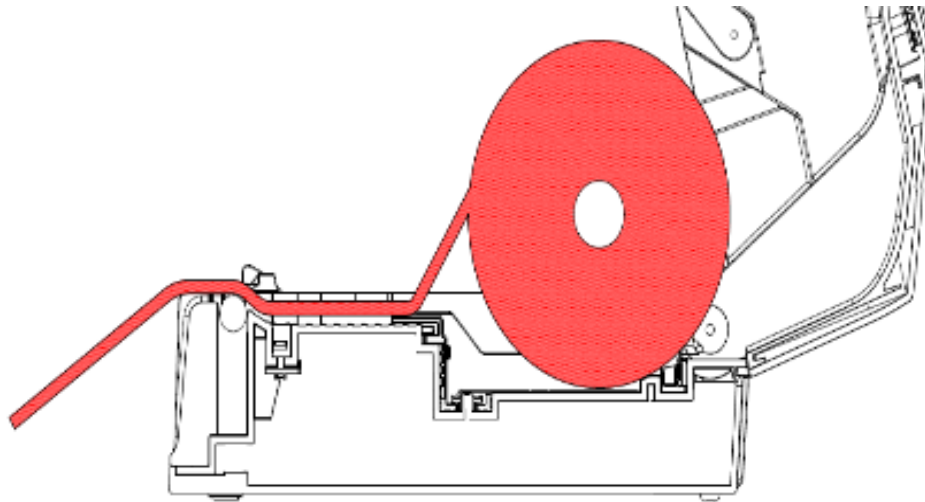
- 1) Hold on each side of label holder, press the orange buttons and then arrange the width, and place a label roll between the holders.



- 2) Pull the label paper through the rubber roller and push the both sides of label under the label guides. Close the top cover to finish label installation.



### 3) Label installation path



## 2.4 Real Time Clock Battery Installation

### 2.4.1 Get started (Battery is excluded in the LP4N model)

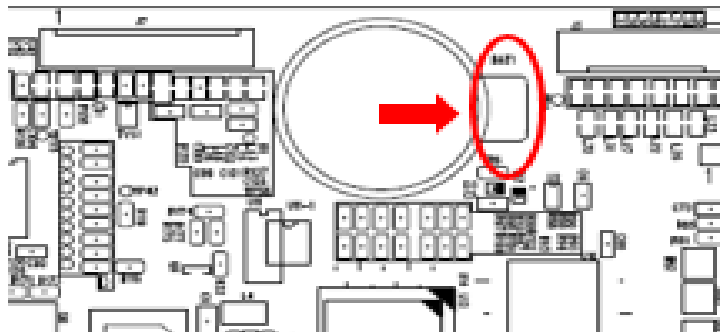
- 1) Turn off the power, and then remove the power cord and relevant connected cable.
- 2) Open the chassis cover at the bottom, there is a battery with insulation sheet.



- 3) Pull out the insulation shim.

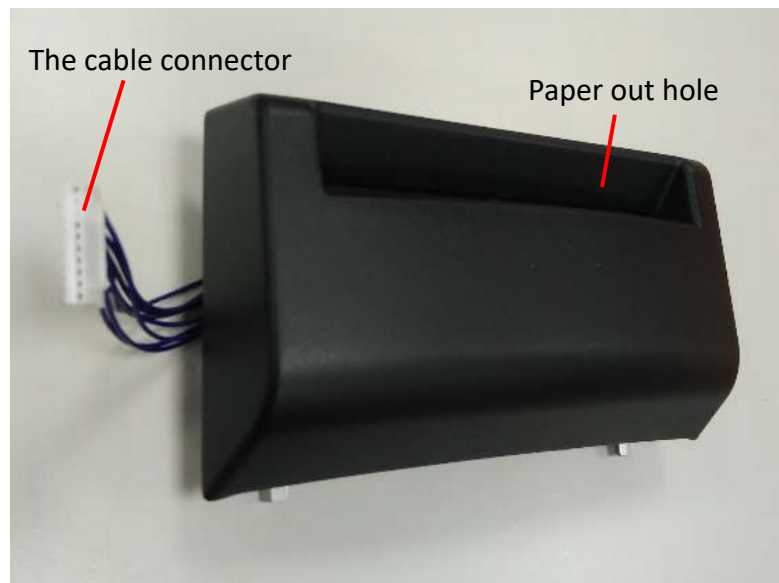
### 2.4.2 Replace the battery

- 1) Turn off the power and disconnect all the cables attached.
- 2) Loose the three screws at the bottom, and then open the lower part cover to see the motherboard.
- 3) Press the button beside the battery as below figure.
- 4) The battery would be left from the mount.
- 5) Place a new battery and then press until it is fixed in the installation mount.



\*Notice: the battery model CR2032 is recommended.

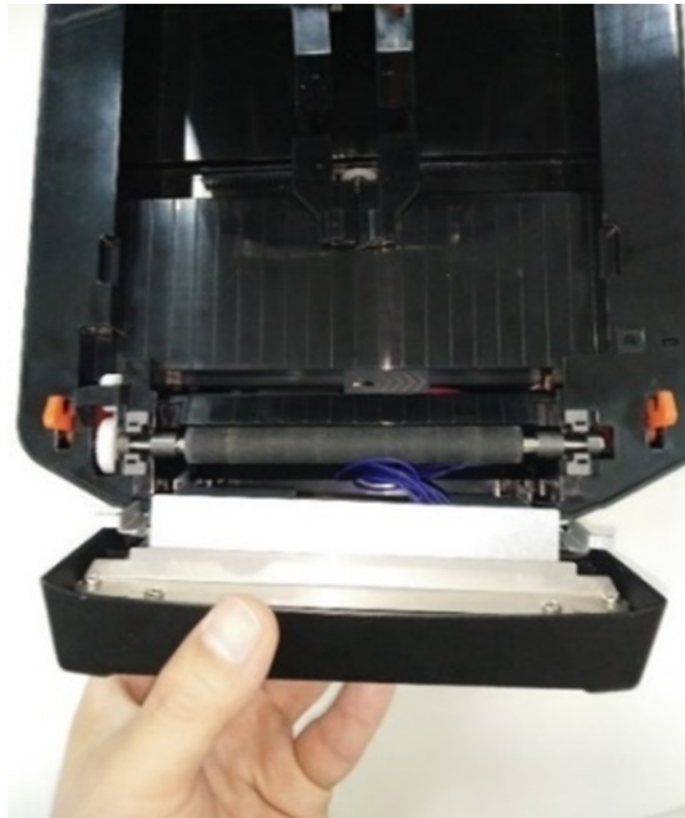
## 2.5 Cutter Installation (Optional)



- 1) Turn off the power and disconnect all the cables attached.
- 2) Open the upper cover and take down the front baffle.
- 3) Make the connected cable go through the hole of right side of lower part.



- 4) Place the cutter in the position of the front baffle, and then close the cover.



- 5) Open the bottom cover, and find the cable of cutter inside.



- 6) Place this cable into the slot of motherboard, and close the bottom cover.



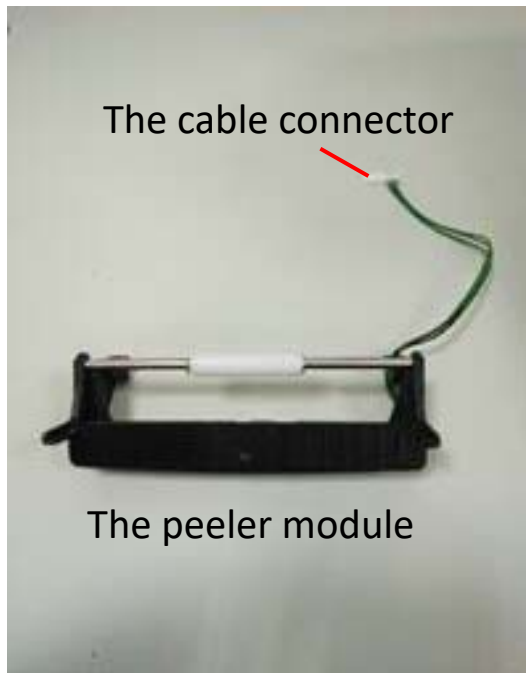
### 2.5.1 Label Installation

- 1) Follow [2.3](#) to load on the label.
- 2) Pull out the label through the paper outlet hole, and then close the cover.





## 2.6 Peeler Installation (Optional)



- 1) Turn off the power and disconnect all the cables attached.
- 2) Open the upper cover and take down the front baffle.
- 3) Make the connected cable go through the hole of right side of lower part.





- 4) Install the peeler module into the two holes of the left and the right sides of the lower cover part (right-side go first).



- 5) Place the spring part on the iron piece firstly, and install this iron piece into the notches (spring side in the right side) and then check if the arrow mark of iron piece pointing to the front.



- 6) Open the peeler module, and then close the upper cover.
- 7) Open the bottom cover and find the peeler cable connector.
- 8) Place the cable connector into the slot of motherboard and then close the bottom cover.



## 2.6.1 Label Installation

- 1) Follow [2.3](#) to load on the label.
- 2) Tear the first labels and leave the backing liner, pull down the backing liner and make the label through between the iron piece and white roller.



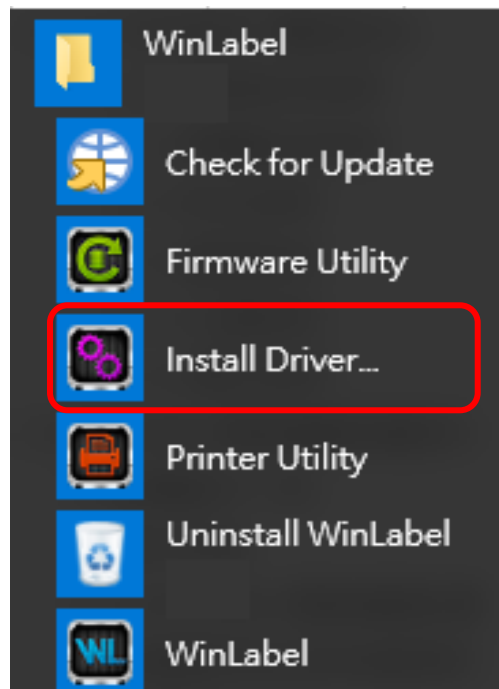
- 3) Push back the peeler module, and then close the upper cover.



### 3. Driver installation

The printer could support USB, RS232 and TCP/IP connection. After WinLabel installation, the user could find and execute it in the start menu of Windows. For the WIFI or Ethernet connection, please select "adding TCP/IP port" to install driver.

For RS232 connection, please select COM port to install driver.



## 3.1 Printer Installation

### Step1

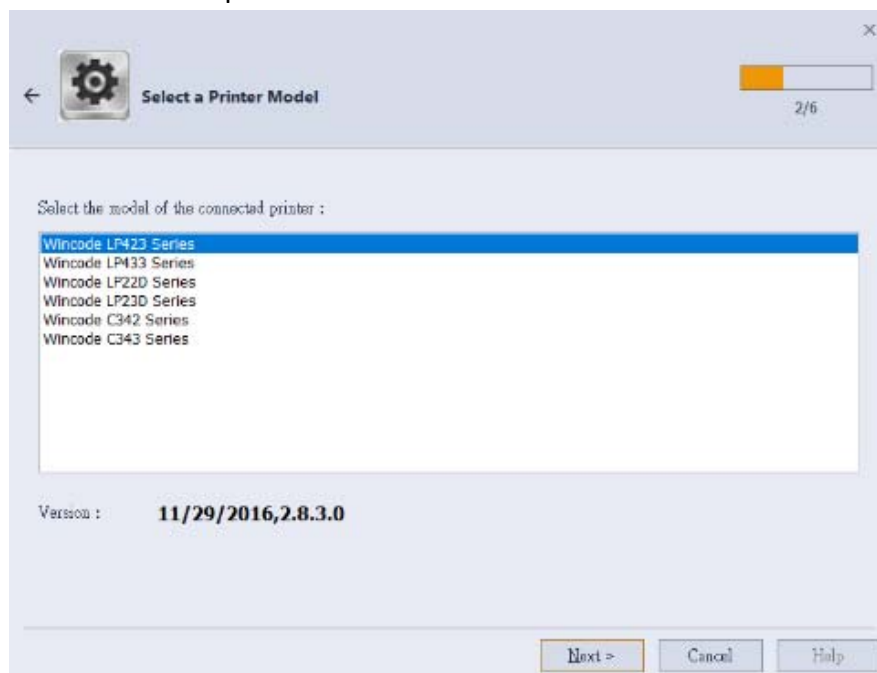
After WinLabel installation, the user could find the "Install Driver" icon in the START menu to execute it.

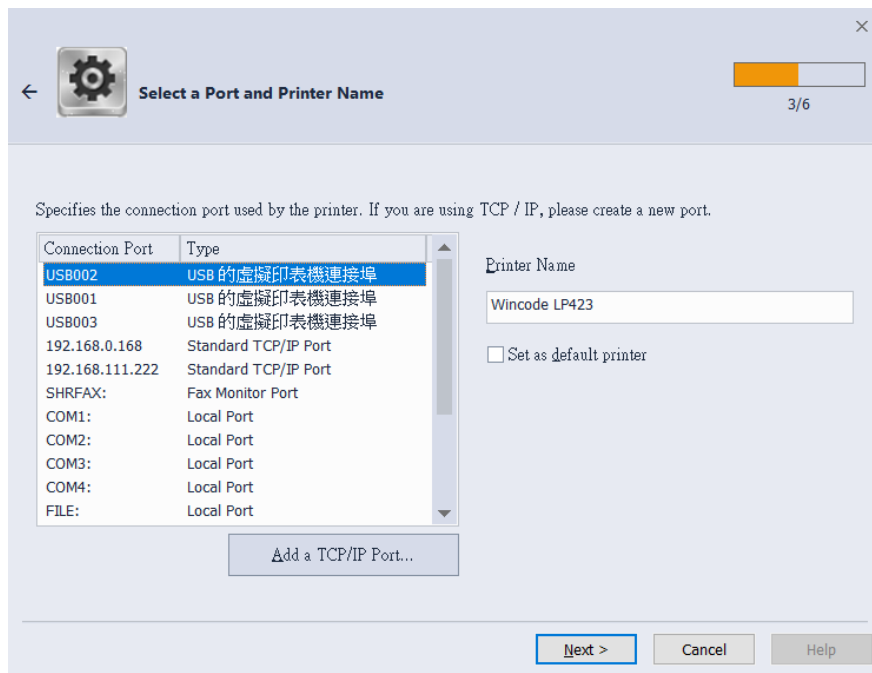
Connect printer to the computer with USB/ RS-232 / LPT cable and then press the Next icon.



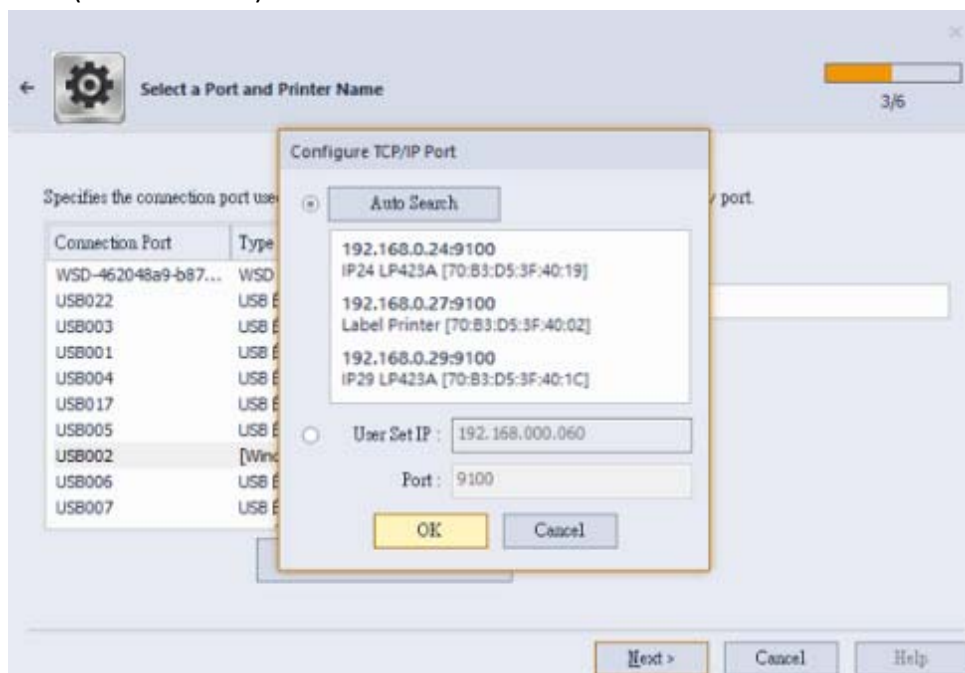
### Step2

Choose the model of the printer and then click "Next".



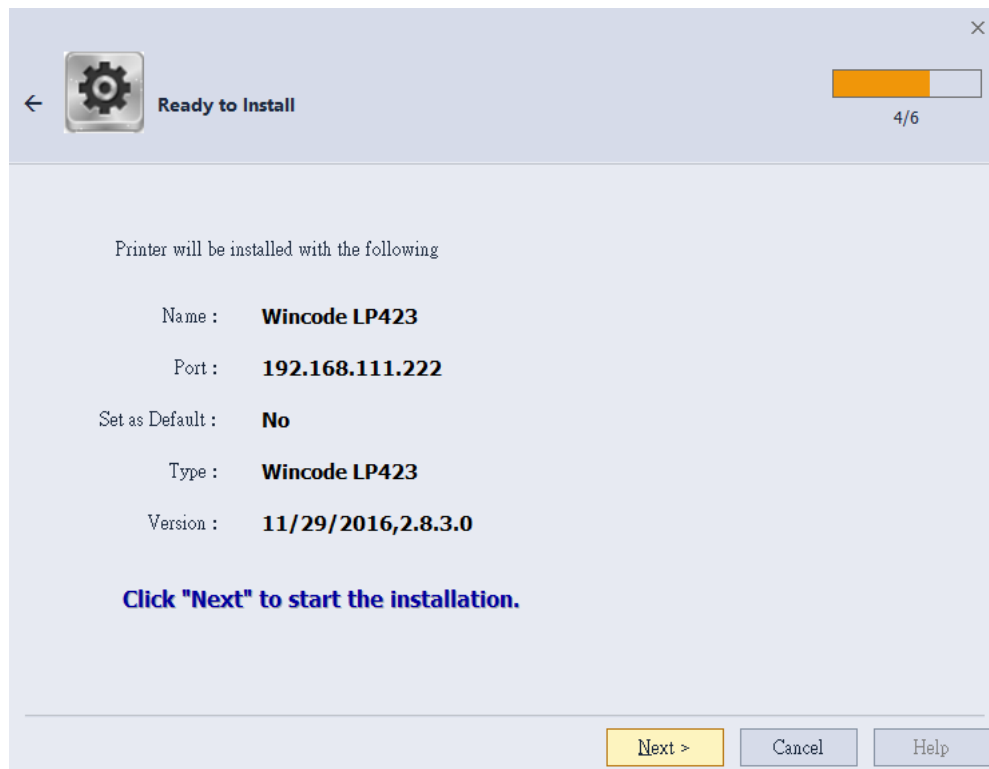


- USB connection: the program will select the connected port automatically.
- RS-232, LPT connection: please select the corresponding COM or LPT port.
- Ethernet or WIFI or share IP connection: please select “add a TCP/IP port”
  - Automatically search: this function would search the whole printers that are ready connected to the router, it will bring a corresponding IP of each printer automatically.
  - If the user selects the manual IP input, please insert the custom IP and port (default: 9100).

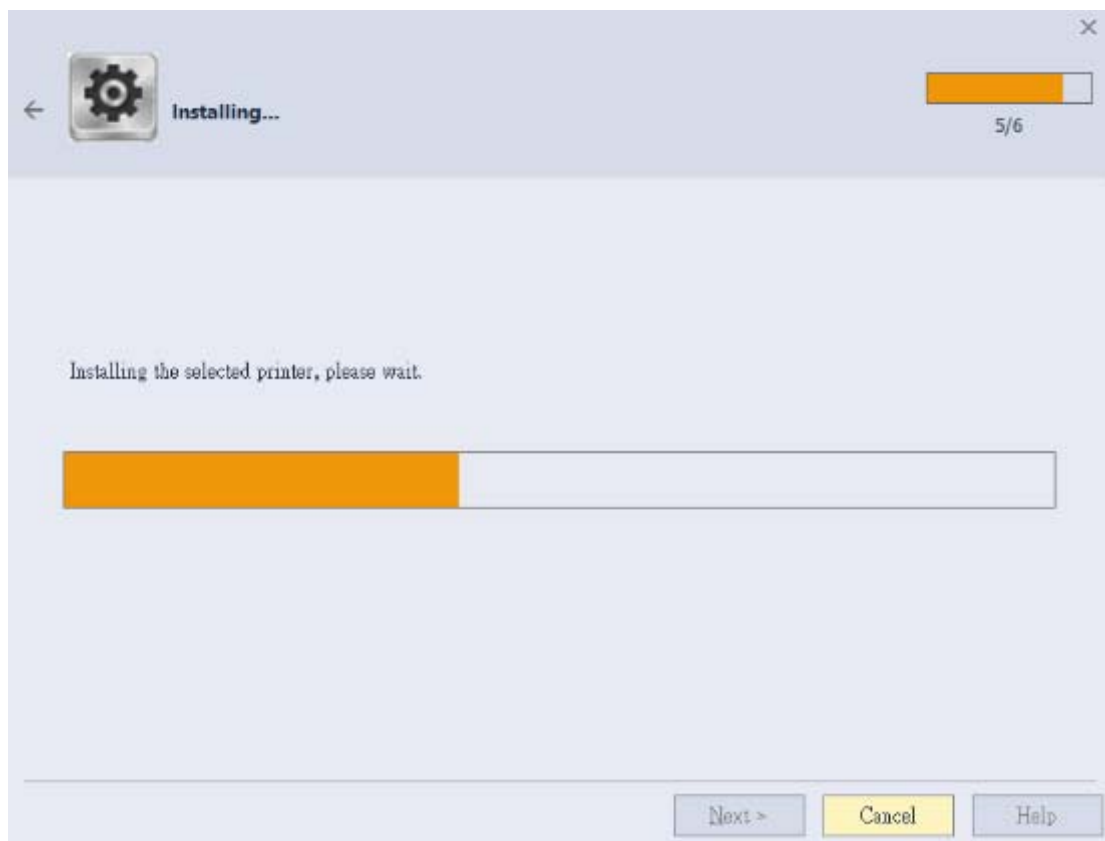


**Step3**

If the showed information is correct, click “Next” to start driver installation.

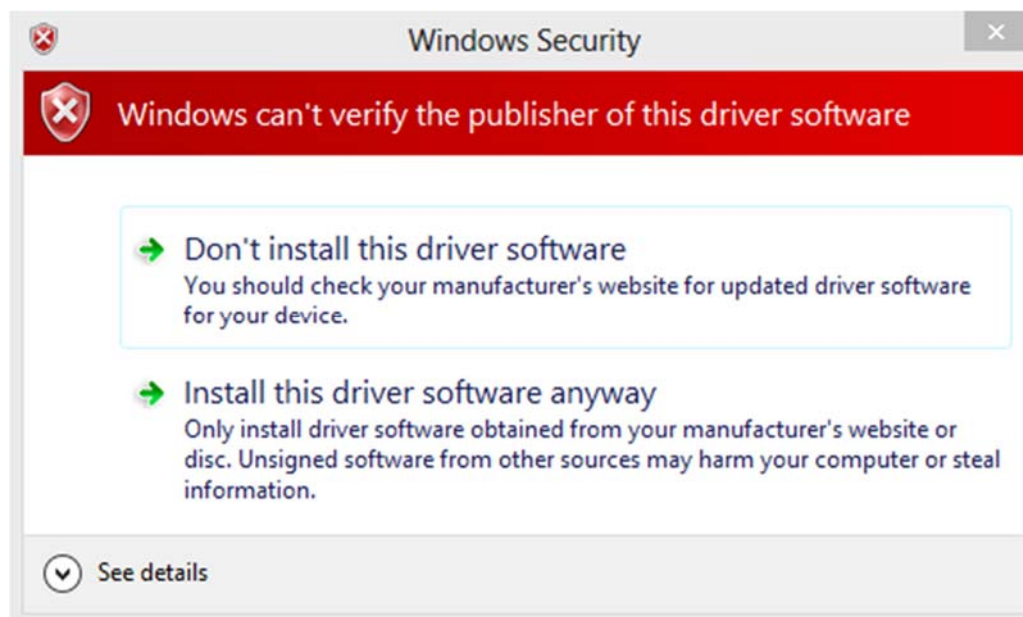
**Step4**

The driver installation would require several minutes.

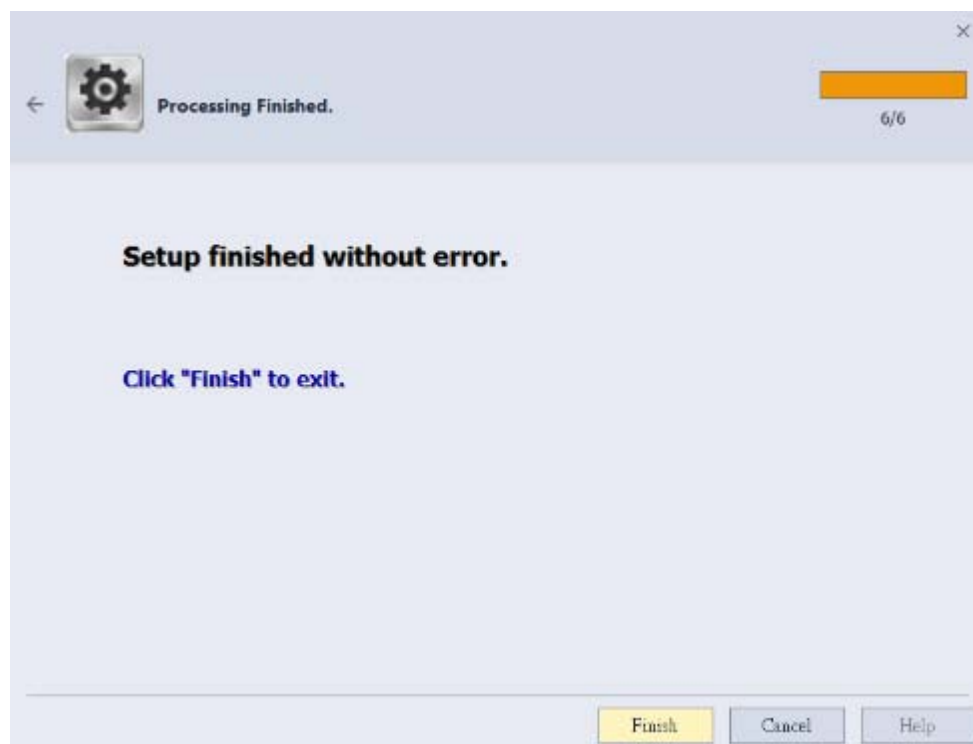


**Step5**

If a “Windows Security” window popup, please select “install this driver software anyway”.

**Step6**

The driver installation is finished.



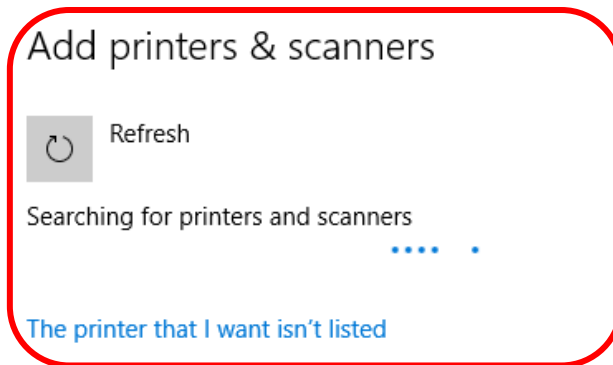


## 3.2 Install driver with “Add a Printer” in Microsoft

Use the “add new printer” at the control panel of Microsoft to install the driver

➤ Windows 10 Platform

- 1) Click “Start” > “Setting” > “Devices”> “Printers & scanners”
- 2) Click “Add a printer or scanner” and then start searching, if the device cannot be found, select “The printer that I want isn’t listed”



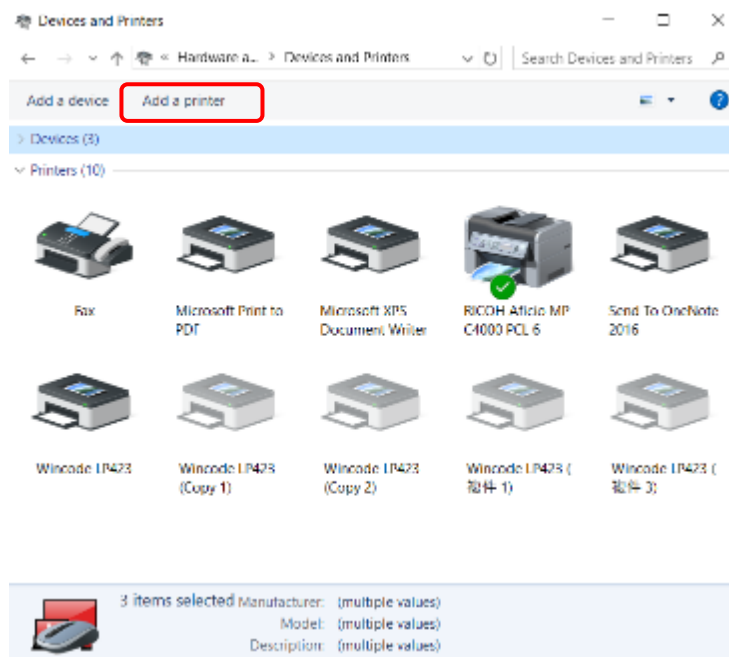
### Printers & scanners



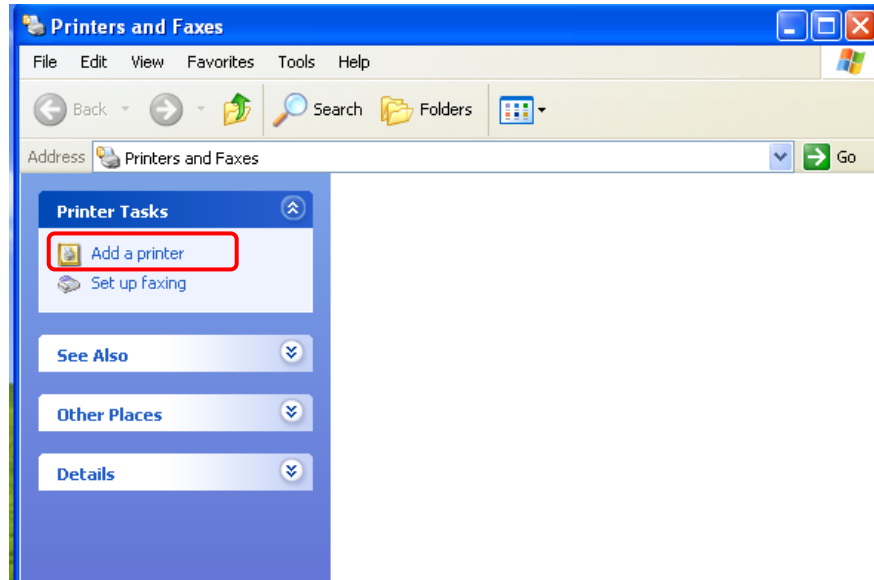
EPSON LQ-690C ESC/P2

➤ Windows 7 and Windows 8 Platform

- 1) Enter “Devices and printers” from the control panel or click “start” and select “Devices and printers”
- 2) Click “Add a new printer”



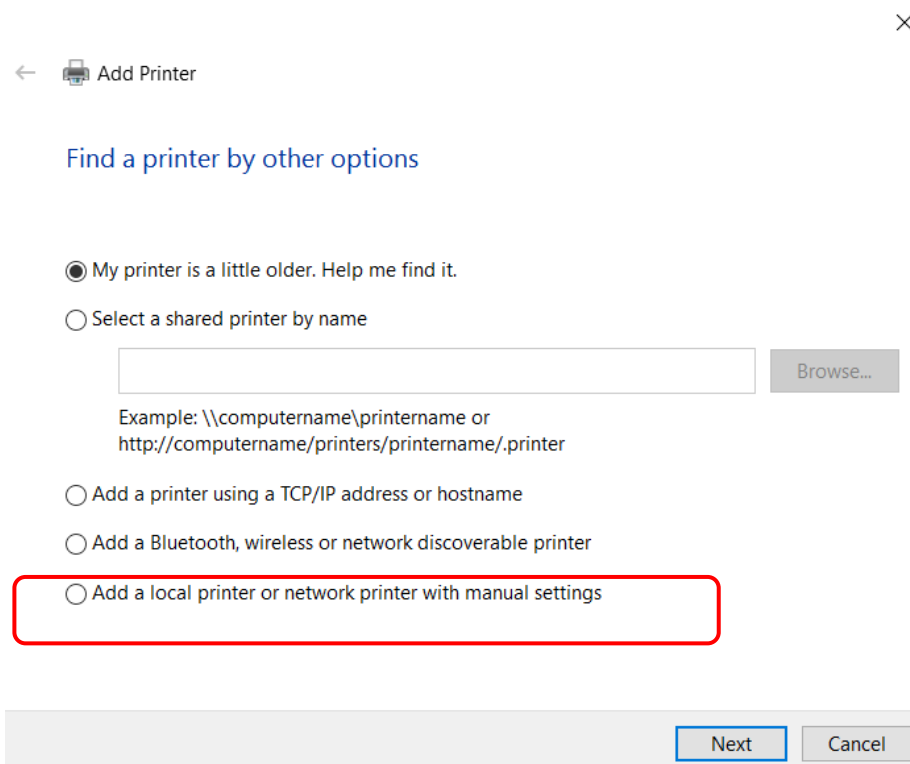
- Windows XP Platform
  - 1) Enter “Printers and Faxes” from the control panel or click “start” and select “Setting” > “Printers and Faxes”
  - 2) Click “Add a printer” > “Add a printer wizard”



### 3.2.1 Printer Installation

(For example: in the windows 10 platform)

- 1) Follow the step above, select “The printer that I want isn’t listed” > “Add a local printer or network printer with manual settings” > “Next”



## 2) Choose a printer port

- For USB, COM, LPT printers, please select “Use an existing port”, choose the corresponding port, then click “Next” (Then go to step “6”)

X

← Add Printer

### Choose a printer port

A printer port is a type of connection that allows your computer to exchange information with a printer.

☒ Use an existing port: LPT1: (Printer Port) ▼

☐ Create a new port:

Type of port: Local Port ▼

Next

Cancel

- For TCP/IP printers, please select “Create a new port”, choose the type of connected port, click “Next”

X

← Add Printer

### Choose a printer port

A printer port is a type of connection that allows your computer to exchange information with a printer.

☐ Use an existing port: LPT1: (Printer Port) ▼

☒ Create a new port:

Type of port: Local Port ▼

Local Port

Standard TCP/IP Port

Next

Cancel

3) Key-in the IP address of the printer and then click “Next”.



←  Add Printer

Type a printer hostname or IP address

Device type: TCP/IP Device

Hostname or IP address:

Port name:

☒ Query the printer and automatically select the driver to use

Next

Cancel

4) Wait for TCP/IP port detecting.



←  Add Printer

Detecting TCP/IP port

Detecting the TCP/IP port...  
Windows will automatically move to the next page when the detection is complete.



Next

Cancel

- 5) Select "Custom" in "Settings", and fill up the port name, printer name or IP address. For Protocol, please select "Raw". For Port Number, please fill up "9100". Select "OK" > "Next".

X

← Add Printer

### Additional port information required

The device is not found on the network. Make sure that:

1. The device is turned on.
2. The network is connected.
3. The device is properly configured.
4. The address on the previous page is correct.

If you think that the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure that the address is correct, select the device type below.

Device Type

☐ Standard
Generic Network Card

☒ Custom

Settings...

Next

Cancel

### Configure Standard TCP/IP Port Monitor

X

Port Settings

Port Name:
192.168.0.123

Printer Name or IP Address:
192.168.0.123

Protocol

☒ Raw
☐ LPR

Raw Settings

Port Number:
9100

LPR Settings

Queue Name:

☐ LPR Byte Counting Enabled

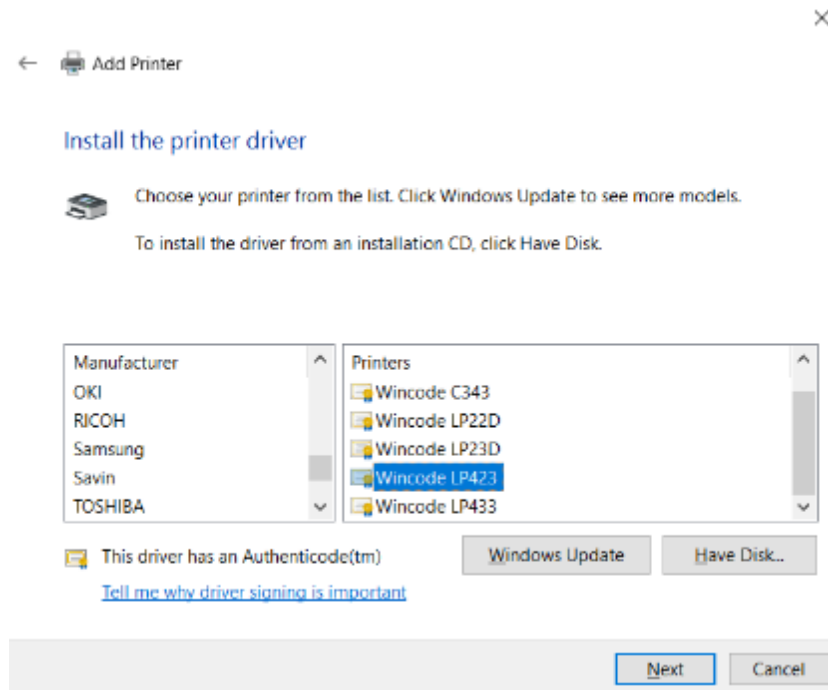
☐ SNMP Status Enabled

Community Name:
public

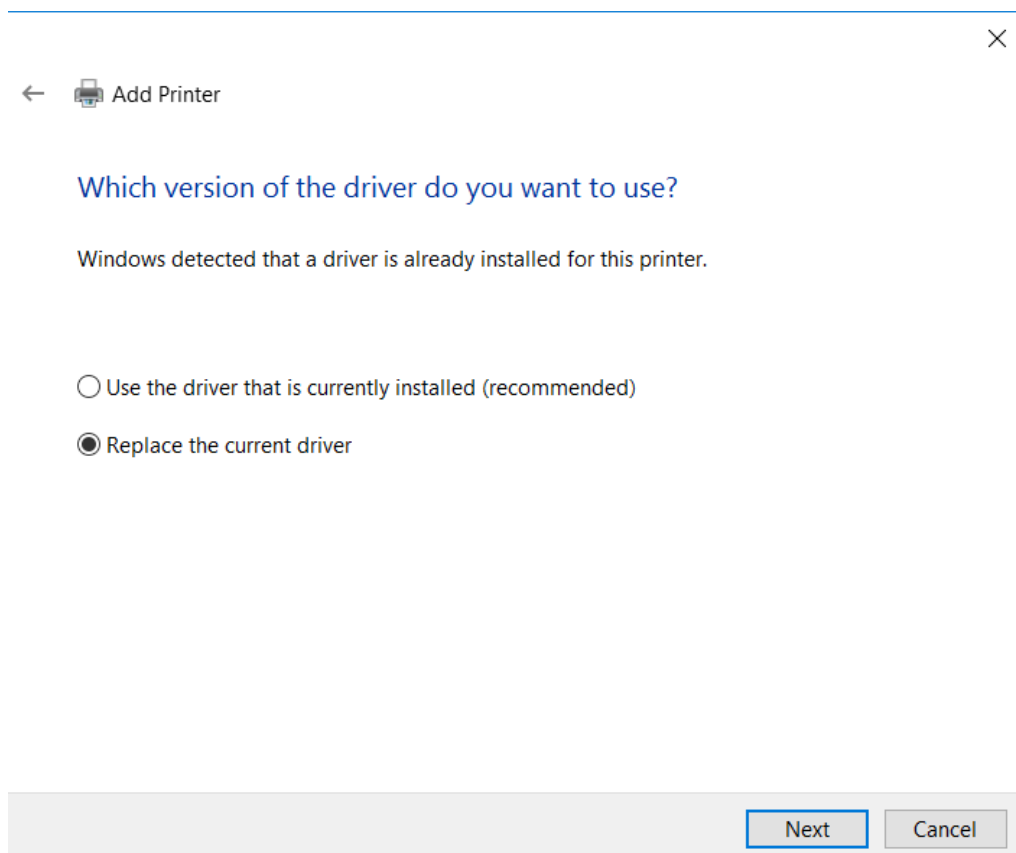
SNMP Device Index:
1

OK
Cancel

- 6) Choose the printer driver that you want to install, and select the printer manufacturer and then select the printer driver . Click “Next”.




\*If the same driver has been installed, it will show the following window, select “Replace the current driver” and click “Next”.



7) Enter the printer name, click “Next”.

×

←  Add Printer


Type a printer name

Printer name:

This printer will be installed with the Wincode LP423 driver.

8) Select “Do not share this printer” click “Next”.

×

←  Add Printer

Printer Sharing

If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.

☒ Do not share this printer

☐ Share this printer so that others on your network can find and use it

Share name:

Location:

Comment:

9) The user may select “Set as the default printer”, click “Finish”.



←  Add Printer

You've successfully added Wincode LP463

☐ Set as the default printer

To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.

Print a test page

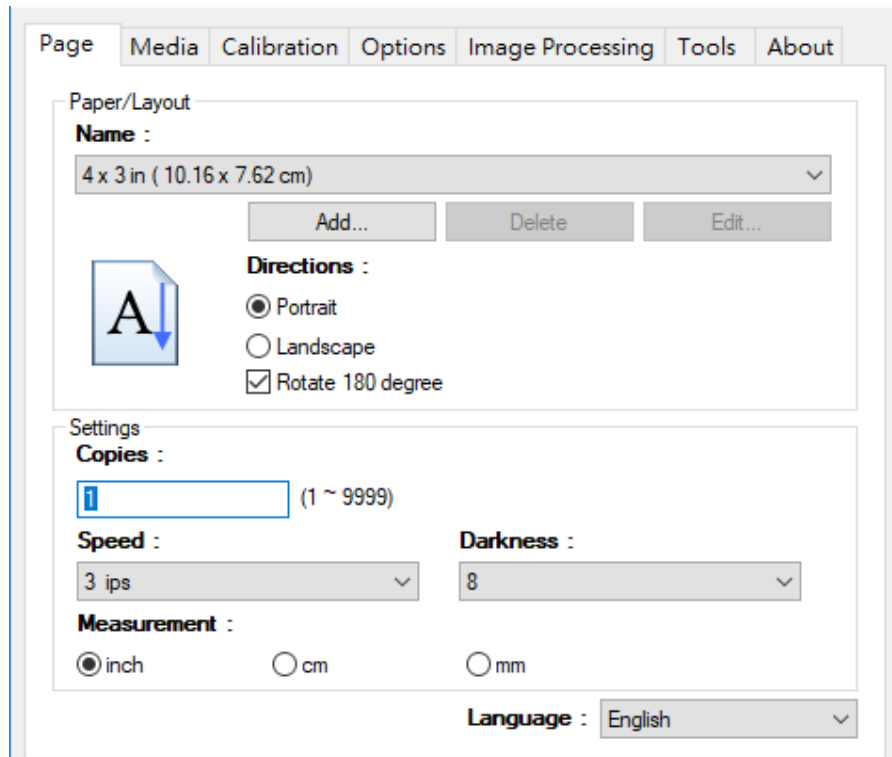
Finish

Cancel



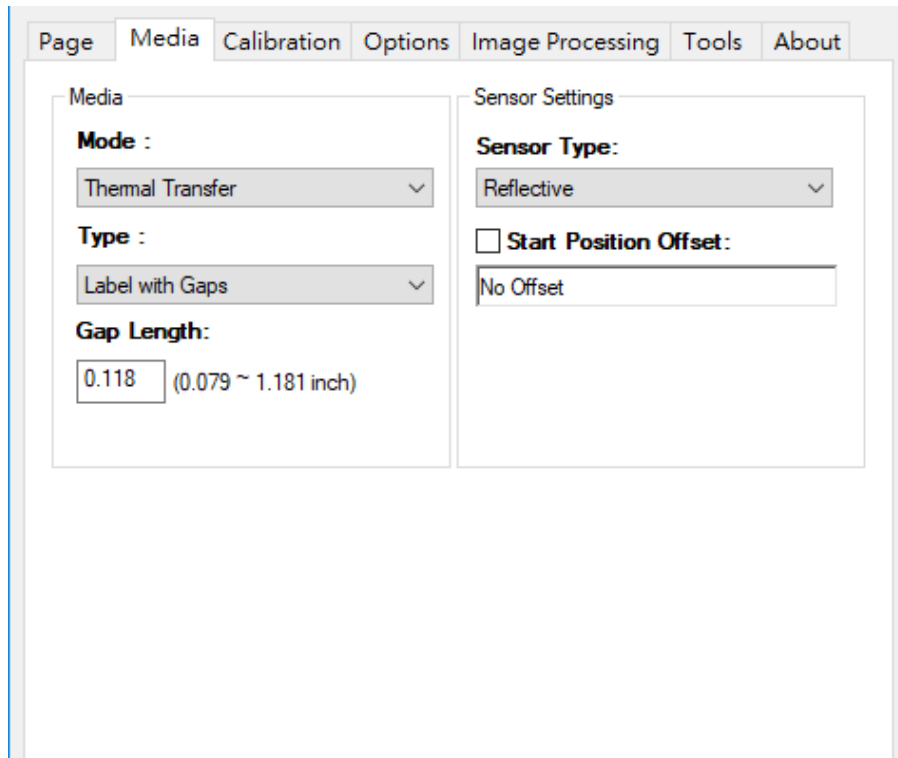
## 3.3 Printing Setup (Driver Setup)

### 3.3.1 Page Setup



Item	Description
Paper/Layout	<ul style="list-style-type: none"> <li>➤ Name : Choose paper size (4 x 3 inch and 2 x 1 inch); User can also define frequently-used paper size by adding new label format.</li> <li>➤ Directions : Portrait and landscape (rotate 90 degrees); 180 degrees rotation is default settings.</li> </ul>
Settings	<ul style="list-style-type: none"> <li>➤ Copies : Each page quantity</li> <li>➤ Speed : Printing speed</li> <li>➤ Darkness : Adjust Printing darkness status.  <b>Caution:</b> If the value is higher, that would cause the temperature of print head higher, and would make ribbon melting and breaking easily. (Suggest value less than 8 for wax ribbon, the value more than 10 for resin ribbon)</li> <li>➤ Measurement : inch, cm, and mm.</li> </ul>

### 3.3.2 Media Settings



Item	Description
Media settings	<p>Mode: Thermal Transfer and Direct Thermal.</p> <p>“Thermal Transfer” mode means that printer needs to be loaded ribbon for printing.</p> <p>“Direct Thermal” mode means that printer does not require ribbon but need to be loaded thermal paper.</p>
Media type	<p>Label with gaps :</p> <ul style="list-style-type: none"> <li>➤ “Gap Length” is the distance between two labels.</li> </ul> <p>Label with marks :</p> <ul style="list-style-type: none"> <li>➤ “Black Line” is the thickness in each black line.</li> </ul> <p>Continuous :</p> <ul style="list-style-type: none"> <li>➤ Continuous label type: Ignoring the gap or mark of label</li> <li>➤ Stop On Last Element: Printing action will stop while printing the last label</li> </ul>
Sensor settings	<p>Sensor type:</p> <ul style="list-style-type: none"> <li>➤ Use Current Printer Setting (by previous setting)</li> <li>➤ Reflective sensor (<b>Recommend</b>)</li> </ul>

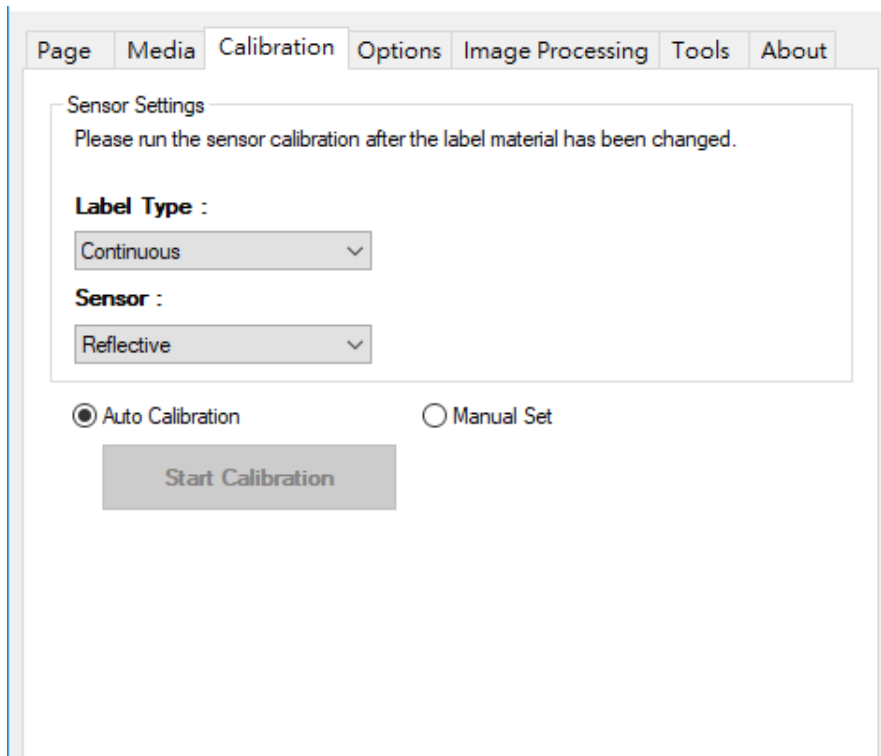
➤ Transmissive sensor

Start Position Offset: (recommend to input number when the printing pattern has a little bit shift up or shift down)

If selected, user could fill up the value by dot.

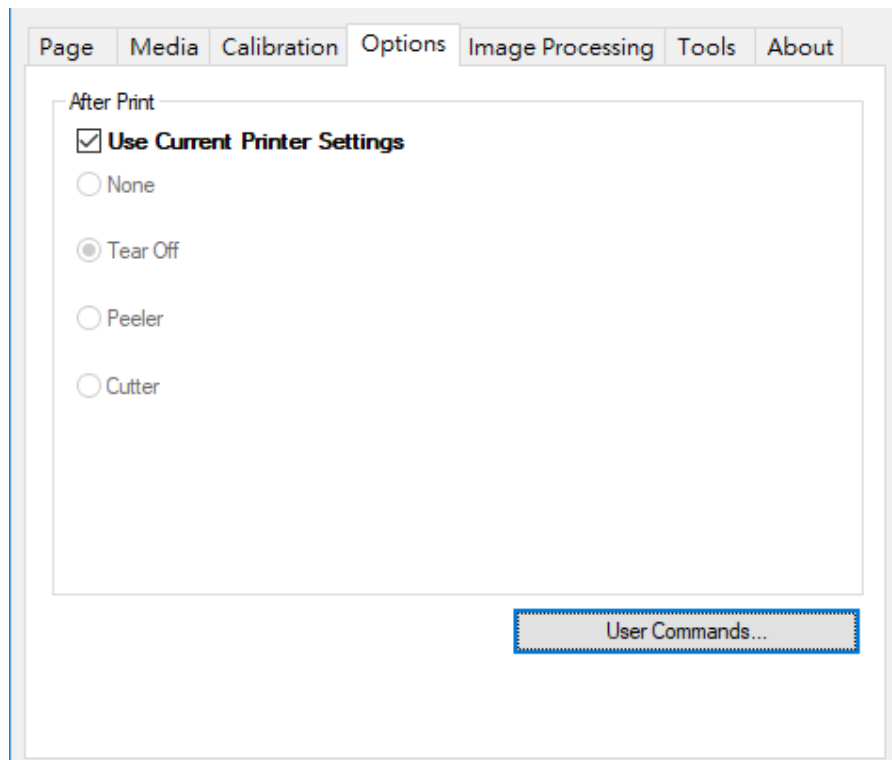
(+value: pattern shifts up; 203dpi: 1mm=8 dots; 300dpi: 1mm=12 dots.)

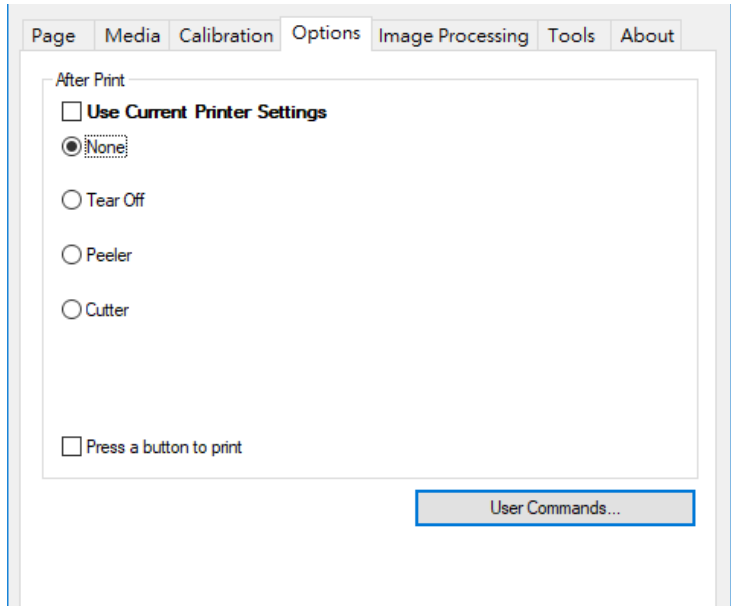
### 3.3.3 Sensor Calibration



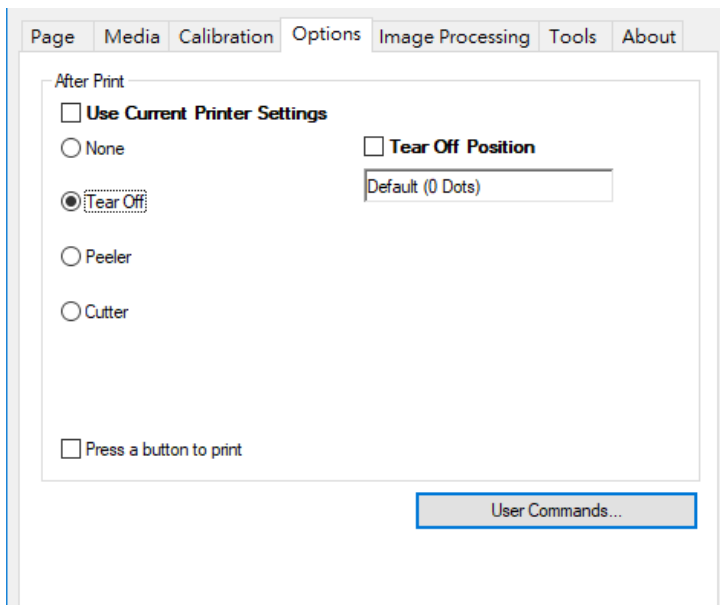
Item	Description
Auto Calibration	<p>The calibration would adjust the sensitivity of sensor according to the feeding label thickness.</p> <p>We suggest to run the “Auto calibration” for most kinds of labels, or while the label material is different from the previous label. If it is the same material but different size, user only needs to adjust the page size.</p>
Manual Set	<p>➤ Sensor Strength: Middle or High are recommended. Higher sensor strength would detect thicker label.</p> <p><input checked="" type="radio"/> Manual Set</p> <p><b>Sensor Strength :</b></p> <p>Middle</p> <p>Set to Printer</p>

### 3.3.4 Options



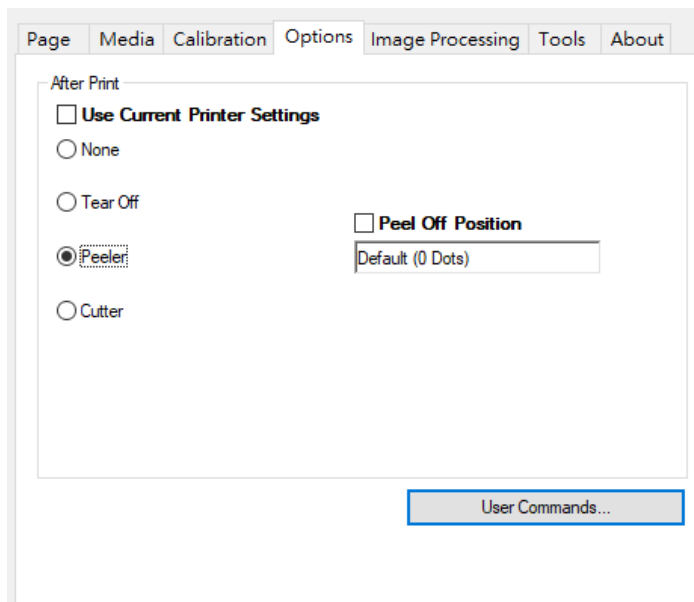
Item	Description
After Print	<p>Default: Use Current Printer Settings. The below options will show after removing the tick.</p> <ul style="list-style-type: none"> <li>➤ None: The label will be stopped after printing the last label.</li> </ul>  <ul style="list-style-type: none"> <li>➤ Tear off: The label gap will be stopped at the tear off position that letting user easily tear off the label.</li> </ul>

The tear off position is adjustable as long as selecting the “Tear Off Position” option.



- Peeler: with peeler module, the labels can be peeled continuously while printing. The printer will feed the next label after the current label peeled.

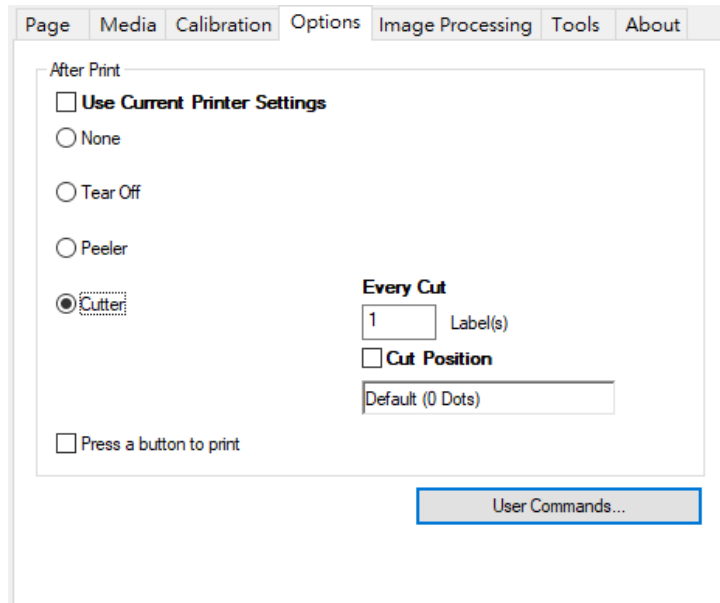
The Peel position can be adjusted with the “Peel Off Position” selected.



- Cutter: with cutter module, the cutter operates after printing each label.

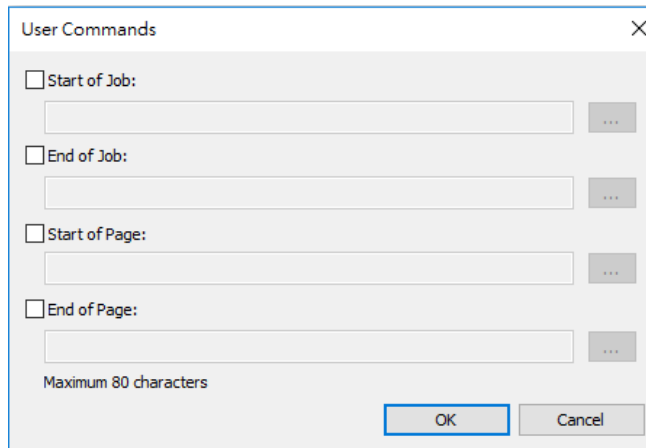
“Every Cut”: the amount of pages that come out once running the cutter.

“Cut Position”: the cutting position will be adjustable while selected.

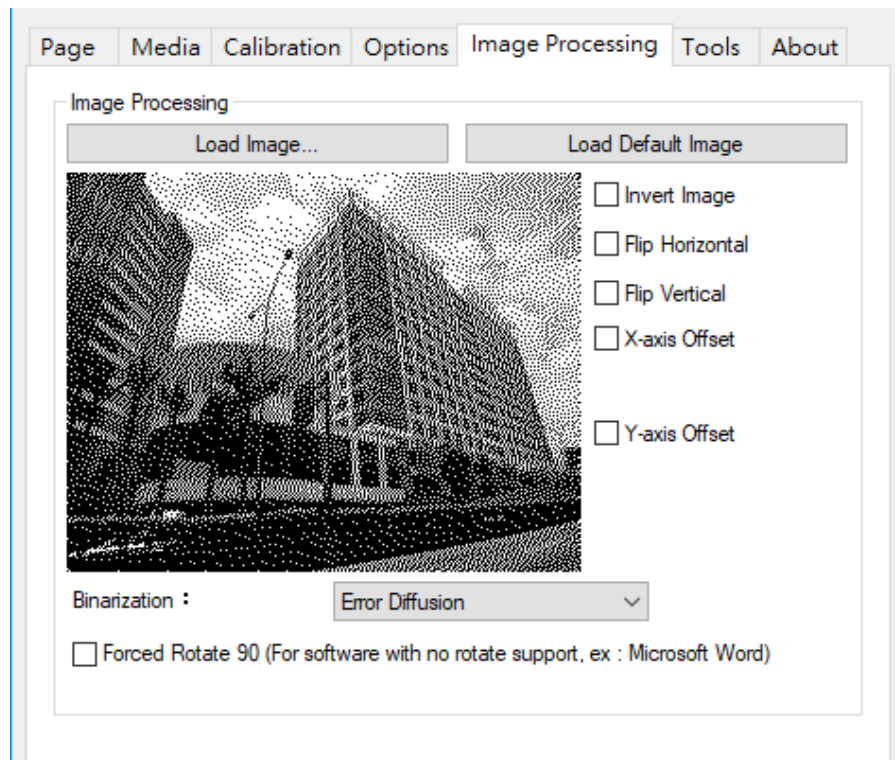


User  
Commands

User can fill in the printer commands in this dialog when it is needed. Select and press “...”, a new window will pop out and the user can key in the commands.



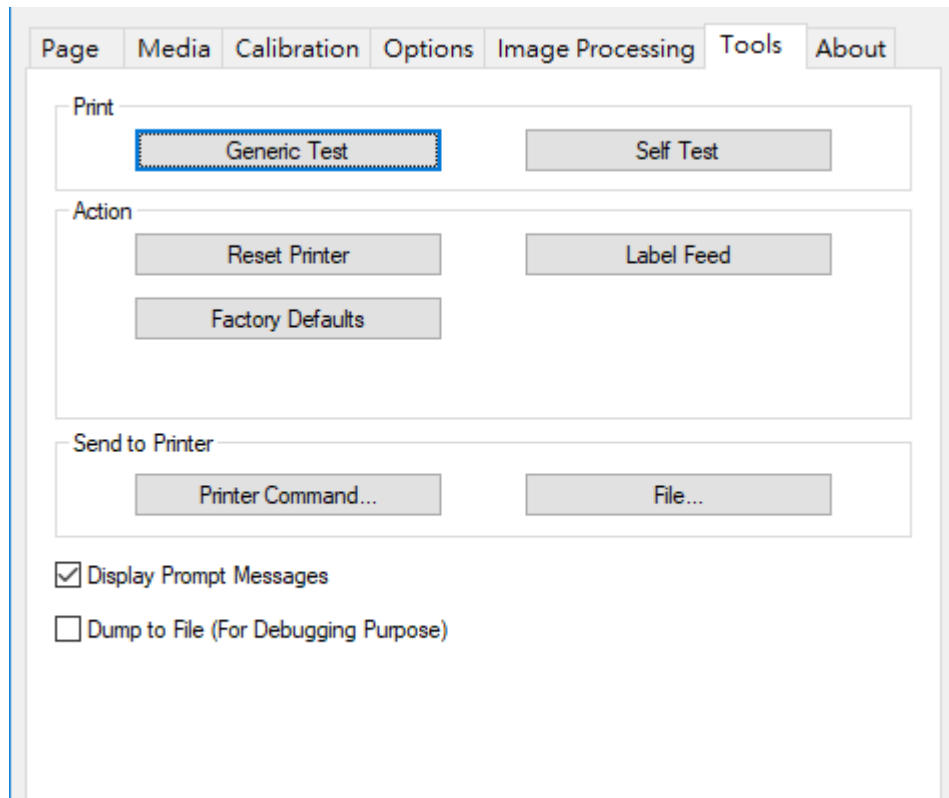
### 3.3.5 Image Processing



Item	Description
Image Processing	<ul style="list-style-type: none"> <li>➤ Load Image: The selected image will be displayed in below area.</li> <li>➤ Load Default Image.</li> <li>➤ Binarization: Converts color images to different kind of black-and-white image. <ul style="list-style-type: none"> <li>F&amp;S Error Diffusion</li> <li>F&amp;S Error Diffusion</li> <li>Bayer 4 x 4</li> <li>Bayer 8 x 8</li> <li>Cluster 6 x 6</li> <li>Cluster 8 x 8</li> <li>Cluster 16 x 16</li> <li>Bayer 16 x 16</li> <li>Threshold</li> </ul> </li> <li>➤ Invert Image: Convert image color.</li> <li>➤ Flip Horizontal: Flip along X axis.</li> <li>➤ Flip Vertical: Flip along Y axis.</li> <li>➤ X-axis Offset: Adjust the print position in the horizontal direction.</li> <li>➤ Y-axis Offset: Adjust the print position in the vertical direction.</li> <li>➤ Forced Rotate 90° (If the software with no rotation support. e.g. Microsoft Word.): Only select when there is the printing rotation error in landscape direction.</li> </ul>



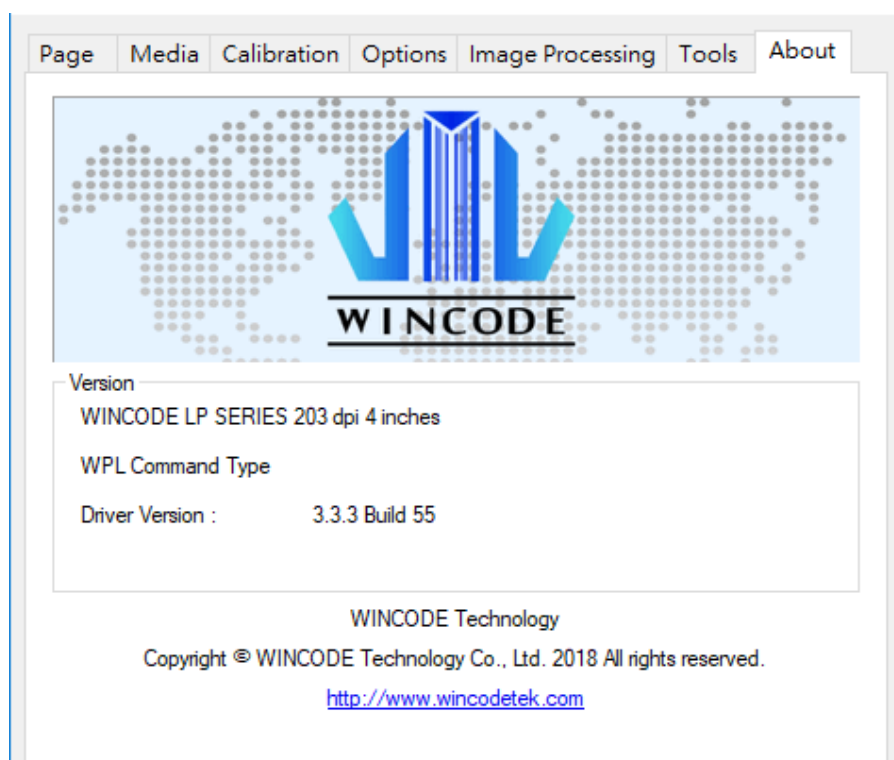
### 3.3.6 Tools



Item	Description
Print	<ul style="list-style-type: none"> <li>➤ Generic Test: ask printer to print a label with texts for testing purpose.</li> <li>➤ Self-Test: ask printer to print a label with inside parameters of printer.</li> </ul>
Action	<ul style="list-style-type: none"> <li>➤ Reset Printer : Restart printer.</li> <li>➤ Factory Defaults : Inside parameters to be default</li> <li>➤ Label Feed : ask printer to deliver a label come out</li> </ul>
Send to Printer	<ul style="list-style-type: none"> <li>➤ Printer Command: Send commands to the printer, please refer to the <u>WINCODE's WPL Command Manual</u>.</li> <li>➤ Files : Select a command file (*.prn) from the stored space of computer</li> </ul>
Dump to File (For Debugging Purpose)	<ul style="list-style-type: none"> <li>➤ Click this option to generate .prn file when use the third-party software.</li> </ul>

### 3.3.7 About

WINCODE driver version.









## 4. WinLabel tool suite

### 4.1 Software Introduction

WinLabel tool suit supports the below platform: Windows XP SP3, Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Server 2003, Server 2008, Server 2012 and Server 2012R2 operation system (32 bit and 64 bit).

**Note:** The monitor resolution needs to be at least 1024 x 768 for normal use.

Icons	Description
	WinLabel : Label editing software
	Printer Utility : Printer tool
	Install Driver : Driver installation tool
	Firmware Driver : Firmware update tool
	Check for Update : Version check
	Uninstall WinLabel : Uninstall all installed software

## 4.2 Software Installation

Click “WINLABEL\_SETUP.EXE” file which could be downloaded from our official website (<http://www.wincodetek.com/service>), choose a preferred language (English, Spanish, Turkish, traditional Chinese, simplified Chinese, and Korean) and then input a stored path to finish the software installation.

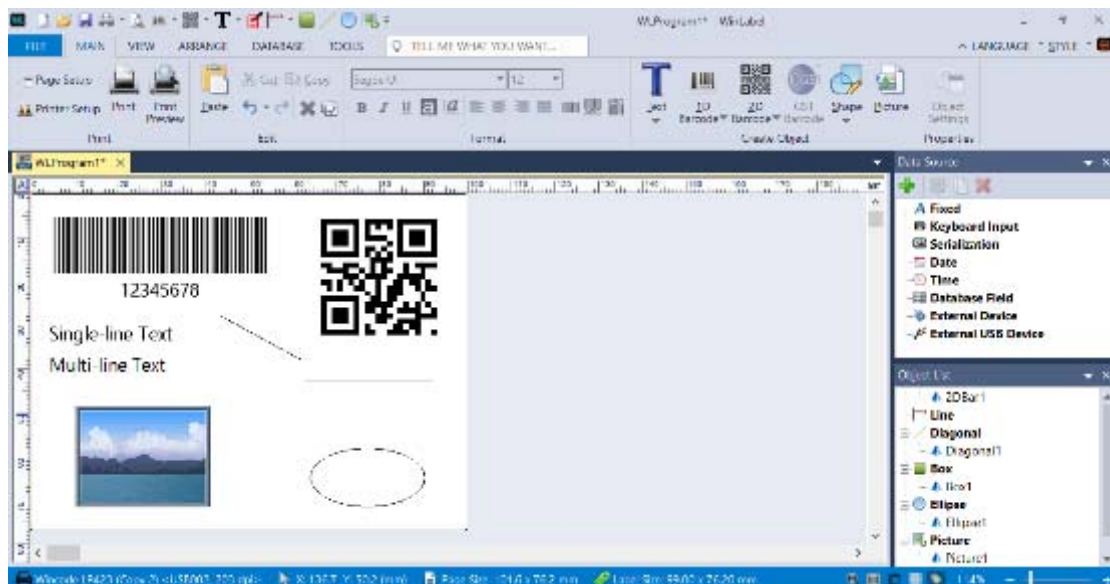


## 4.3 WINLABEL Label Editing Software

### ➤ The Welcome screen



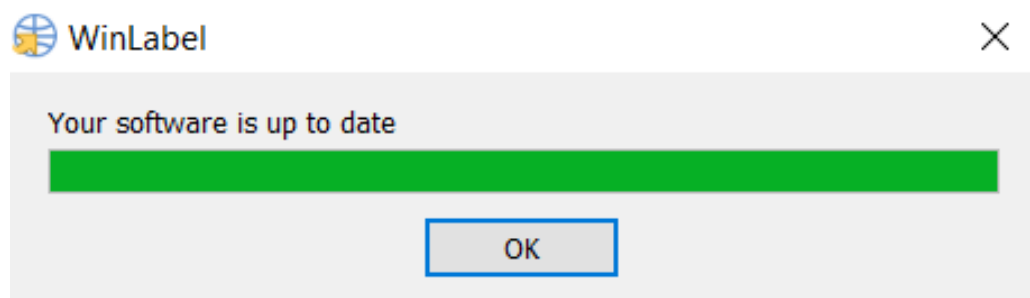
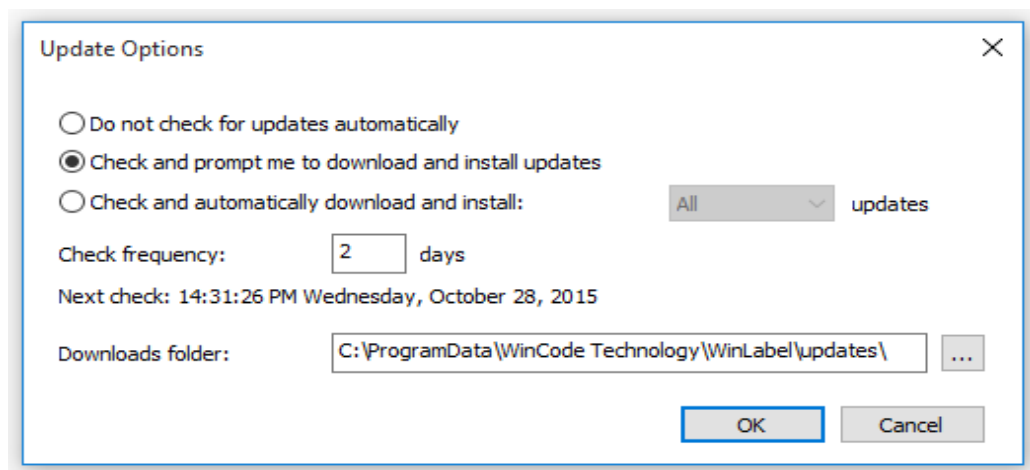
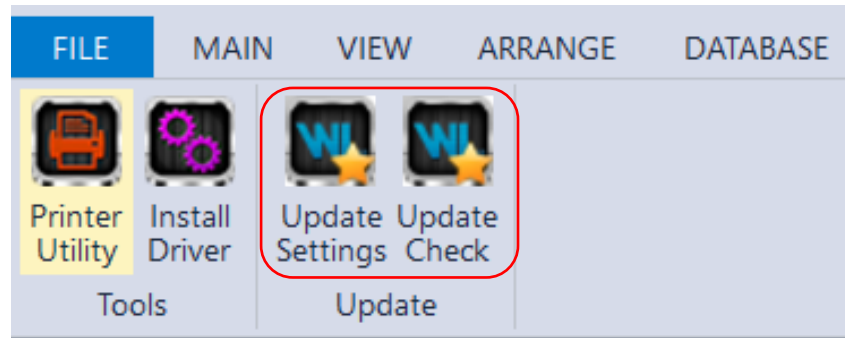
### ➤ The main screen



## 4.4 Update settings and update check

After entering the WinLabel program, click the “Update Check” icon in “TOOLS” page and check if it is the latest version. The program can be updated automatically.

Besides, user can click “Update Settings” icon for adjusting the update settings



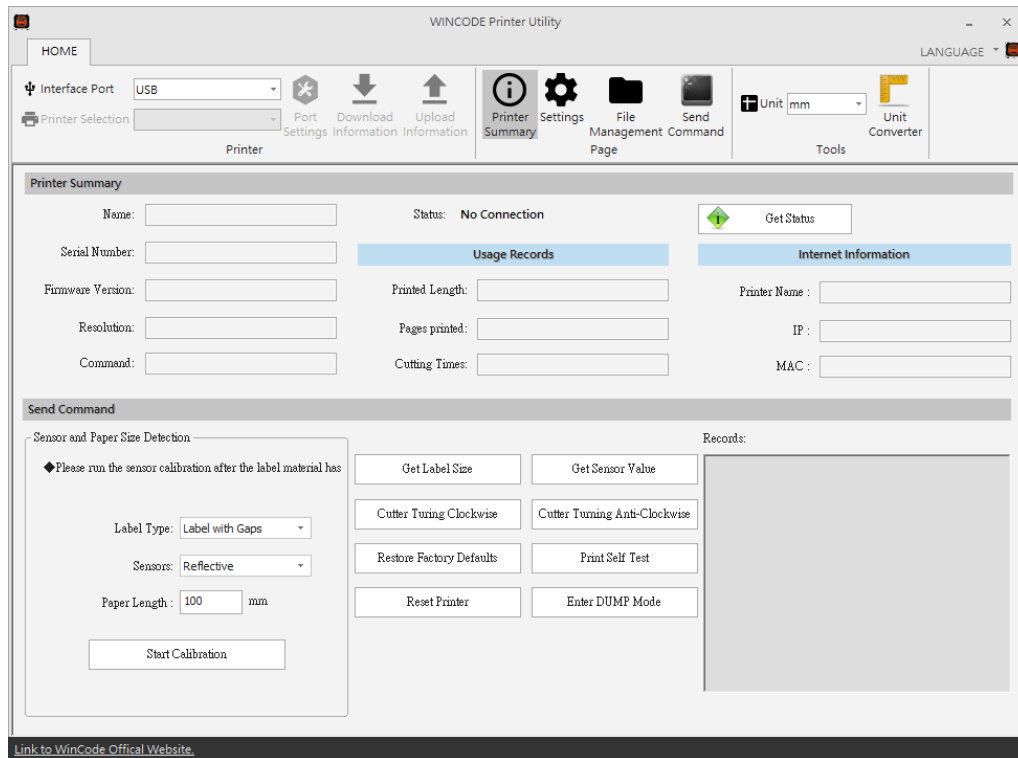
## 4.5 Firmware update Tool

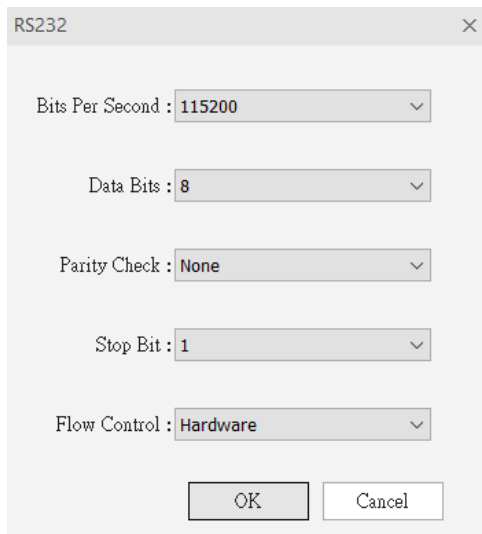
- When user receives the \*.ulf FW file, please execute the file directly and the system will open the firmware update tool automatically. After confirming the version, please press “burn” and wait until the “update finished” information shown.
- The update procedure can be run with USB 、RS-232 、LPT 、Ethernet (USB is recommended.)
- Press the “Search” button when selecting Ethernet, the system will search the LAN network and list all the connecting printers.



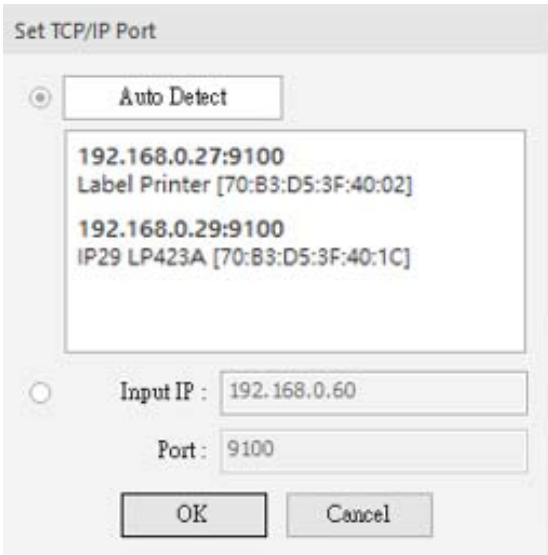
Item	Description
Port	<ul style="list-style-type: none"> <li>Term : select the connecting way: USB, RS-232, LPT, Ethernet</li> <li>connect : select the connected printer.</li> </ul>
Firmware file	Confirm the firmware version <ul style="list-style-type: none"> <li>The system will connect the firmware update tool automatically and show the information while executing the *.ulf file</li> </ul>
Burn	Burn the firmware into the printer
Get information	Get the serial number and the firmware version of the printer
Exit	Leave the firmware update tool

## 5. Printer Utility





Item	Description
Interface port	Interface port selection: USB, RS232, LPT (Centronics), Ethernet.
Printer selection	While the printer is connected to the computer, the program can automatically detect the printer device. User can select a connected printer from the pulldown list.
Port settings	<p>When RS-232 or Ethernet is connected, select for interface settings</p> <ul style="list-style-type: none"> <li>RS-232: bps, data bit, parity check, stop bit, flow control selection.</li> </ul> 

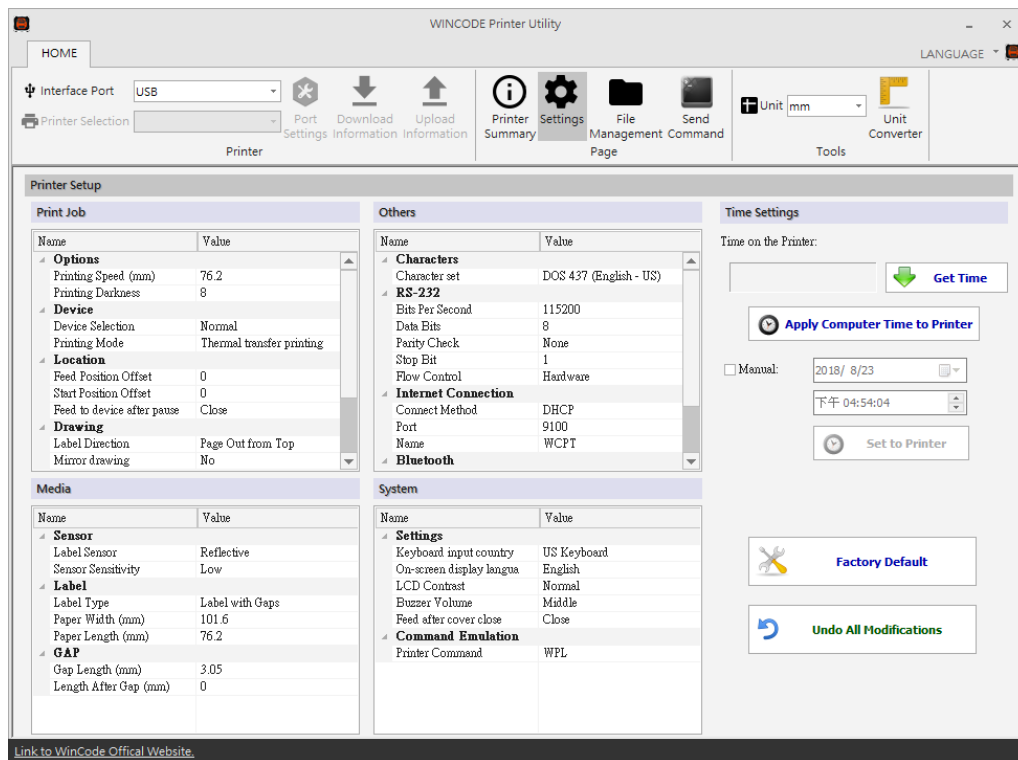


	<ul style="list-style-type: none"> <li>Ethernet: auto or manual insert selection</li> </ul> 
Download information	The current printer setting information can be showed in the Printer Summary area.
Upload information	The settings in the Printer Utility will be uploaded to the printer.

## 5.1 Printing Summary

Printer Summary	<ul style="list-style-type: none"> <li>Listing printer information</li> </ul>  <p>Send Command window</p> <ul style="list-style-type: none"> <li>Start Calibration Run the sensor calibration after the label material has changed. If it is the same material but different size, only need to adjust the “Page Setup” at WinLabel. It is recommended to use “auto detection”.</li> <li>Get Label Size: get the detected value of label size at the right table</li> <li>Get sensor value: get the detected value of the sensors at the right table</li> <li>Cutter Turning Clockwise: cutter cuts label from top to bottom (Fully cut)</li> <li>Cutter Turning Anti-Clockwise: cutter cuts from bottom to top (Not completely cut-off the label, the user can tear off the label)</li> <li>Restore Factory Defaults: restore the parameters of the printer to factory default settings.</li> <li>Printer Self Test: print out the internal settings of the printer.</li> <li>Reset Printer: restart the printer <ul style="list-style-type: none"> <li>Enter DUMP Mode: enter to the DUMP mode (Press “menu” for returning to the original mode)</li> </ul> </li> </ul>
Settings	Please refer to the 3.5.2 Settings
File Management	Check the detail files in the different store spaces 
Send command	Be able to send command to the printer, please refer to the Printer Command Manual.
Unit- Tools page	Printing measurements: millimeter (mm), centimeter (cm), inch (in).

## 5.2 Settings



### 1) Print Job

Item	Description
Printing Speed (mm)	Select required speed
Printing Darkness	Select the required parameters from 0 to 15; adjust the temperature of the print head (8 is recommended for wax ribbon)
Device Selection	Normal, tear-off, peel-off and cutter modes are selectable.
Printing Mode	Direct Thermal and Thermal Transfer modes are selectable
Feed Position Offset (After printing)	Input the required parameters. (If the printer is connected to cutter/peeler, user may use this for offset settings. Default: 0)
Start Position Offset (Before printing)	Input the required parameters (Plus value feeds more distance; minus value back feeds more distance) * 203 dpi:8dot=1mm, 300 dpi:12dot=1mm
Feed to device after pause	Close: while pressing button, printer stop printing immediately. Open: while pressing pause button, printer will stop printing after completing the current label.
Label Direction	Label-out from the top or Label-out from the bottom
Mirror Drawing	No effect or mirror reflection.

Drawing origin X axis offset	Input the required parameters
Drawing origin Y axis offset	Input the required parameters

## 2) Media

Item	Description
Sensor-Label Sensor	Which sensor is using; Reflective / Transmissive selectable.
Sensor-Sensor Sensitivity	Low / Middle / High selectable.
Label-Label Type	Label with Gaps / Label with Black Line / Continuous label selectable.
Label-Paper Width	User can enter the parameter. (default: 4 inches)
Label-Paper Length	User can enter the parameter. (default: 3 inches)
Gap-Gap Length	User can enter the parameter. (default: 0.4016 inches)
Gap-Length after Gap	User can enter the parameter.
Label with Black Line-Black Line Thickness	User can enter the parameter. (default: 0.4016 inches) (Only when it is loaded the label with black line.)
Label with Black Line-Length after Black Line	User can enter the parameter. (Only when it is loaded the label with black line.)

## 3) Others

Item	Description
Characters	User can adjust the parameters.
RS-232	User can adjust the parameters when the port is RS-232.
Internet Connection	User can adjust the parameters while selecting "manual". Default: DHCP.
Bluetooth	User can enter the name and PIN code.

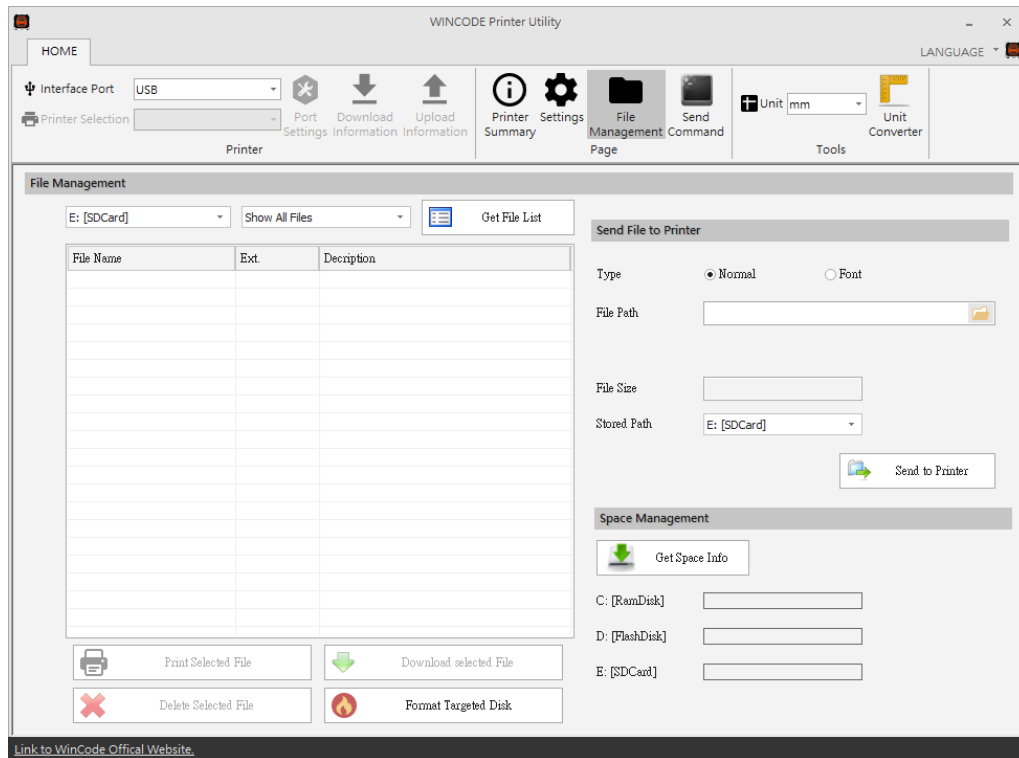
## 4) System

Item	Description
Setup-Keyboard Input country	Default: US Keyboard
Setup-On-screen display language	English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Vietnamese, Korean.
Setup-LCD Contrast	Review the LCD contrast settings
Setup-Buzzer volume	Review the Buzzer volume settings in the printer
Setup-Feed after cover closed	Close / Open
Setup-label used up indication	Close / Open (Optional)
Setup-label length Error control	Close / Open, after selected, if the label size does not match the settings, the system sends the error report.
Printer Command	<b>Printer Emulation Switch</b> Auto Detect (Default), detect WPL, TSPL, ZPL, EPL, DPL automatically.

## 5) Time Setup

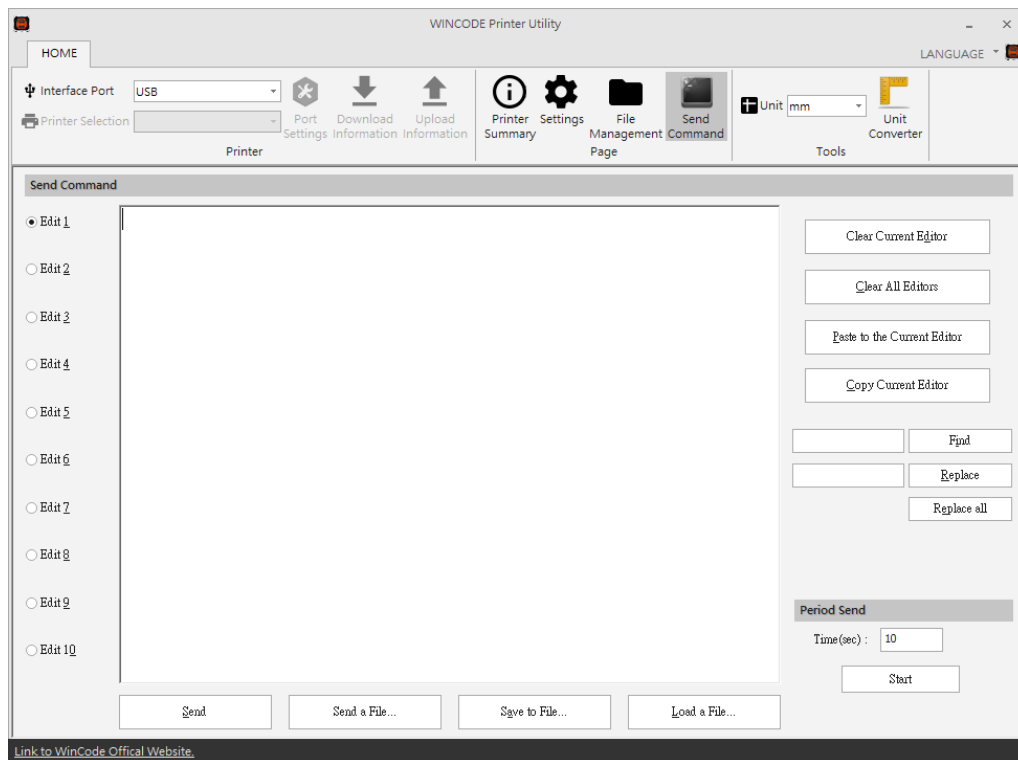
Item	Description
Printer Current Time	<ul style="list-style-type: none"> <li>Get the time: to get the current time of the printer.</li> <li>Synchronize the time of the computer to the printer.</li> <li>Manual setup: the user can setup the time of the printer.</li> </ul>
Reset to manufacturer default	Reset the printer to manufacturer default
Undo	Reset all the parameters to the original parameters, will not affect the setup in the printer.

## 5.3 File Management



Item	Description
Get the file list	To get the file list from C:[RamDisk], D:[FlashDisk] or E:[SDcard]
Format the target disk	Initialize the disk
Delete selected file	Delete the selected files.
Download selected file	Download the selected files.
Print selected file	Print out the selected files.
Send the file to the printer	Send the selected files or font to the assigned storage area in the printer <ul style="list-style-type: none"> <li>File path: select the file that needed to be uploaded</li> <li>File size: show the size of the file automatically</li> <li>Storage location : select the storage location from C:[RamDisk] 、 D:[FlashDisk] 、 E:[SDcard]</li> </ul>

## 5.4 Send Command



Item	Description
Edit Zone	Edit the command <ul style="list-style-type: none"> <li>Clear the current edit zone : to clear the command in the current edit zone</li> <li>Clear all the edit zone : to clear all the command in the edit zone</li> <li>Paste to the current edit zone : paste the command to the current edit zone</li> <li>Copy the current edit zone : copy the content in the edit zone</li> <li>Search: search the specific content in the edit zone</li> <li>Search and replace: replace the searched content</li> <li>Replace all: replace all the assigned content from the edit zone</li> </ul>
Send	Send the command to the printer
Send the file	Send the file to the printer
Save the file	Save the command in the edit zone
Read the file	Read the file at the edit zone

## 6. LED indicators and button explanation



LP423N/LP433N model equips six functional LED indicators (blue color) and a feed button (white and red LED color), user can understand the current printer status easily according to the LED display status. The description of each LED display status is listed as follows.

LED	Display status	Possible problem	Solution
LED 1 LABEL	Always on: Label out	The label placement is not correct or labels been run out.	Open the cover, and confirm the label placement and if the label has been run out. Then close cover and press the Feed button.
	Flash : Gap out	Sensor cannot detect the gap of label.	Run the auto calibration on the Pinter Utility to adjust the sensitivity of sensor.
LED 2 CUTTER	Always on : Cutter module is not ready	Cutter installation is not correct	Re-install the cutter module and check the cutter connector connection.
	Flash : Paper jam	1) Check if the label thickness is exceeded the spec of cutter module.	Place label in the correct position and press button to start printing.



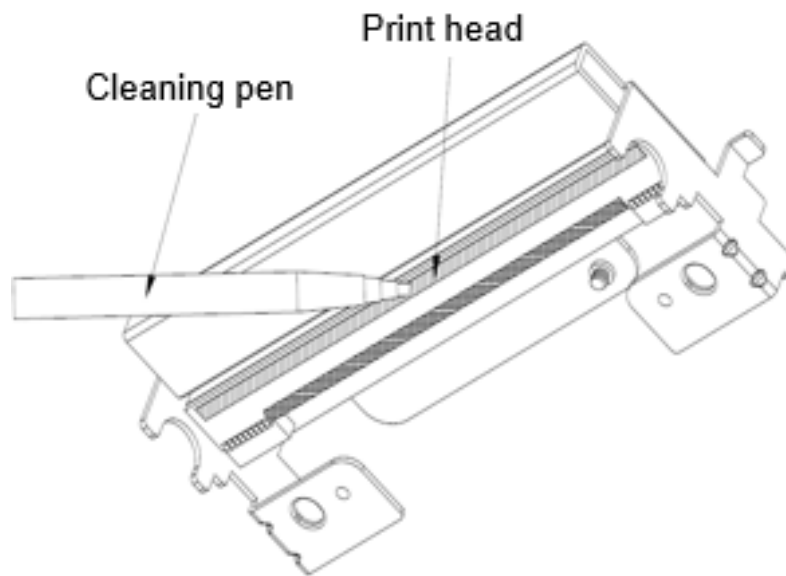
		2) Label placement is not correct	
LED 3 RIBBON	Always on : No detect ribbon	Ribbon placement is not correct or ribbon is possibly run out.	Open top cover and ribbon cover, re-install the ribbon and confirm if it has been run out. After checking, close the ribbon cover and enter the feed button to start printing.
	Flash : Ribbon exist but setting is in direct thermal mode.	Ribbon exist but printer is in direct thermal mode,	Remove the ribbon when the settings in direct thermal.
	Flash: Data transfer	Data transfer	Waiting data transfer finished
LED 5 DEMAND	Always on: Waiting to press button to print next label	Printing process is not finished	Press button once to print a label (repeat this action until the whole printing job has been finished)
LED 6 PAUSE	Always on : Top cover is opened	Top cover is not closed	Open the top cover and then close it. Press feed button to start printing.
	Flash : Pause	Printing process is not finished	Press the button to start printing
Feed Button	Red LED flash: Refers to all errors	Need to check if any other LED is flash to define the issue	Check LED 1~LED 6 whether anyone is always on or flash. If had, please refer to each LED status to deal with problem. If not, shut down the printer and wait 1~2 mins to restart printer.
	White LED always on : Ready	Wait for the print job	
	Red and White LED flash : 1. print head error 2. adapter error	1. loosen Print head 2. broken Adapter	1. Check the print head connection 2. Change the adapter
	Special lights: Continuous flashing red LED twice and	The value-added printing length is insufficient.	Use provided tool to add printing lengths.

	white LED twice Ps: value added function is opened		
<b>Feed button function</b>			
Printer current status	<b>Printer status after pressing Feed button once</b>		
Ready	Printer will deliver a label out		
Printing	Printer will pause printing action		
Pause	Printer will cancel pause status		
Error (Red LED flash)	Printer will execute the remaining job if the error issue has been solved		
Error (Red LED flash)	Printer will cancel the current printing job to return ready status after pressing Feed button twice		
Auto Calibration	Turn on the power, the feed button will flash in 3 seconds while power is ON. Press the feed button once, the printer could feed labels to run the auto-calibration procedure		

## 7. Maintenance

The following are some steps and methods to suggest user for proceeding the simple maintenance of the printer.

1. Turn off the power firstly, and then open the top cover of printer.
2. Take out the ribbon then find the print head. (If the print job has just finished, please wait until it is completely cool.)
3. If the print head is adhibited with label paper or dirt, please use a head cleaning pen or a cotton swab with 100% ethanol to clean the surface of the print head. Repeat the procedure until it is all cleaned.
4. Keep the regular rubber roller cleaning to maintain the printing quality and avoid the print head damage.
5. Use compressed air or vacuum to clean the dirt from the sensor.



Note:

- 1.) it is suggested to clean the printhead once a week and to clean the sensor once a month.
- 2.) When using a cotton swab to clean the print head, please make sure that there are no metal fragments or hard particles attached on the cotton swab as that would cause the damage of the print head.

## 8. Appendix – LP4N series specification

Model	LP423N	LP433N
Printing method	Thermal Transfer / Direct Thermal	
Resolution	203 DPI	300 DPI
Max. print speed	127 mm (5") / second	102 mm (4") / second
Max. print width	108 mm (4.25")	109.77 mm (4.32")
Max. print length	4572mm (180")	2032mm (80")
Enclosure	Double-walled plastic	
Physical dimension	220mm(W)x198mm(H)x288mm(D)	
	8.66"(W)x7.8"(H)x11.3"(D)	
Weight	2.5 KG	
Label roll capacity	127 mm (5")OD	
Ribbon	300M length, max. OD 67 mm, 1" core	
	100M length, max. OD 38.25 mm, 0.5" core	
Ribbon width	25.4 mm ~ 110 mm (1" ~ 4.3")	
Processor	32-bit RISC CPU	
Memory	8MB Flash memory, 16MB SDRAM	
Power	External universal switching power supply, Input: AC 100-240V, 2.0A, 50-60Hz, output: DC 24V, 2.5A, 60W	
Operation interface	1 button, 8 LEDs	
Interface	USB 2.0, RS-232	
	Bluetooth(option), WIFI IEEE 802.11 b/g/n (option), Ethernet 10/100 Mbps (option)	
Sensors	Transmissive gap sensor (adjustable), Reflective gap sensor, Ribbon end sensor, Head open sensor, Paper near end sensor(option)	
Internal fonts	Seven kinds of bitmap fonts	
Bar code	1D bar code : Code 11, Code 39, Code 93, Code 128, Codabar, EAN/JAN-8, EAN/JAN-13, Interleaved 2-of-5, ITF-14, MSI Pleassy, PostCode, Telepen, UPC-A, UPC-E, UCC-128	
	2D bar code : Code 16K, Code 49, Aztec Code, QR Code, PDF417, Micro PDF417, Data Matrix, Grid Matrix, Micro QR Code, MaxiCode	
Printer language	WPL (ZPL, EPL, TSPL, DPL...auto switch)	
Dealer options	Cutter 、Peeler Dispenser 、External label stand	
Media width	Standard :15 ~ 120 mm (0.59" ~ 4.72")	
	With Cutter: 15~117mm (0.59" ~ 4.61") External Label Stand: 15 ~ 115mm (0.59" ~ 4.53")	
Media thickness	0.06 ~ 0.19 mm (2.36 ~ 7.48 mil)	
Media core diameter	25.4 mm (1")	
Label length	3 ~ 4,572 mm (0.12" ~ 180")	3 ~ 2,032 mm (0.12" ~ 80")
Real time clock	RTC (CR2032 battery is excluded)	
Safety regulation	CE Class A, FCC Class A, CB	
Bundled software	WinLabel labelling application, windows printer driver, printer utility, DLL SDK library, EXE executive AP for batch print. Platform support: Windows XP, Vista, 7, 8, 8.1, 10 and Server 2003, 2008, 2012, 2012R2 (32/64 bit)	