

LP1 LABEL PRINTER USER MANUAL

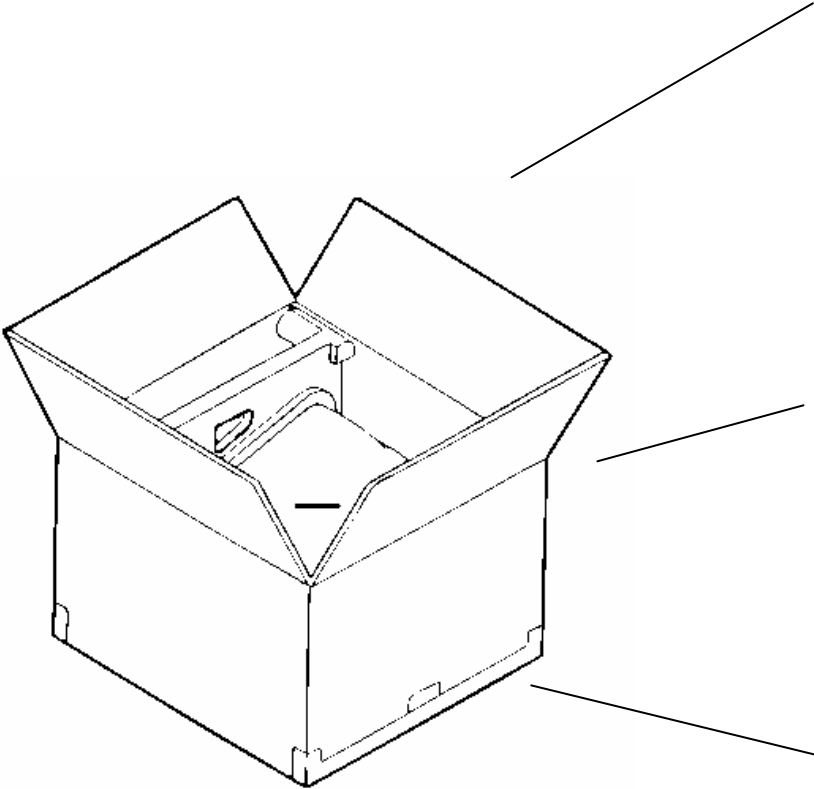


Pinnacle Technology Corp.

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1 UNPACKING THE LP LABEL PRINTER



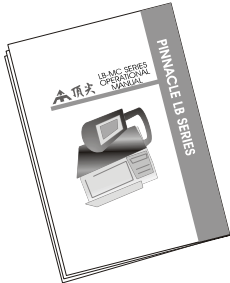
LP1 Printer



4P9D Cable



PC Disk



User manual

2 SUMMARIZATION

2.1 Technical Specification

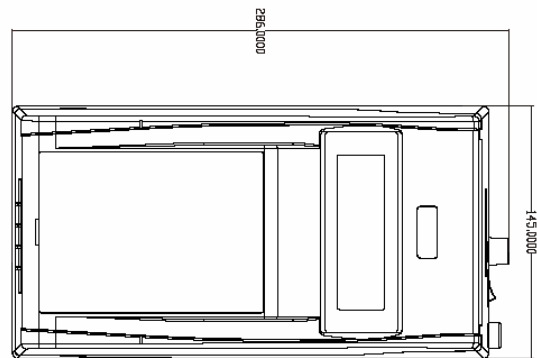
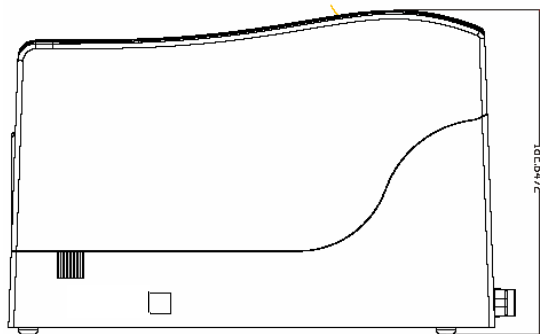
Power supply:	AC100—240V~50/60Hz 1A
working environment:	0℃~40℃ , 5%~85%R.H.
storage environment:	-10℃~50℃ , 5%~85%R.H.
Printer:	Thermal Printer
Printer head:	72mm width, 203 Dot/in
Print speed:	50mm/s (light printing)
Paper width:	72mm
Weight:	3Kg
Keyboard:	40 membrane keys
Communication port:	PS/2, Ethernet, RS232
NAND Flash capacity:	standard 16Mbit (can change to larger capacity)

2.2 Advanced Features

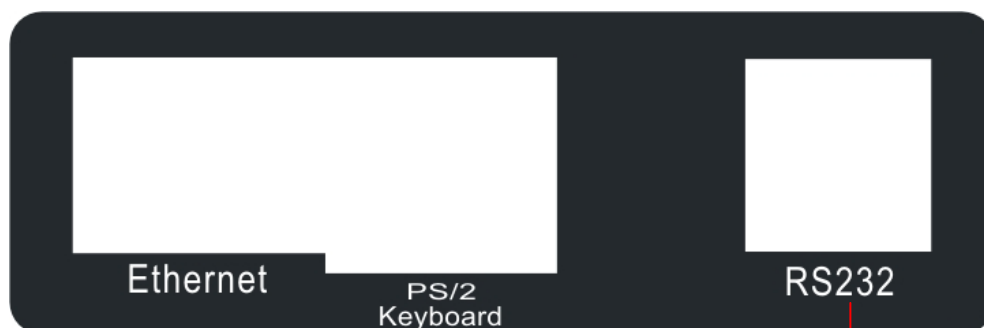
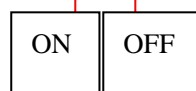
- Provide the label graph edition software for any label design with the scope of 30*30mm~55*60 size.
- With auto label backing re-winder, can continuously printing labels and spit out the next label automatically.
- Integrate an auto-packing system with platform scale (with communication function).
- Support UNICODE and can work with back office s/w based on NT, UNIX, INTERNET.
- Can select any kinds of font and language in PC editor application, and download for printing.
- Printing darkness can be adjusted according to label sensitivity, and with auto compensation of voltage and temperature changes, makes the lifetime of thermal head 2-3 times longer than normal machine's.
- Support 60*40mm paper roll with 1000pcs labels while other competitive printer in the market only can load paper roll with max.
- Capable of printing label, background and PLU name in different language for different countries.
- With 65*132 graphic LCD to display commodity name, price, weight, amount and other details information.

2.3 Dimension

Unit: mm

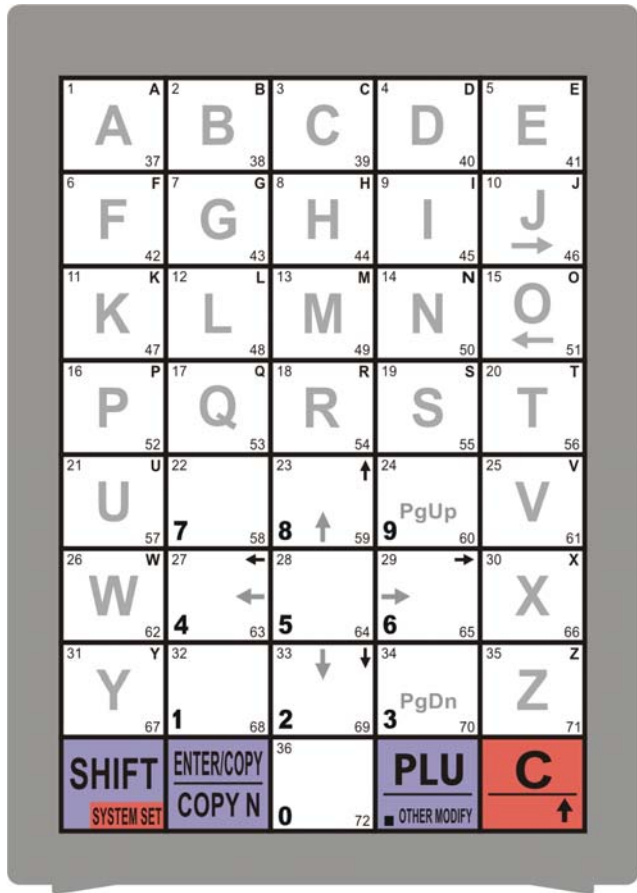


2.4 Power Switch and Communication Interface



Use to download data from PC or connect to scale

3 KEYBOARD LAYOUT



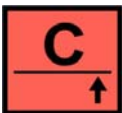
Shift the key function
Press the key and hold it for 2 seconds to enter system set mode.



Confirm key
Press key [SHIFT][COPY] to copy the last label, and stops until you press key [C]



Decimal point
Combine with numerical key shift digits to bar code number

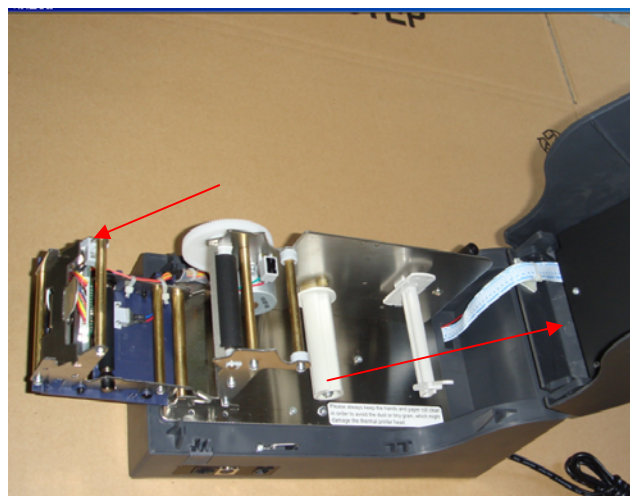


Clear data
Paper feeding

4 HOW TO INSTALL PAPER

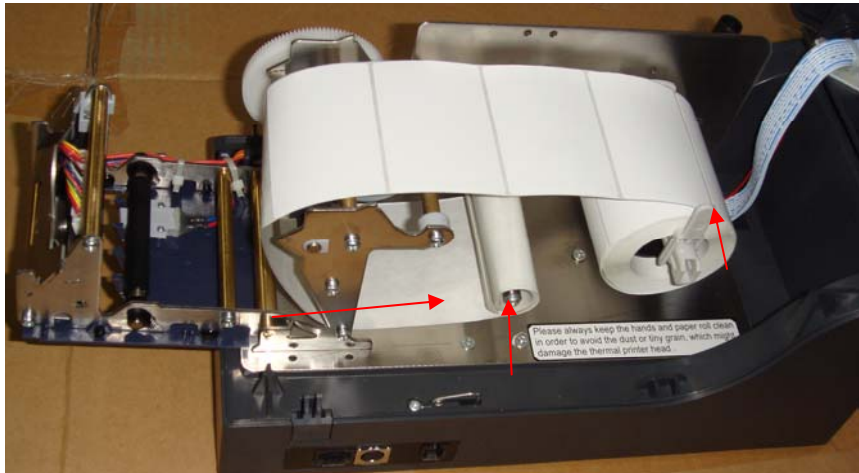


1. Follow the arrowhead direction and push the two side buttons.



2. Open the upper cover and open the printer head

➤ **Label paper installation**



3. Roll paper like the picture shows , lock the paper edge on the winder and shut up the flake

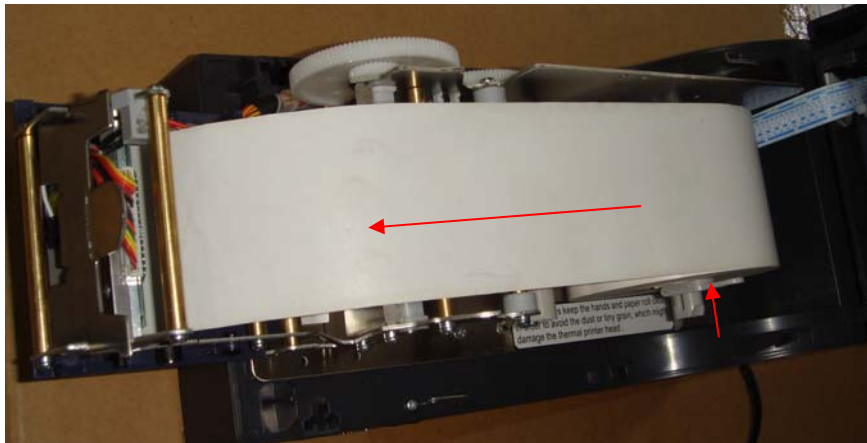


4. Close the printer head

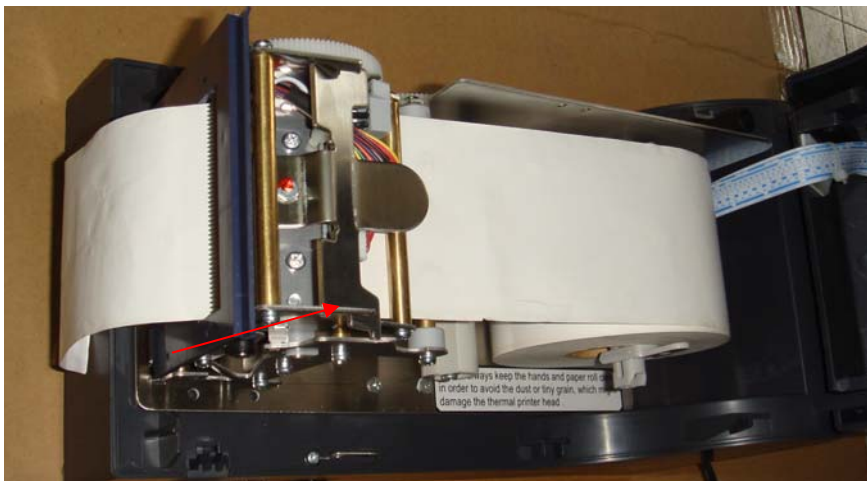


5. Close the cover

➤ **Receipt paper installation**



Load the receipt paper like the picture shows and then shut up the flake



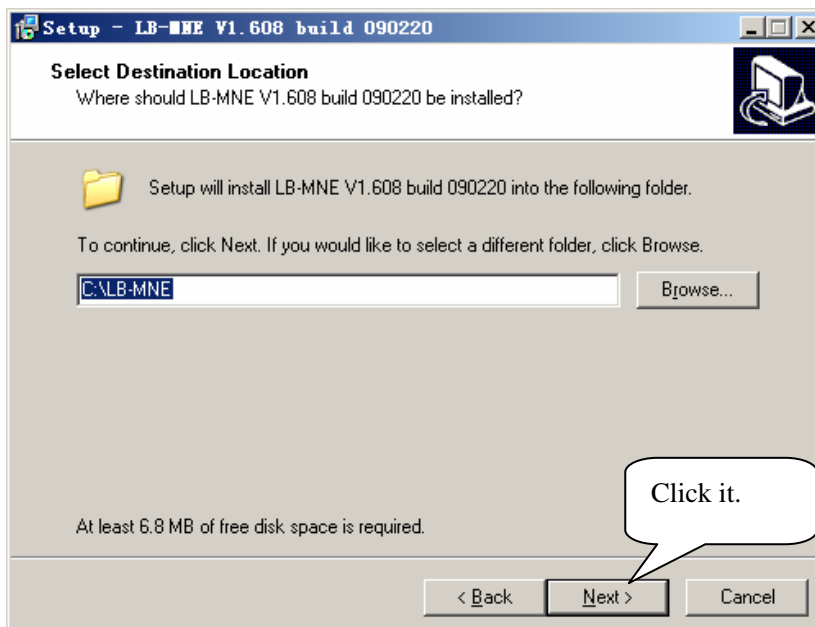
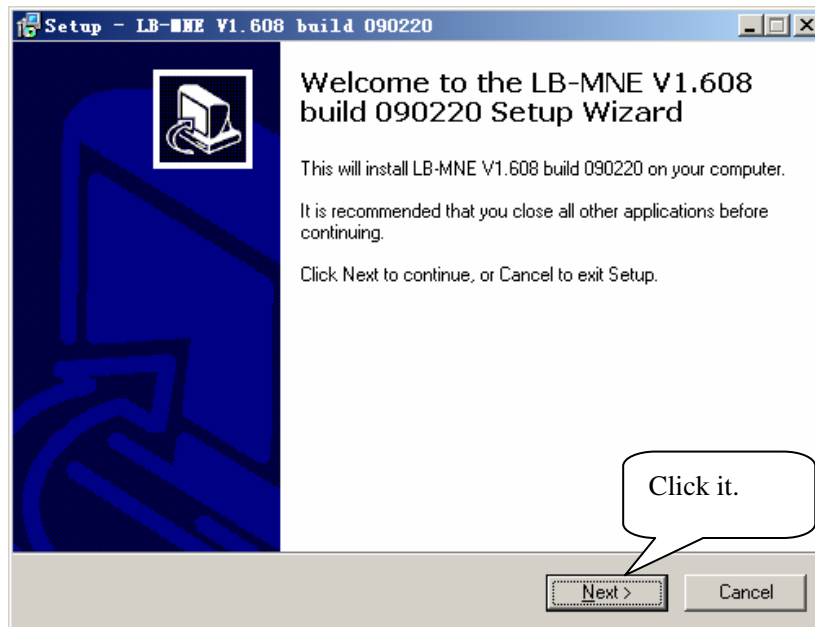
Close the printer head

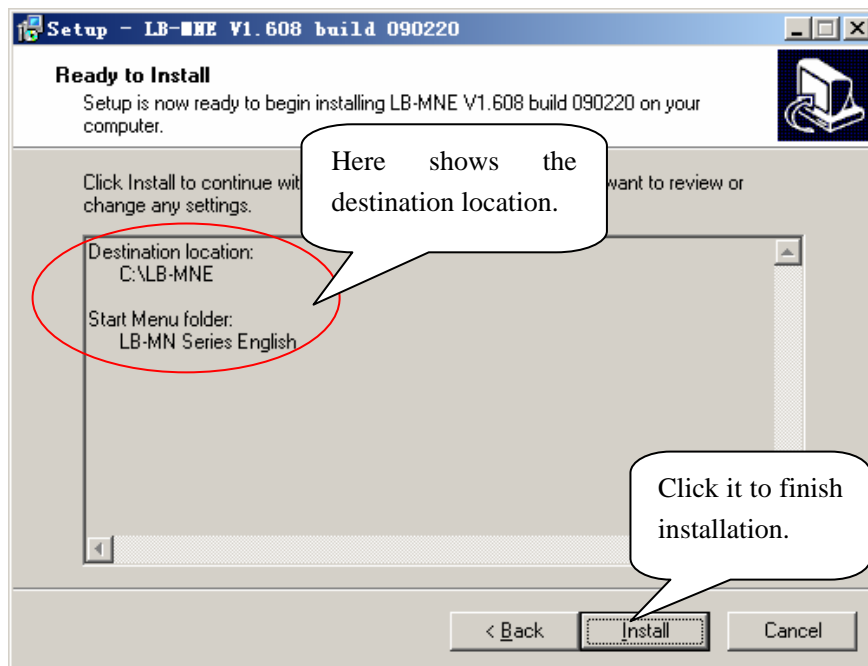
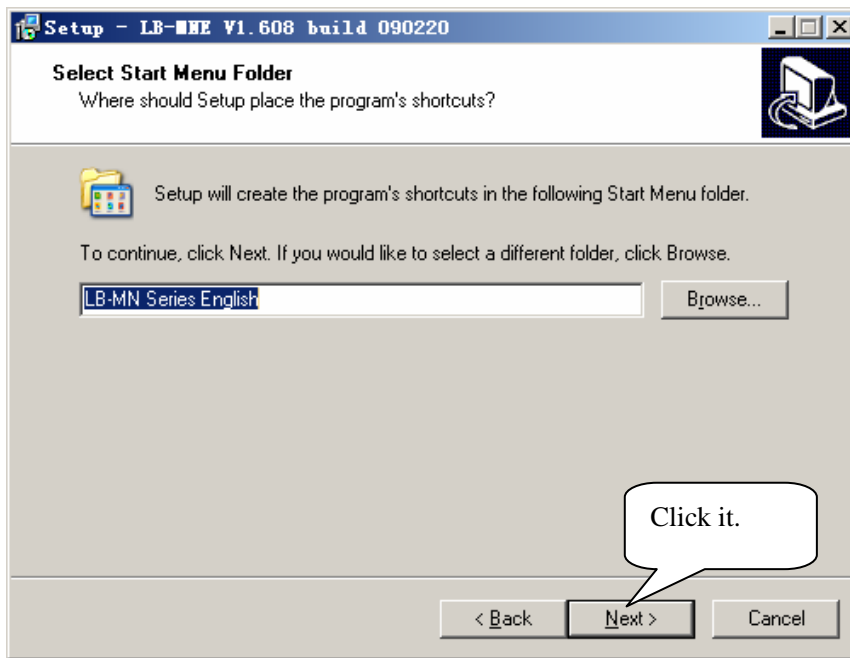


Close the cover

5 PC SOFTWARE INSTALLATION

Double click lbmn602b.exe:

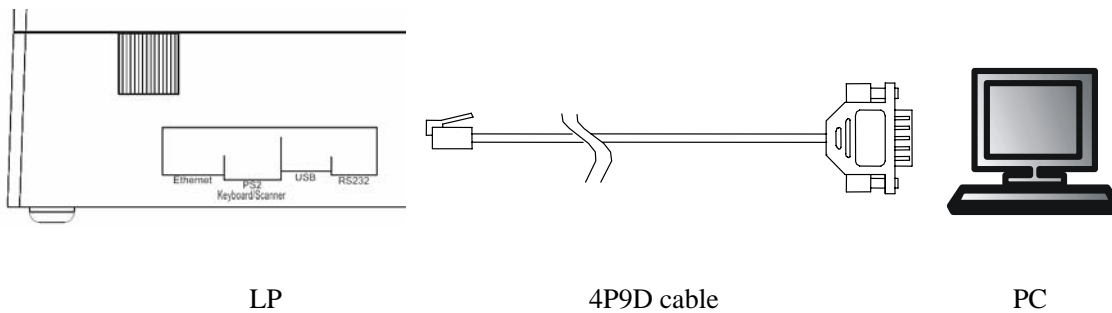




6 COMMUNICATION

Before you download data or driver, you need to test the communication.

6.1 Connect LP to PC



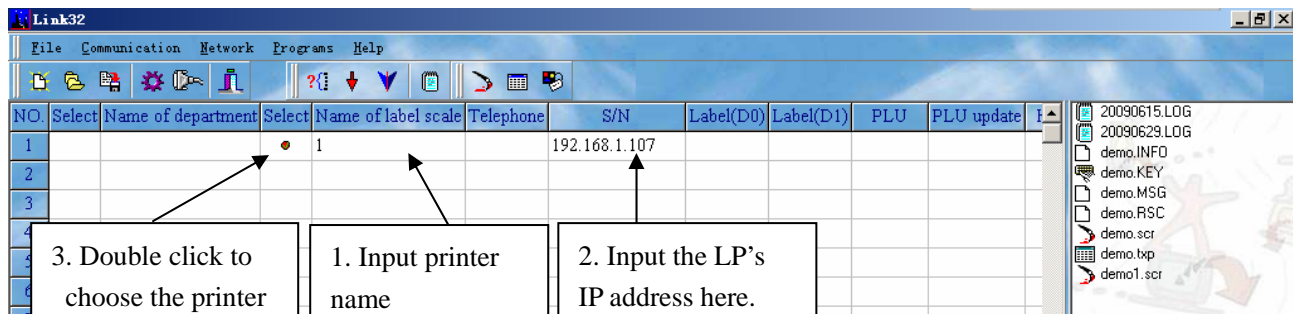
There are 2 methods to connect LP1X and PC:

- Via Ethernet port
- Via RS232 port

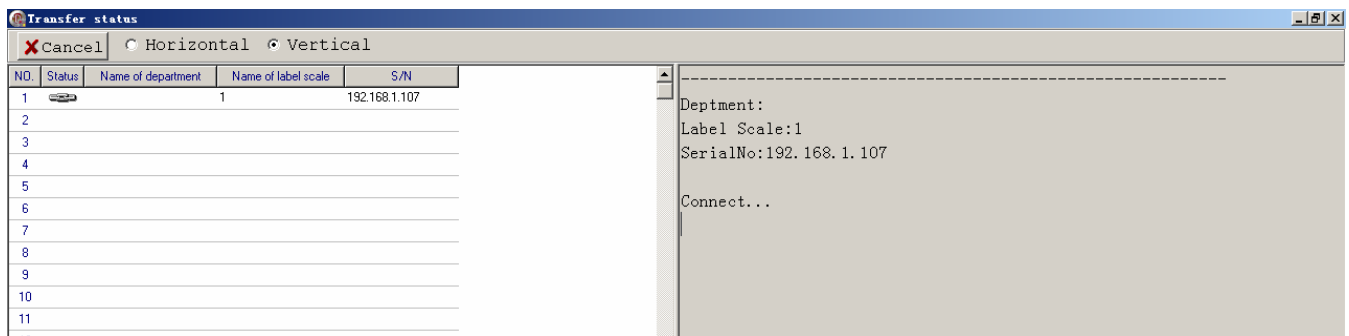
6.2 Communication Test

Before you use link 32, you need to test the communication:

1. Connect LS to PC: Via Ethernet port
2. Communication Test
 - a) Open attached PC software LB-MNB, and choose 'Link32'.
 - b) Input scale information, we suggest you connect LP to PC via Ethernet port.



3. Choose the button  and click it, then, start to test communication.



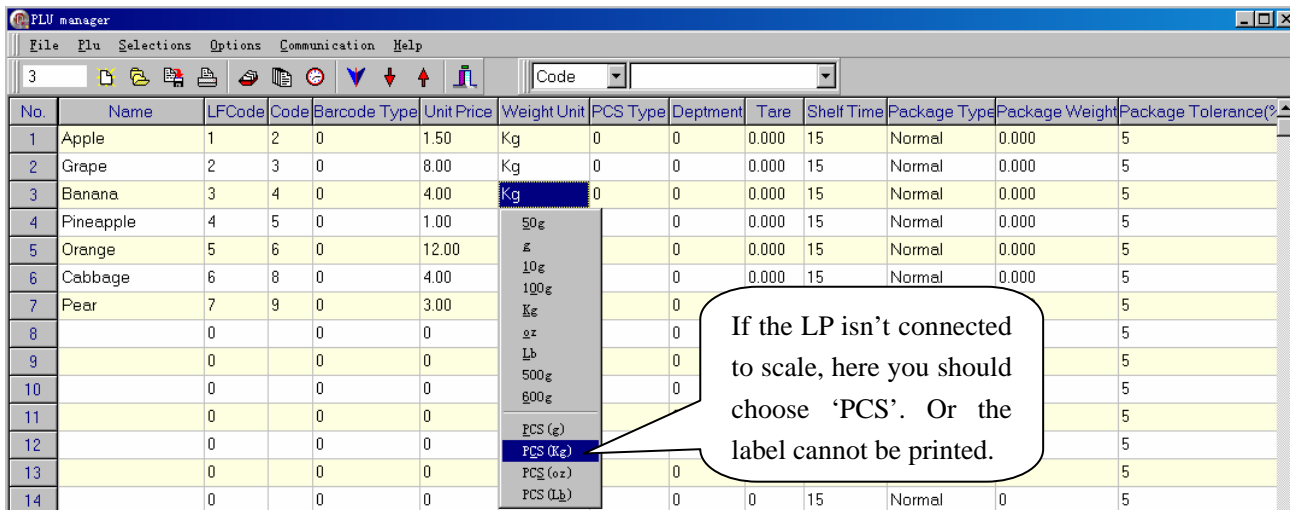
<Communicating>



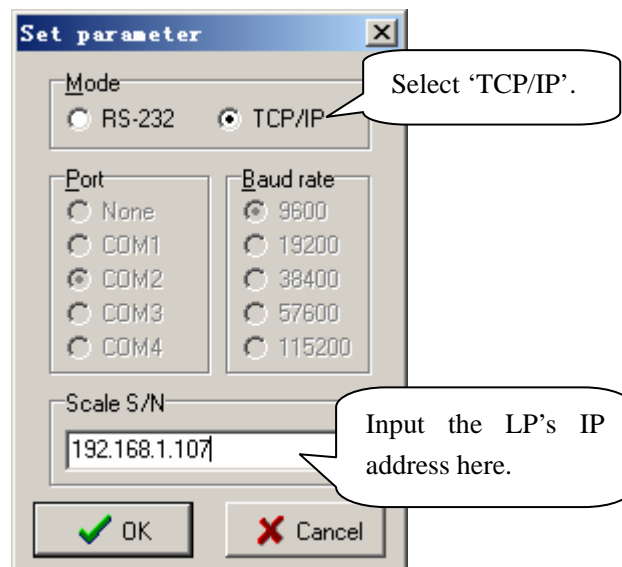
<Result>

7 HOW TO CREATE PLU DATA

1. Click  open “PLU manager” and edit PLU information.

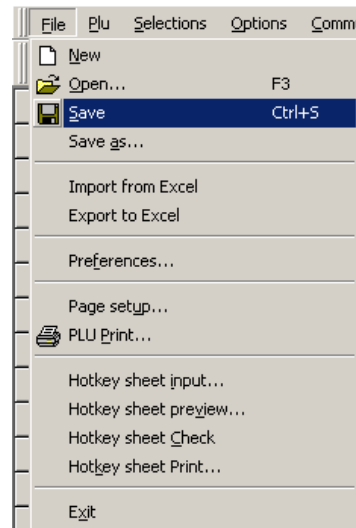


2. Click button .

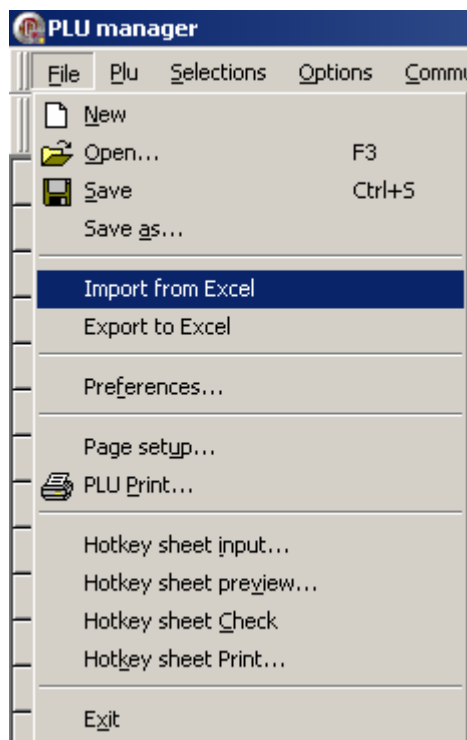


Note: if you connect LP to PC via RS232, then you should choose 'RS-232', choose COM port and the baud rate '9600', and input the series number of the LP1X in 'Scale S/N'.

3. Save the PLU data




- You can also import PLU data from excel file

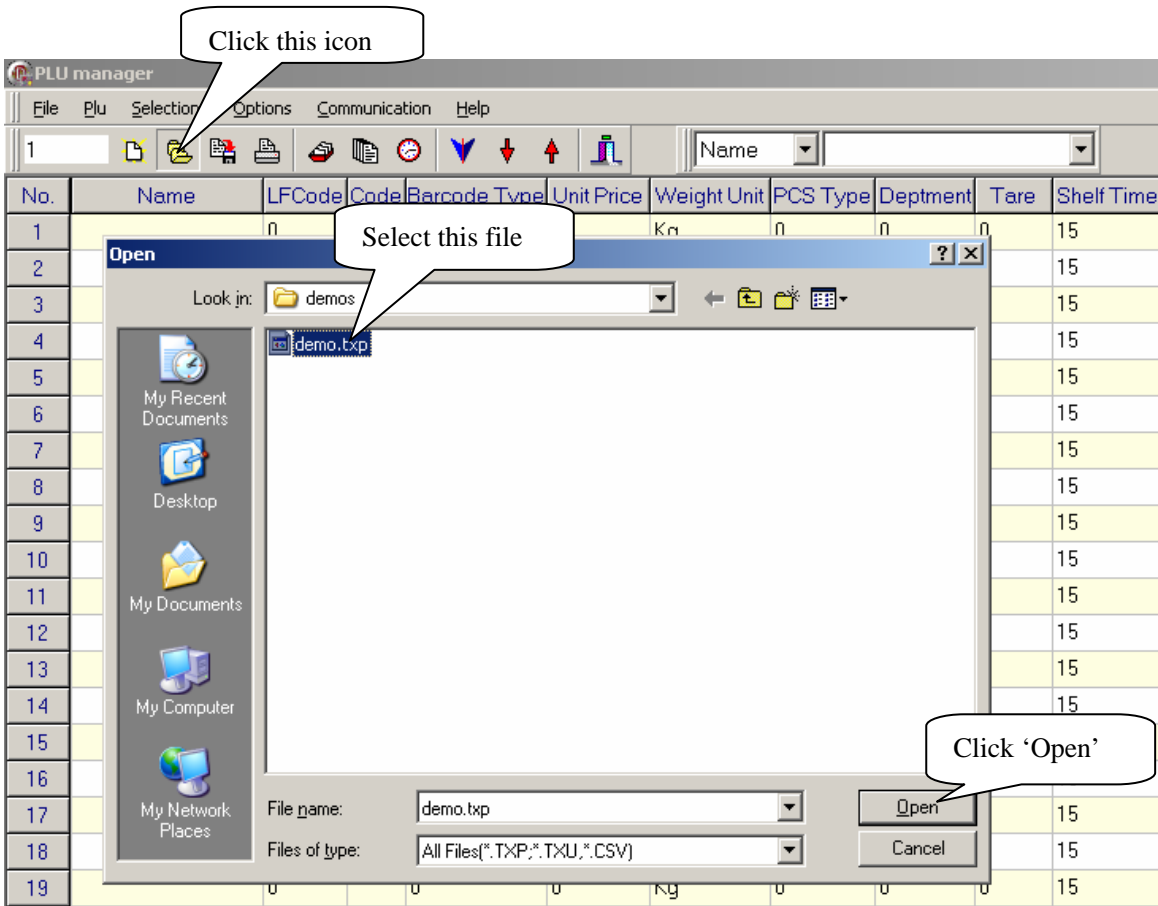


8 HOW TO CREATE HOTKEY

You can create the hotkey by “PLU manager”.

1) Download a PLU file:

Click  , select a PLU file, and click “open” to download it.

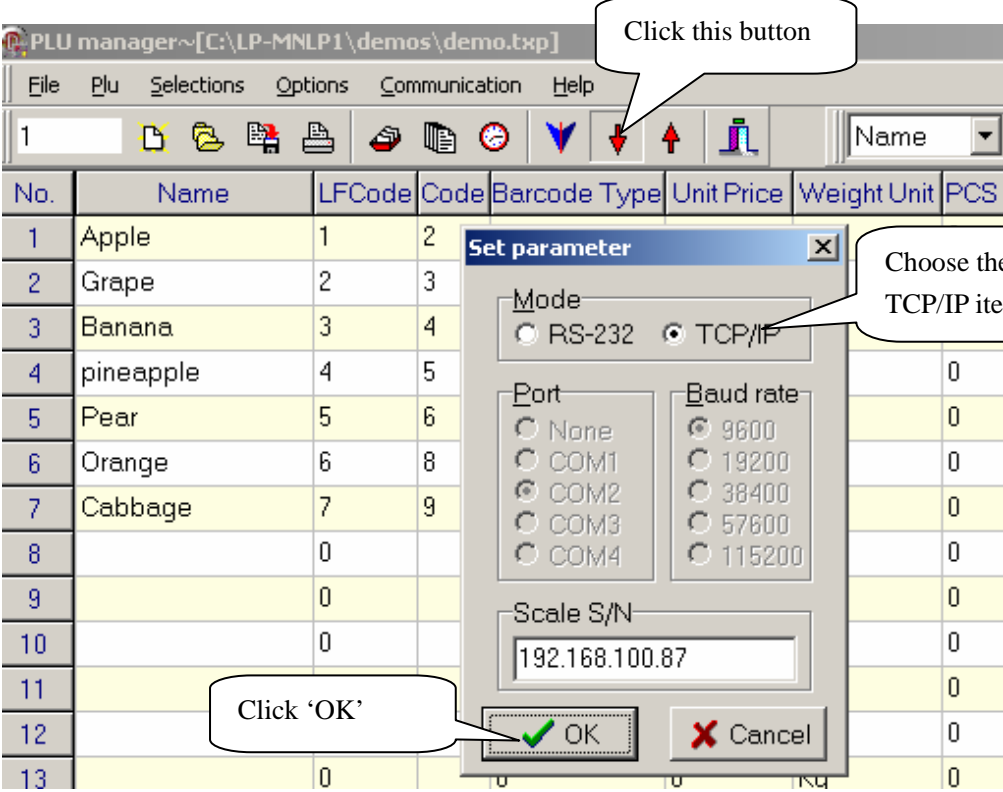


2) Click button 

Click this button

Click 'OK'

Choose the default TCP/IP item



No.	Name	LFCODE	Code	Barcode Type	Unit Price	Weight Unit	PCS
1	Apple	1	2				
2	Grape	2	3				
3	Banana	3	4				
4	pineapple	4	5				0
5	Pear	5	6				0
6	Orange	6	8				0
7	Cabbage	7	9				0
8		0					0
9		0					0
10		0					0
11							0
12							0
13		0					0

Set parameter

Mode

☐ RS-232 ☒ TCP/IP

Port

☐ None ☐ COM1 ☒ COM2 ☐ COM3 ☐ COM4

Baud rate

☒ 9600 ☐ 19200 ☐ 38400 ☐ 57600 ☐ 115200

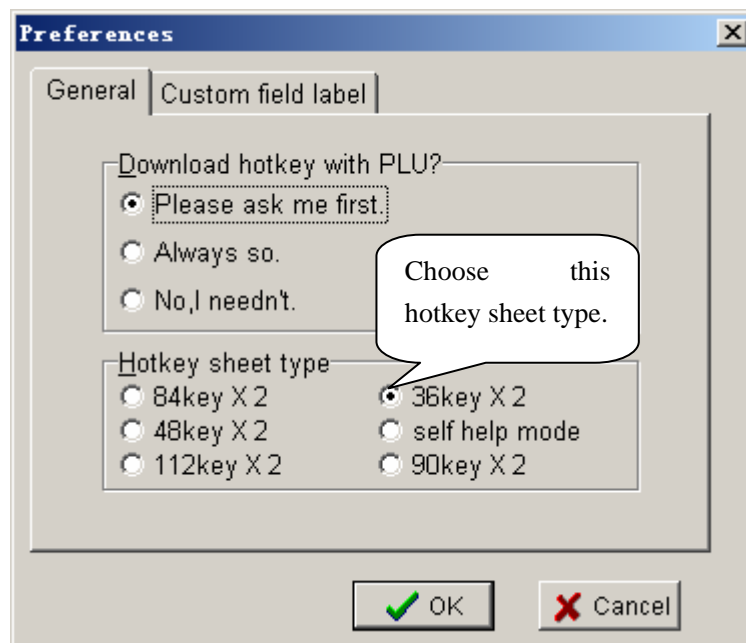
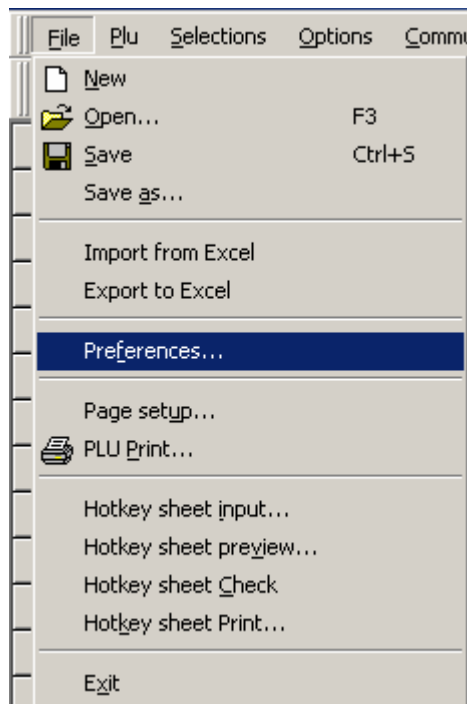
Scale S/N

192.168.100.87

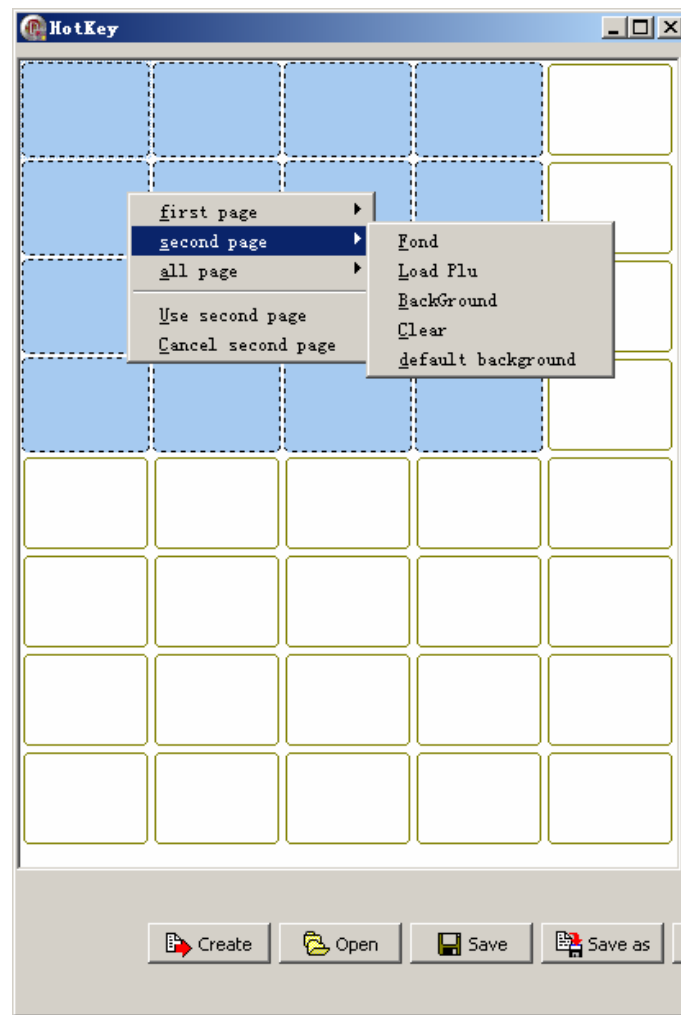
OK Cancel

9 HOW TO PRINT HOTKEY

1. Choose 'Preferences' in PLU Manager:

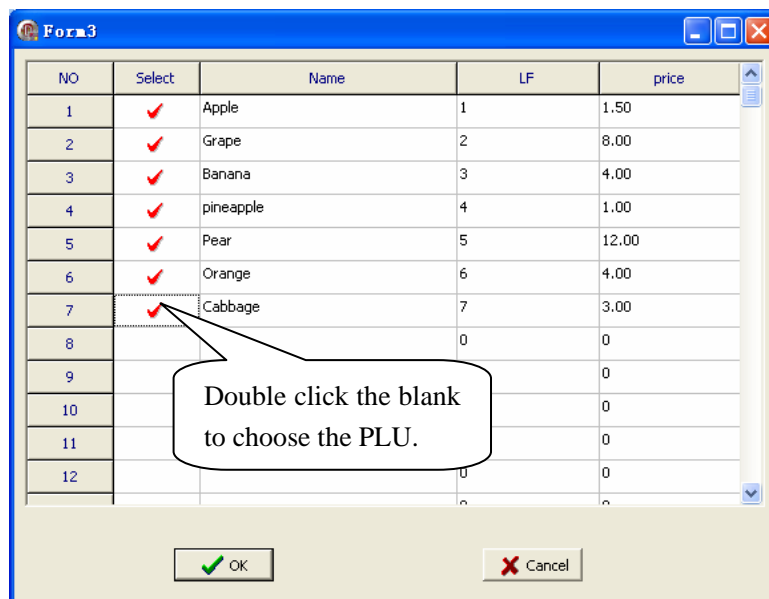


- Click 'File/Hotkey sheet input' to set the hotkey table in the following interface:



first page: Font --- set the characters' font on hotkey table.

Load Plu --- click this item, you can choose the PLU in the pop-up window:



BackGround --- set background color for the hotkey table.

Clear --- clear all messages on the hot key table.

default background --- set the default background color of the hotkey table.

second page: you can set two levels of each hotkey. This item is to set the second level on hotkey table. It is similar to the item 'first page'.

all page: Font --- set the characters' font on hotkey table.

Clear --- clear all messages on the hot key table.

default Font --- set the characters' default font on hotkey table.

Price Visible --- set whether to show the price of each PLU on the hotkey table.

Load Image --- set image for the corresponding PLU.

Delete Image --- delete the selected image.

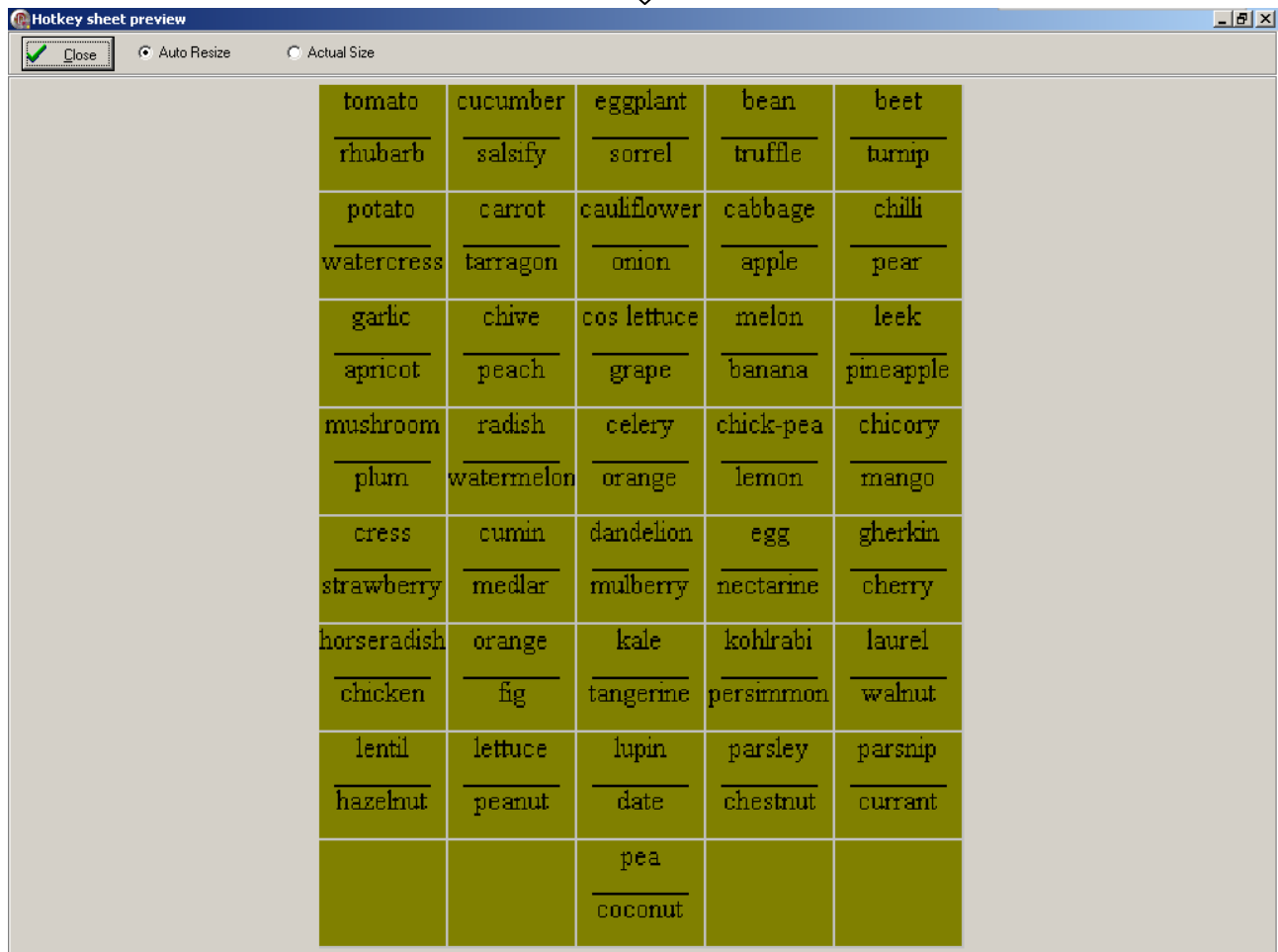
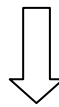
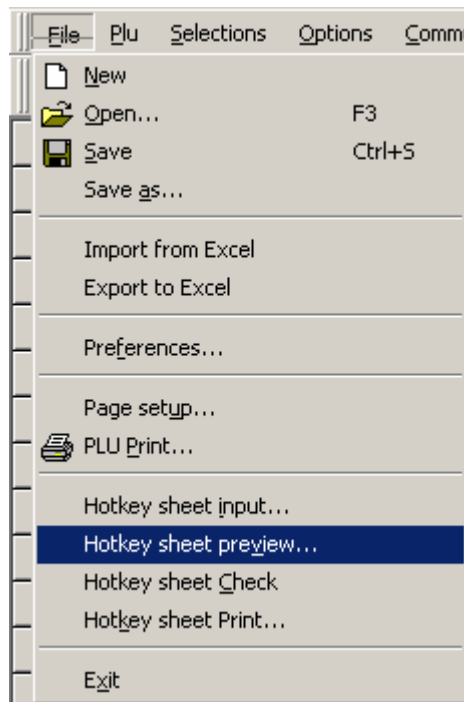
Use second page: choose this item to use the second level on hotkey table.

Cancel second page: this is to cancel all messages of the second level on hotkey table.

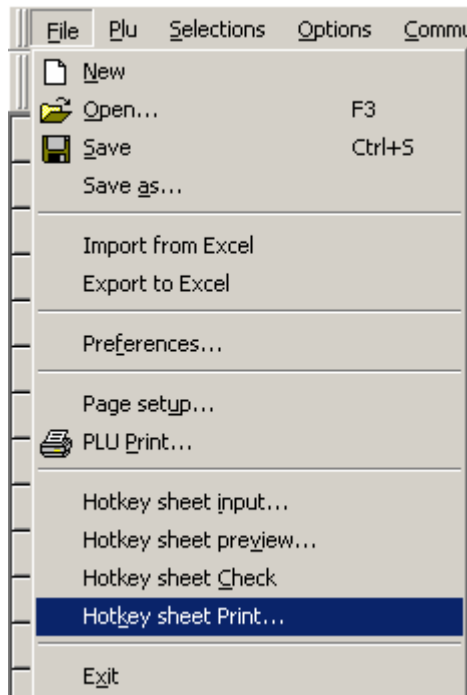
Note:

1. **If you want to sell the PLU by using second page hotkey, please press key [SHIFT] and then enter hotkey number. For example: use hotkey 37. Press key [SHIFT][37].**
2. **You also can create the hotkey table by this method: click 'File/Hotkey sheet input' to enter the hotkey setting interface, press the button 'Create', and then the whole hotkey table will be created automatically.**

3. Preview hotkey sheet



4. Print the hotkey: click 'File/hotkey sheet Print...'.

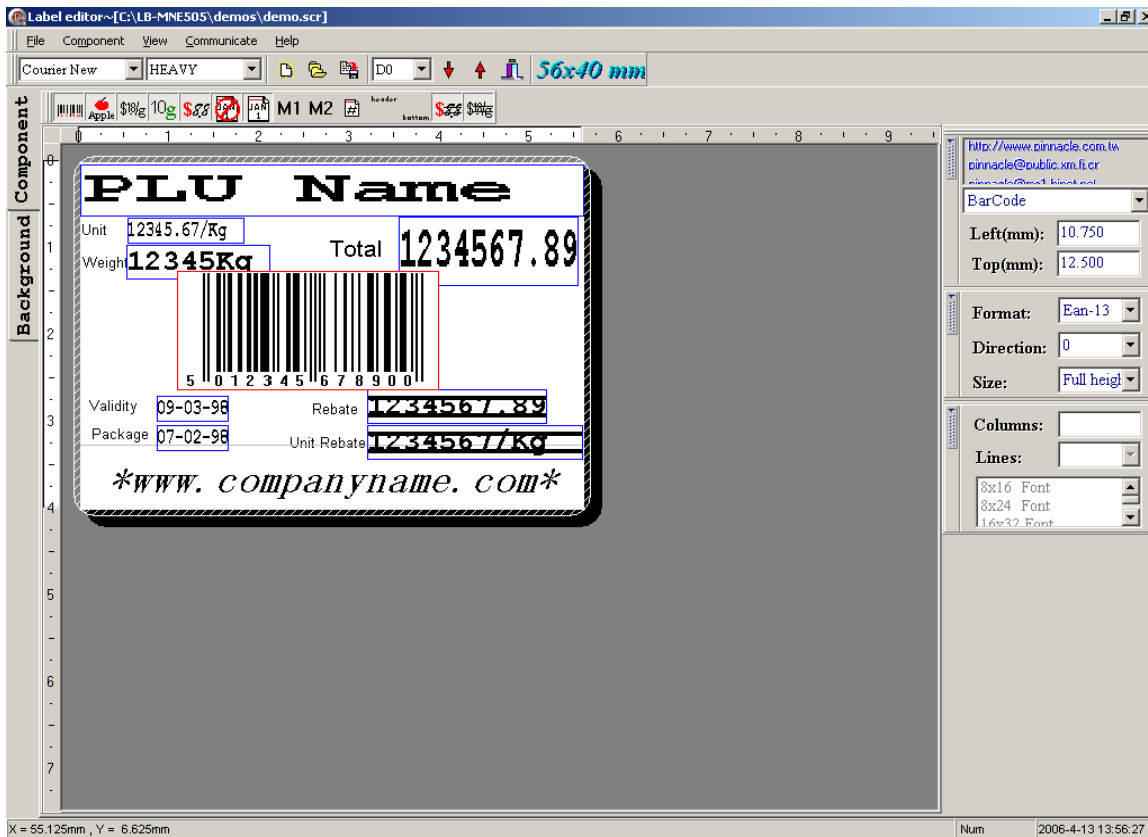


4. Cut a hotkey sheet down and insert the hotkey sheet into the keyboard.

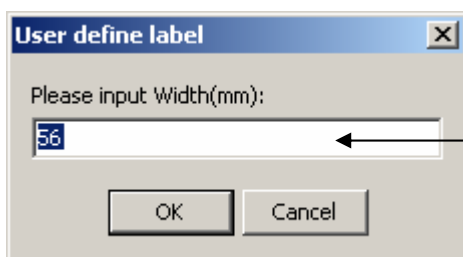
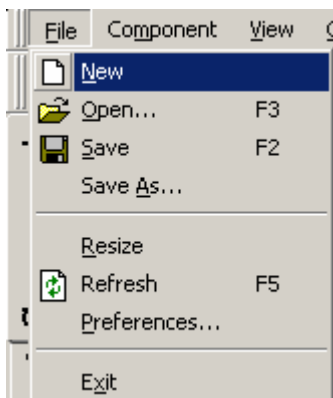


10 LABEL DESIGN

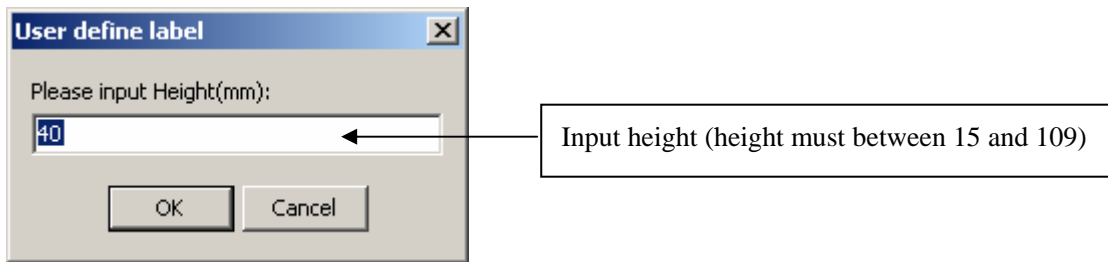
1. Open link32, and Click  to open “label editor”.



2. Create a new label:

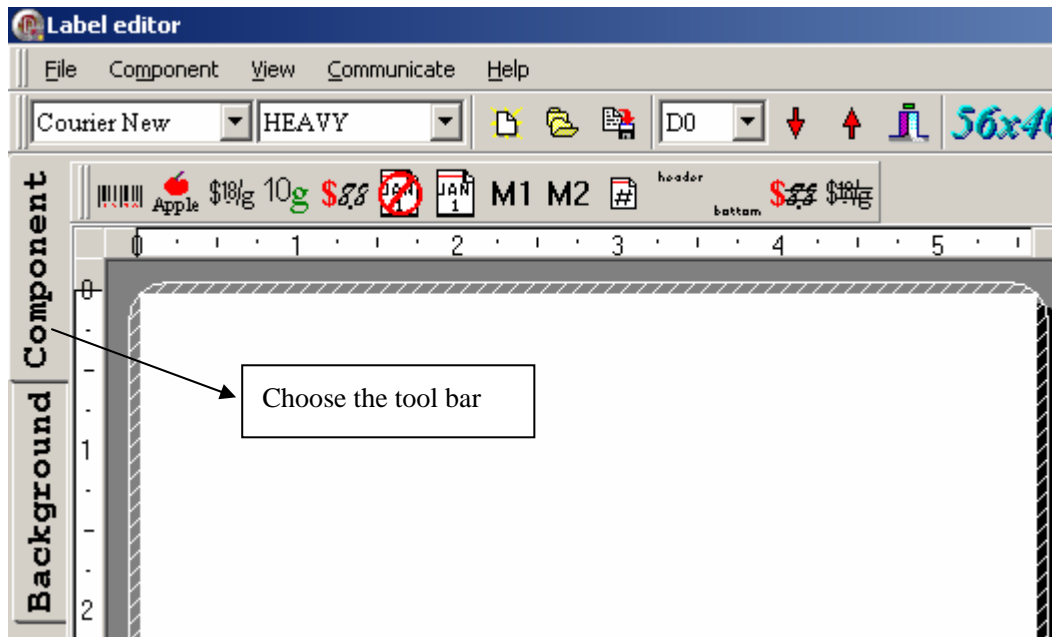


Input width (width must between 30 and 78)



3. Edit the label

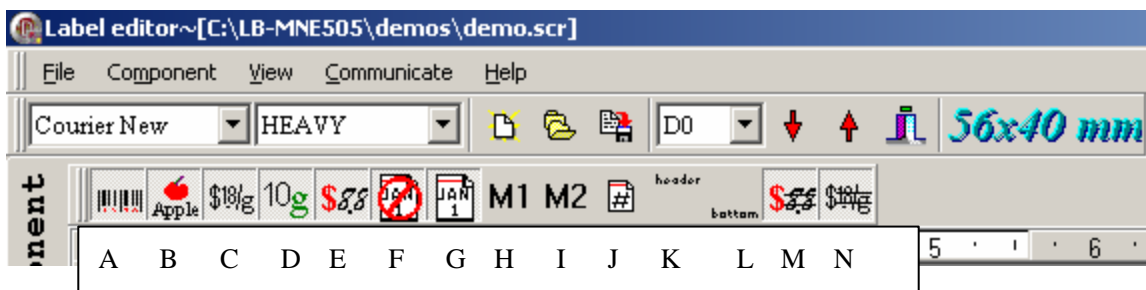
1) Choose 'component' tool bar



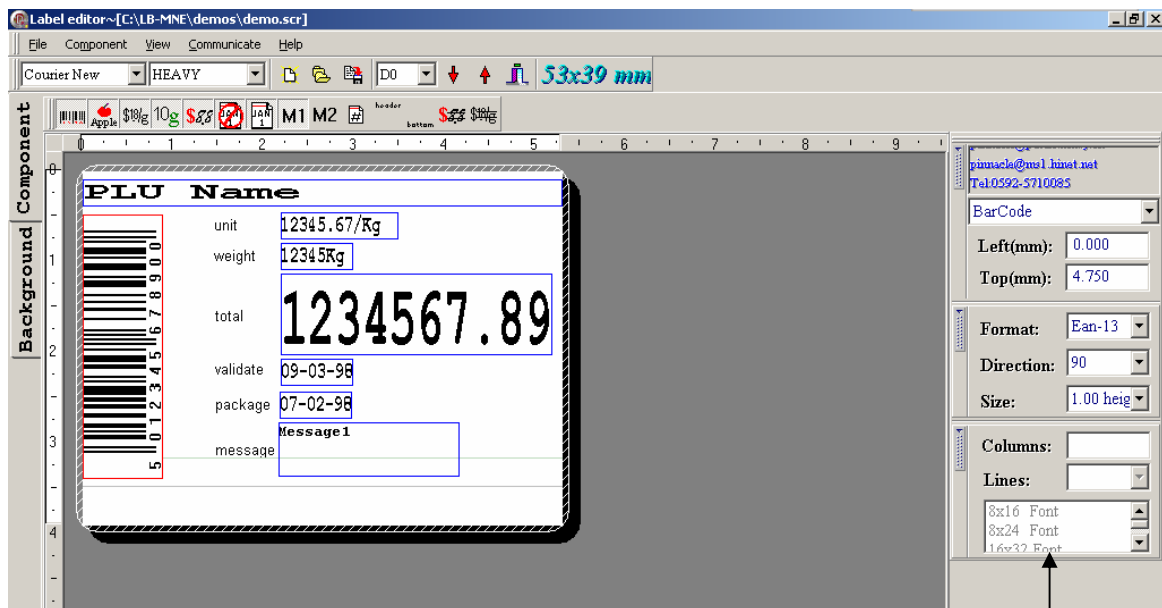
2) Choose the components and edit them.

Click each item in tool bar, and then click the label, the label component will lay in the label, select the component and keep it, the component can be moved to any position. When you are editing a barcode, you can change the direction of the barcode by changing the value in right column 'Direction' item.

Click the item in the tool bar again to eliminate it; or you can click the component in the label and hold it, and then drag it out of the label to eliminate it.

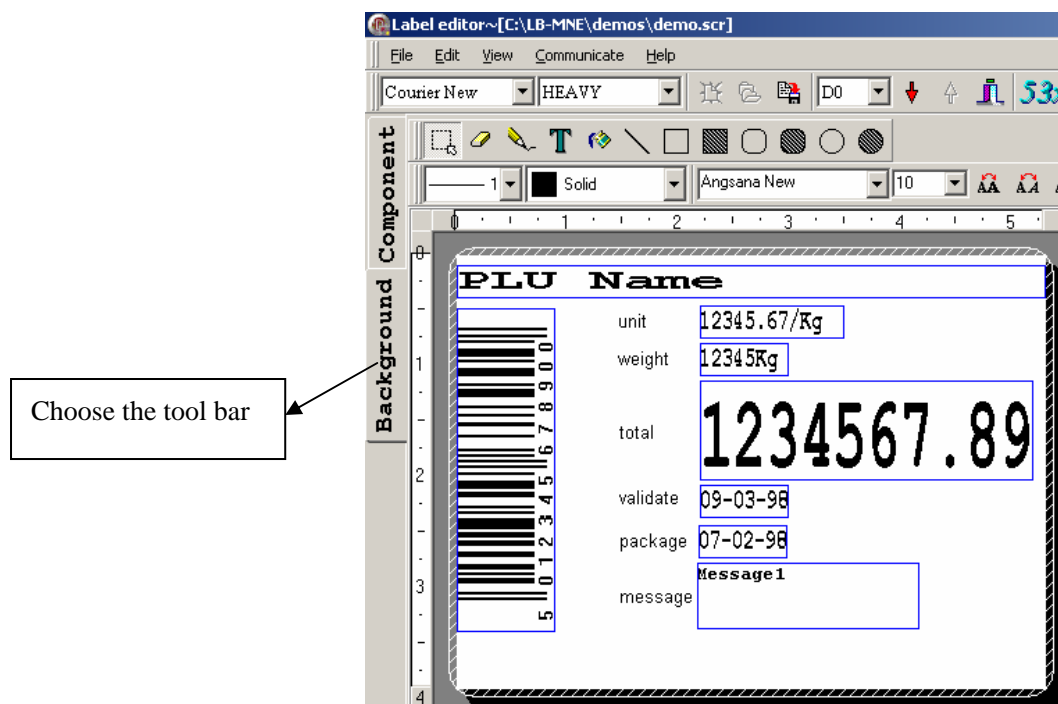


A, barcode; B, PLU name; C, unite price; D, weight; E, total price; F, period of validity; G, package date; H, info 1; I, info 2; J, fresh code; K, head message; L, foot message; M, total price discount; N, unit price discount.





Edit the components here

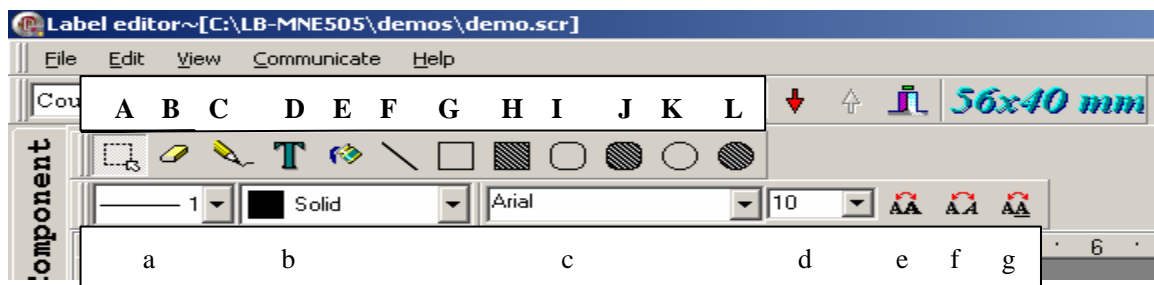
3) Edit background picture



Choose the tool bar

Click the item in the tool bar, and then click the label to edit the label background. Click  to select the background and keep it, the background can be moved to any position.

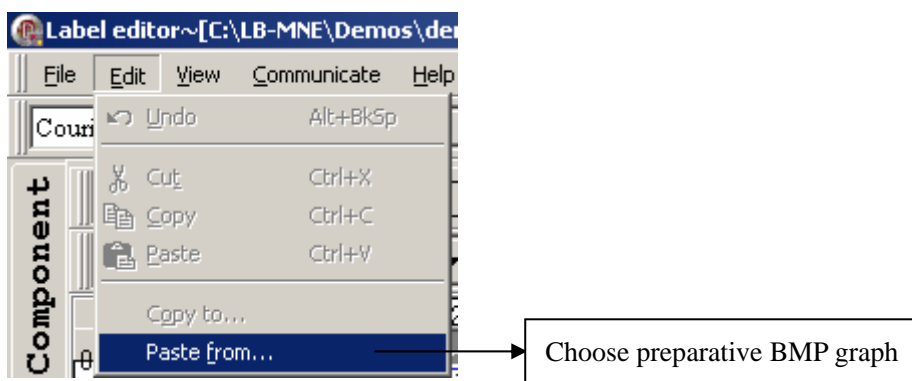
Click  to select the background and keep it, and drag it out of the label to eliminate it; or you can use rubber in the tool bar to erase it.



A. Select; B. rubber; C. pencil; D. Text; E. fill in; F. beeline; G. rectangle
H. Fill in rectangle; I. round angle; J. fill in round angle rectangle; K. round; L. fill in round
a. Line thickness; b. fill in type; c. word font; d. word size; e. bold font f. italic g. underline

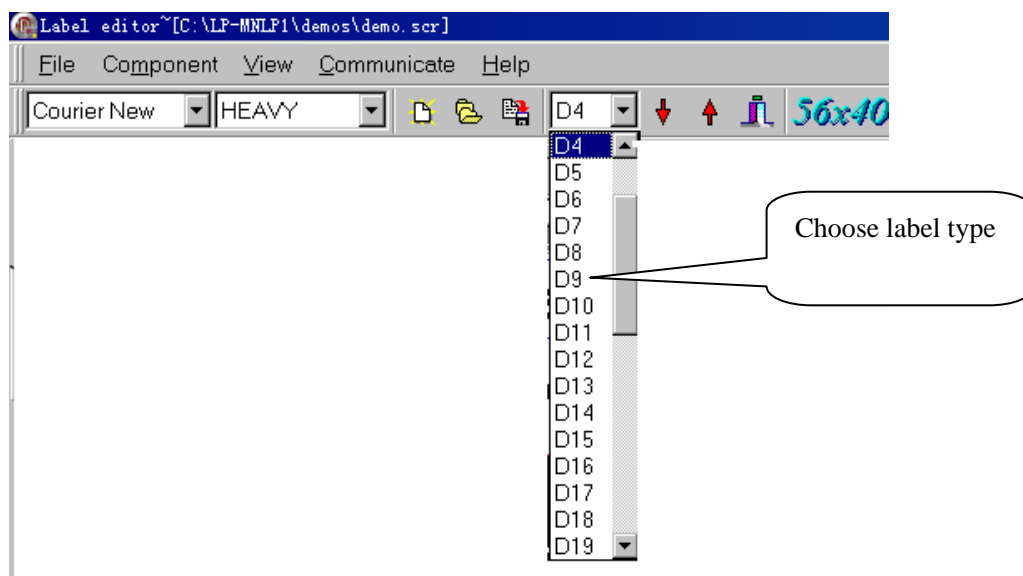
4) You can also paste a preparative BMP graph as the label background picture.

Note: this operation is dispensable.




5) Save the label

A kind of PLU can edit forty-two types of label, before you download the label, you need to choose label type. So, before saving, you should choose label type.





11 SYSTEM SET MODE



Press key  for about 2 seconds to enter system set mode.



Use key  or  to select system set items:

Hotkey	System set	Description
	<DATE>	Set date and time
A	<ALIGN>	Use arrow key to select one of the 17(-8~+8) different kinds of the excursion and to adjust the paper to the most suitable initial state.
L	LABEL SELECT	Choose any label type from D0 to D41
S	PAPER	Using arrow to select paper type: label or no rewind
N	DATE FORMAT	Set date format.
	PRINT WEIGHT UNIT	Whether print weight unit
	PRICE FORMAT	Set price format
X	AMOUNT FORMAT	Set decimal point for total price.
	BARCODE SET	Set barcode type
W	PRINT TIME	Set whether print time or not.
K	ROUND	Set round input a digit range from 0 to 10
Y	YEAR FORMAT	Set year format (2 or 4 digit).
D	DENSITY	Select printing density from “-1” to “5” with arrow.
E	MESSAGE 1	Set MESSAGE1 value.
F	MESSAGE 2	Reserved.
	BARCODE LINE WIDTH	Set barcode width in label
	ANTI WIND	Open anti wind function
V	SPEED	Set print speed
	STAT. MODE	Enter statistics mode
	STAT. WARNING?	Whether giving a warning when statistics data full
	PRN TUBTOT	Print summation label
	PRN ALL STAT. PLU	Print statistics data by PLU
	CLR STAT.	Clear statistics data

- Set parameters in PC software


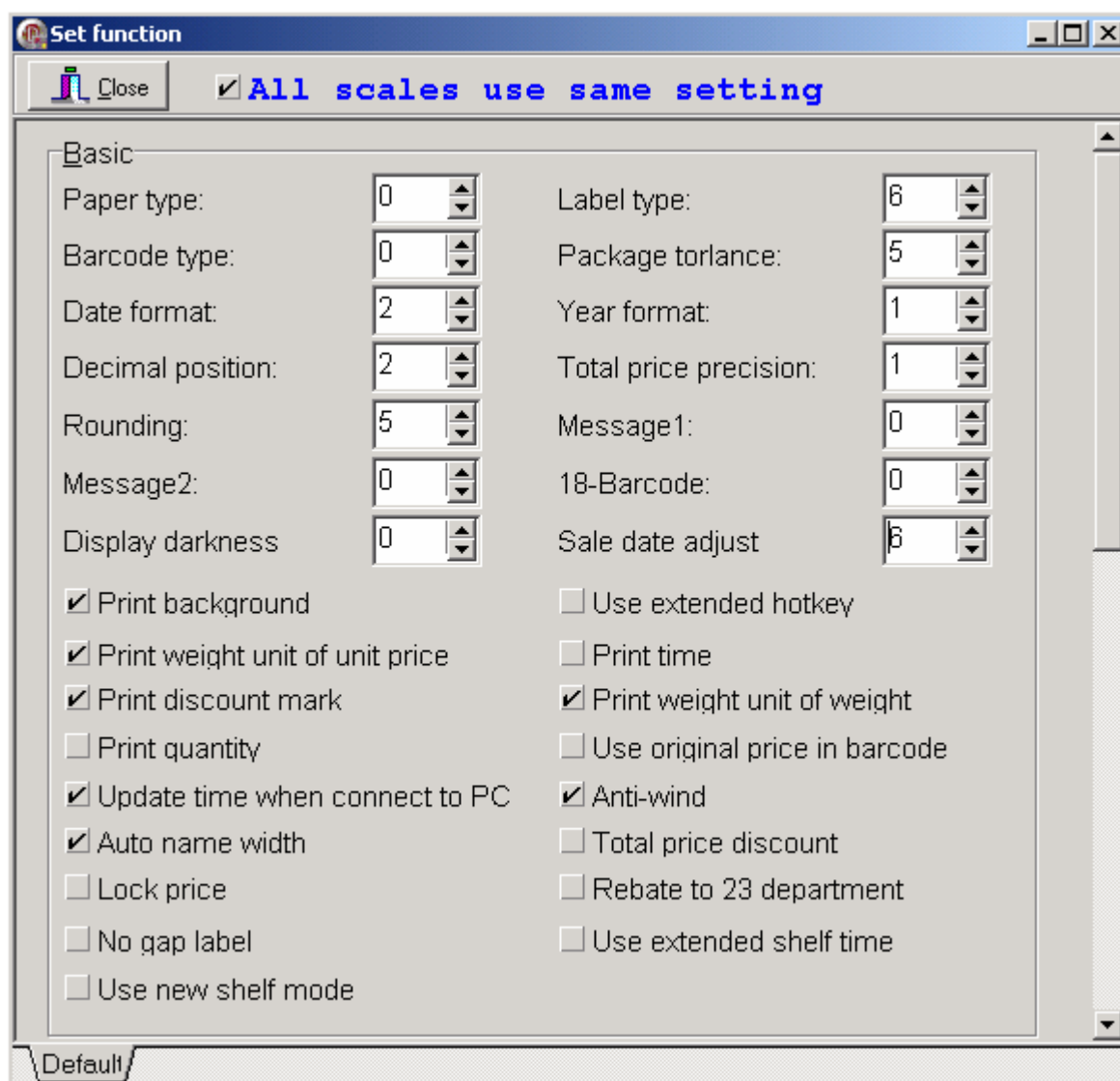
Open link32, and Click ,

Figure function setting (part 1)



Basic			
Paper type:	0	Label type:	6
Barcode type:	0	Package tolerance:	5
Date format:	2	Year format:	1
Decimal position:	2	Total price precision:	1
Rounding:	5	Message1:	0
Message2:	0	18-Barcode:	0
Display darkness	0	Sale date adjust	6
<input checked="" type="checkbox"/> Print background		<input type="checkbox"/> Use extended hotkey	
<input checked="" type="checkbox"/> Print weight unit of unit price		<input type="checkbox"/> Print time	
<input checked="" type="checkbox"/> Print discount mark		<input checked="" type="checkbox"/> Print weight unit of weight	
<input type="checkbox"/> Print quantity		<input type="checkbox"/> Use original price in barcode	
<input checked="" type="checkbox"/> Update time when connect to PC		<input checked="" type="checkbox"/> Anti-wind	
<input checked="" type="checkbox"/> Auto name width		<input type="checkbox"/> Total price discount	
<input type="checkbox"/> Lock price		<input type="checkbox"/> Rebate to 23 department	
<input type="checkbox"/> No gap label		<input type="checkbox"/> Use extended shelf time	
<input type="checkbox"/> Use new shelf mode			

Default

Basic functions explanation:

Paper type: 0:label; 1:receipt ; 2:no-rewinder.0 is the default.

Barcode type: 0~99 (refer to barcode type table).

Date format: 0: DDMMYY; 1: MMDDYY; 2: YYMMDD (D, date; M, month; Y, year).

Decimal position: 0, 1, 2; Set price decimal digit.

Rounding: Set round carry digit.

Message 2: 0~197 default message. If PLU data hasn't set message1 or message2, this PLU data will be the default.

Display darkness: Reserved.

Label type: 6: D0; 7: D1; 0~5: Reserved.

Package tolerance: 1~20

Year format: 0: YY; 1: YYYY.

Total price precision: 1: N.N0; 2: N.NN; 3: N.N.

Message 1: 0~197 message. If PLU data hasn't set message1, this PLU data will be the default.

18 -barcode: 0,width 2/5; 1,narrow width 2/5; 2, Ean 128; 3, narrow Ean 128.

Sale date adjust: The valid date and sale date are related in time: valid date=sale date + sale date adjust, or sale date=valid date – sale date adjust. You can set the sale date adjust here to confirm the time interval between the valid date and sale date.

Figure function setting (part 2)

The screenshot shows a 'Set function' window with a blue title bar and standard window controls. Below the title bar is a toolbar with a 'Close' button and a checked checkbox labeled 'All scales use same setting'. The main content area is divided into three sections: 'Advanced', 'Security', and 'Weight Unit'. The 'Advanced' section contains settings for Print density (-6), Align paper (0), Horizontal Offset (0), AD(Full weight) (16000), Print speed (0), Print direction (0), Account type (0), Adjusted AD(Full weight) (0), and a Server IP field. The 'Security' section contains checkboxes for Lock system function, Lock account function, Lock PLU edit function, Lock discount function, Lock change price function, Lock tare function, and Only PluKey can be used, each with a corresponding Password field set to 1000. The 'Weight Unit' section contains checkboxes for various units: 50g, g, 10g, 100g, Kg, Oz, Lb, 500g, 600g, pcs(g), pcs(Kg), pcs(Oz), and pcs(Lb). A 'Default' button is located at the bottom left of the window.

Section	Setting	Value					
Advanced	Print density	-6					
	Align paper	0					
	Horizontal Offset	0					
	AD(Full weight)	16000					
	Print speed	0					
	Print direction	0					
	Account type	0					
	Adjusted AD(Full weight)	0					
Server IP							
Security	Lock system function	1000					
	Lock account function	1000					
	Lock PLU edit function	1000					
	Lock discount function	1000					
	Lock change price function	1000					
	Lock tare function	1000					
	Only PluKey can be used						
Weight Unit	50g	g	10g	100g	Kg	Oz	Lb
	500g	600g	pcs(g)	pcs(Kg)	pcs(Oz)	pcs(Lb)	

Advanced functions explanation:

Print density: Reserved. Setting on the scale.

Align paper: -8~8 adjust print position.

Horizontal Offset: Reserved.

Print speed: 0~7; 0: the fastest speed; 7: the slowest speed

The lower the speed is, the better the printing impression is.

(Note: don't set too low speed, or the lifetime of the print head will be shortened)

Print direction: 0~1; 0: Horizontal; 1: Vertical. This is to set the print direction of all the label in this software.

Account type: Reserved.







Security functions explanation:

Set the password of the scale lock function.

Weight unit: Set the unit of calculating price.

12 PRINT LABEL

The printer supports 10000 kinds of PLU. You can set 72 kinds of them to hotkey.

PLU	Method	Example
PLU which hotkey number is in the range of 1-36	Press the hotkey number directly	Sell PLU which hotkey number is 20 
PLU which hotkey number is in the range of 37-72	Press key  and hotkey number	Sell PLU which hotkey number is 56  + 
PLU without hotkey	Press key  and the PLU LFcode	Sell PLU which LFcode is 69025, and has no hotkey number  + [69025]

Note: if the LP1X isn't connected with the scale, then you should choose the unit of the PLU as 'PCS', or the label cannot be printed. Please refer to Chapter 7, Point 1.

13 COMMUNICATION PROTOCOL

1. Interface = RS232C
2. Connector = D-SUB 9 (pin2 = TXD; pin3 = RXD; pin 7 = Masa)
3. Baud rate = 9600
4. Bits = 8
5. Stop bit = 1
6. Parity = NONE
7. data format = ASC II
8. Command definition: "TABLE" = 09h

Data format:

<COMMAND>VALUE TABLE <COMMAND>VALUE TABLE...<PRINT COMMAND>

COMMAND AS BELOW:

Net weight

Tare

Gross weight

Date 1

Date 2

Product code

Product name

Barcode type

Pieces weight

Quantity

Print

VALUE:

IS VALUE OF ASC II FORMAT. Such as 1.235,2007-2-3

Sample:

<Net weight> 1.550# <Tare> 1.000# <Gross weight> 2.550# <Date 1> 2007-2-3# <DATE2> 2008-2-3#
<Product code> 123456# <Product name> Apple# <Barcode type> 13# <Pieces weight> 0.000# <Quantity>
1.000# <Print> 1#

Notes: # is "TABLE" (09h)

