

PC201 Thermal Printer

User's Manual



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1 Introduction

1.1 Brief introduction

PC201 is a thermal POS printer. It has good printing quality and high stability, which is widely used in POS system, food service industry and many other fields.

PC201 connects other devices with USB port. It offers drivers for WINDOWS and LINUX operating systems.

The supported operating systems are as below:

WINDOWS XP

WINDOWS 7 32/64

WINDOWS 8

UBUNTU 12.04 32/64

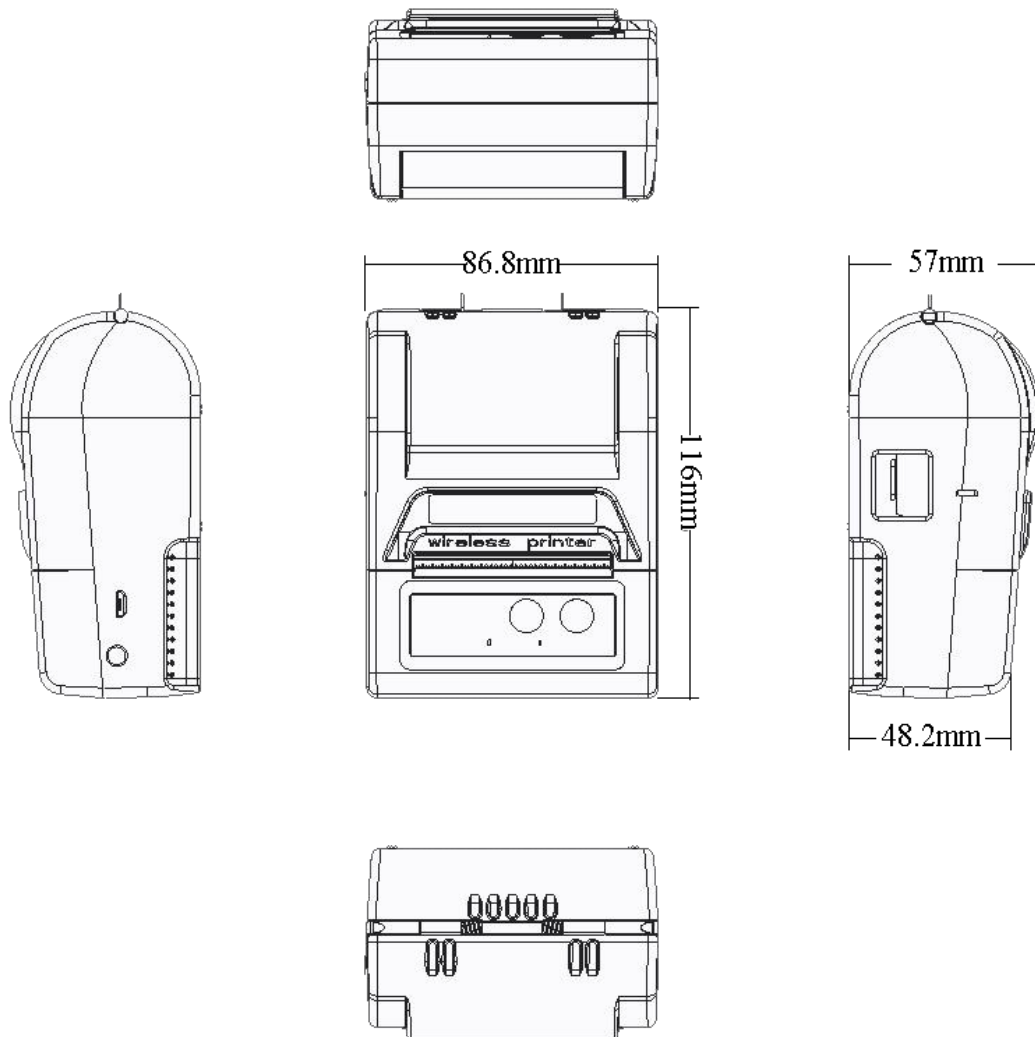
UBUNTU 14.04 32/64

1.2 main features

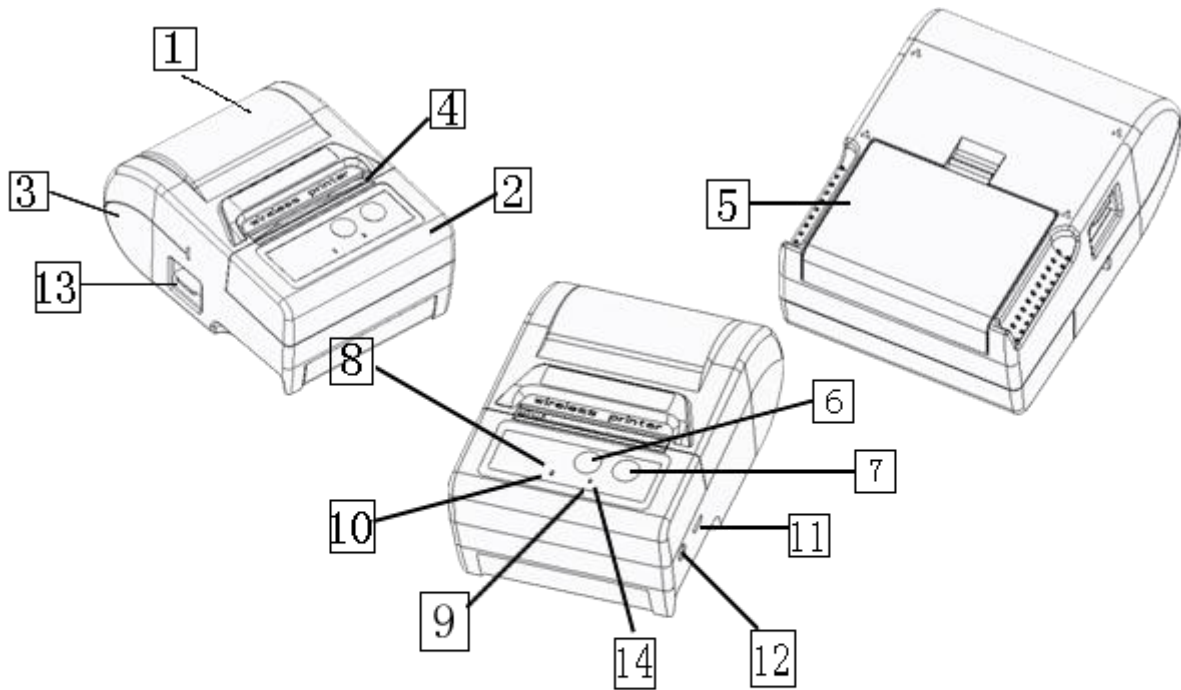
- 1) Battery power,easy move.
- 2) Low noise and high printing speed.
- 3) Easy paper loading.
- 4) Easily use and maintain.
- 5) Support label paper and continuous paper printing.
- 6) Compatible with many kinds of paper width.
- 7) USB interface.
- 8) Support Bluetooth connect.

2 product introduction

2.1 product appearance



Views



- | | | |
|----------------------------|------------------------|-----------------------------|
| 1 Cover of paper warehouse | 6 Power button | 11 USB interface |
| 2 Top cover | 7 Paper feeding button | 12 Charge port |
| 3 Principle port | 8 Power indicator | 13 Hand cover |
| 4 Paper cutting knife | 9 Battery indicator | 14 Paper shortage indicator |
| 5 Battery | 10 Bluetooth indicator | |

⚠ Note: The power indicator light is red when it is running normally
 Missing paper light is blue
 The Bluetooth indicator light is blue

accessories:

battery

charger

paper roll

mini USB



⚠ **Note :** Please make sure everything is in good status when you open the package.
 Otherwise, please contact to distributor in time.

3 Specification

3.1 Specification

Item		Parameter	
Printing parameter	Printing method	Thermal printing	
	Resolution	203DPI,8 dots/mm	
	Printing width	48mm(384dots)	
	Printing speed	100mm/s (max)	
	Interfaces	Standard: USB interface and Bluetooth connect	
Command set	/	ESC/POS compatible commands	
Storage	RAM	Receive buffer area 16K Bytes	
	FLASH	FLASH 4M bytes, NV bitmap 64K bytes	
characters	Chinese	GB18030 24×24	
	Words, figures	ASCII 9×17,12×24	
	User-defined	Support	
	Code pages		Optional international character sets 45 TRADITIONAL CHINESE CHINESE CP437 [U.S.A., Standard Europe] Katakana CP850 [Multilingual] CP860 [Portuguese] CP863 [Canadian-French] CP865 [Nordic] WCP1251 [Cyrillic] CP866 Cyrillic #2 MIK[Cyrillic /Bulgarian] CP755 [East Europe, Latvian 2] Iran CP862 [Hebrew] WCP1252 Latin I WCP1253 [Greek] CP852 [Latina 2] CP858 Multilingual Latin I +Euro) Iran II Latvian CP864 [Arabic] ISO-8859-1 [West Europe] CP737 [Greek] WCP1257 [Baltic] Thai CP720[Arabic] CP855 CP857[Turkish] WCP1250[Central Europe]

		CP775 WCP1254[Turkish] WCP1255[Hebrew] WCP1256[Arabic] WCP1258[Vietnam] ISO-8859-2[Latin 2] ISO-8859-3[Latin 3] ISO-8859-4[Baltic] ISO-8859-5[Cyrillic] ISO-8859-6[Arabic] ISO-8859-7[Greek] ISO-8859-8[Hebrew] ISO-8859-9[Turkish] ISO-8859-15 [Latin 3] Thai2 CP856
Chart	/	Supports different density dots and images printings
		Supports grating bitmap printing
		Supports download bitmap printing, every bitmap size should less than 64K, and the total capacity of download bitmap is 64K.
Bar codes	1D	UPC-A、UPC-E、EAN-8、EAN13、CODE39、ITF、CODEBAR、CODE128、CODE93
	2D	QR Code
Detection function	Sensor	Paper out
LED indicator	Power indicator	Red
	Bluetooth indicator	Blue
	Battery indicator	green
	Paper shortage indicator	Blue
Thermal paper	Type	Standard thermal receipt paper
	Width	57.5±0.5mm
	Thickness	0.065~0.1mm
	Diameter	50mm(Max.)
Physical characteristics	Paper loading	Easy paper loading
	Paper cutting	auto cut paper
	Operating condition	-10℃ ~ 50℃ , 10% ~ 90%RH
	Storage condition	~40℃ ~ 70℃ , ≤93%RH (40℃)
	Outline dimension	116mm×86.8mm×57mm (W×L×H)
	Weight	0.3Kg
Reliability	TPH life	150km
	Motor life	360,000 hours
Software function	Driver procedure	Windows (WIN7/WIN8/Vista/XP/2000) Ubuntu 12.04 32/64, Ubuntu 14.04 32/64

3.2 Printing material requirements

3.2.1 Paper parameters

Paper type: thermal receipt paper/thermal label paper.

Paper width: 57 ± 0.5 mm

Paper roll diameter: 50 mm (Max.)

Paper thickness: 0.065 ~ 0.10mm

3.2.2 Printing paper using attention

 **Note:**

- 1) Please use good quality paper, otherwise, it will effect printing quality and even reduce printer head life.
- 2) Don't make the paper stick on axis.
- 3) Paper will be fading out or reduced thermal sensitivity if it is polluted by chemical or oil, which will affect printing effects.
- 4) Don't use nail or hard things to clash printing paper, otherwise, it will be fade out.
- 5) Paper will be fading out if the environment temperature exceeds 70°C. So please take note the temperature, humidity and illumination effects.

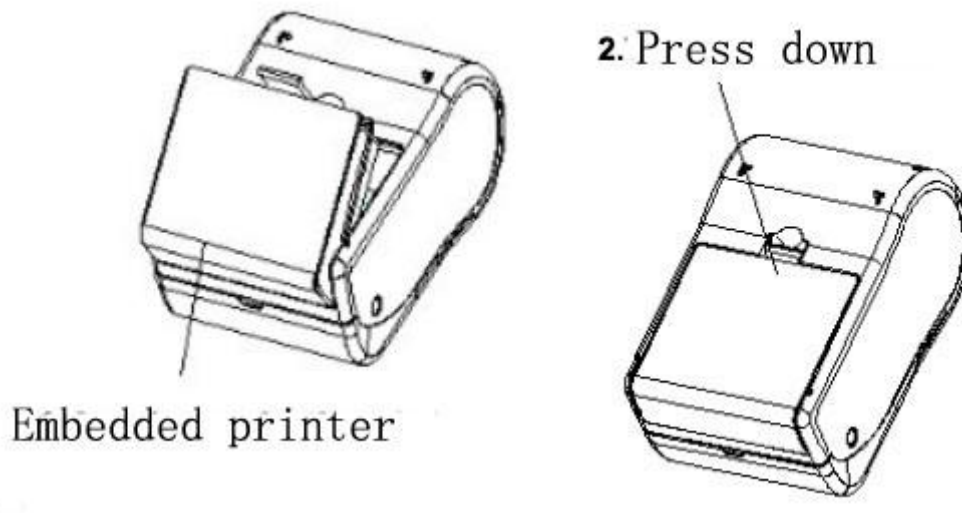
4 Use-method

4.1 Requirements of installation position

- 1) Put the printer on a stably place.
- 2) Let the printer far away from water, fire, and sunlight.
- 3) Avoid to put it on oscillatory and impassive place.
- 4) Make sure to connect printer with ground safety

4.2 preparation before use

4.2.1 battery installation



4.3 Paper roll loading

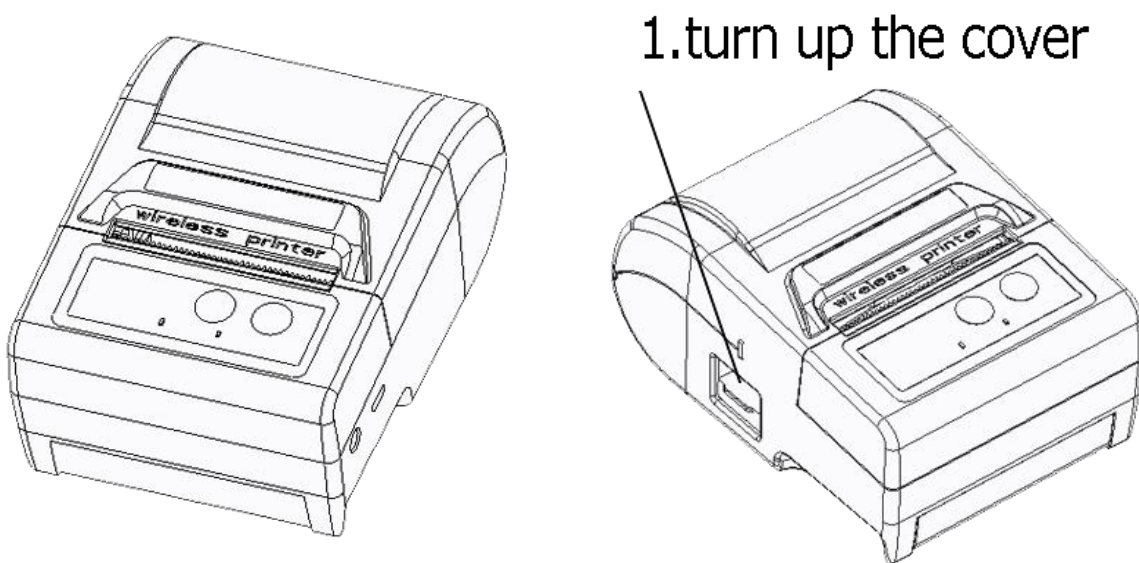
4.3.1 Printing paper type confirmation

You can load paper roll to print after power ON and connecting communication cables. Please make sure the printing paper type before printing. The default paper type is continuous thermal receipt paper and thermal label paper.

4.3.2 Loading or change paper roll

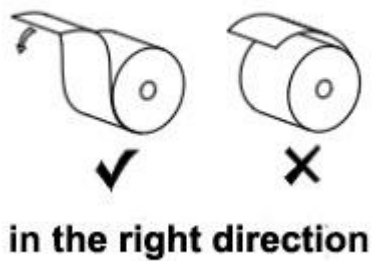
- 1) Power off the printer;

2) Turn up the cover.

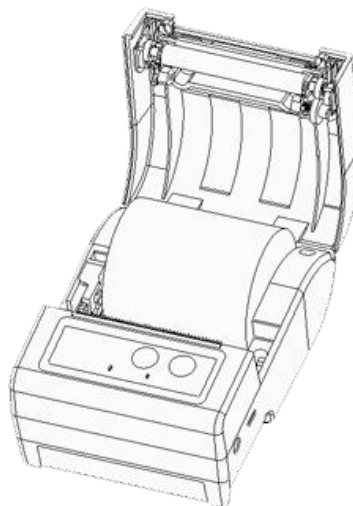


3) According to the figure in the right direction to roll paper bin.

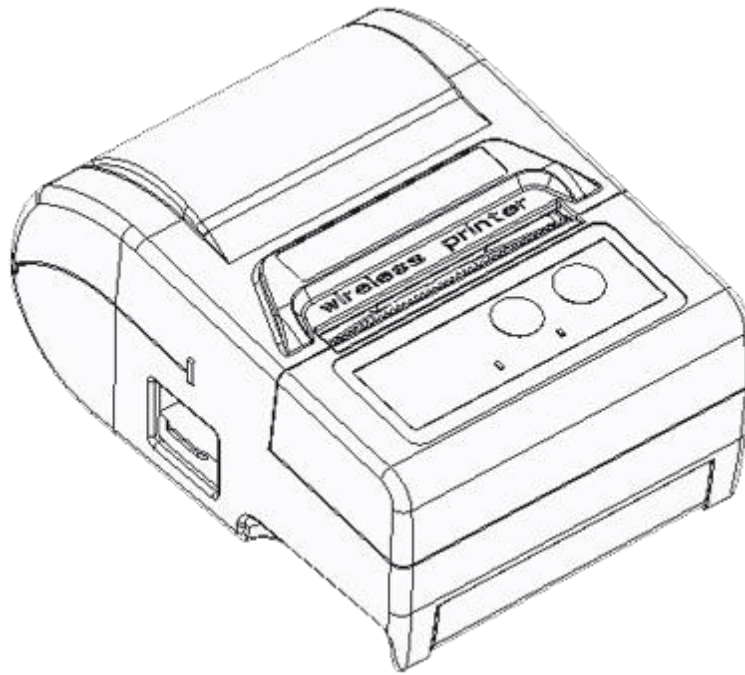
2.Load paper in the direction shown by the arrow



4) Draw out a printer paper,and leave some on the paper out month,then close the storehouse cover.



4) The status after close the storehouse cover.




4.4 indicator

1)

Name	Status	explain
Power indicator	ON	Printer is power ON
	OFF	Printer is power OFF
	flicker	Printer is waiting status
Battery indicator	OFF	The printer is not charged
	flicker	The printer is charging
Bluetooth indicator	ON	Bluetooth connection status
	OFF	No device to connect Bluetooth
Paper shortage indicator	ON	The printer paper shortage state
	OFF	Normal state printer

status	Power indicator	Battery indicator	Bluetooth indicator	Buzzer
Power ON	ON	OFF	OFF	It rings 1 times
Power OFF	OFF	OFF	OFF	It rings 2 times
Waiting status	Slowly flicker	OFF	OFF	~
FEED	ON	OFF	OFF	It rings 1 times
Sufficient Paper	ON	OFF	OFF	~

Out of paper or open the cover	Slowly flicker	Slowly flicker	OFF	It rings 1 times by 10s
Bluetooth connect	ON	OFF	ON	~
Low battery(20%)	OFF	Slowly flicker	OFF	It rings 4 times by 60s
Charging battery	OFF	Quickly flicker	OFF	It rings 1 times
Fully charged	ON	ON	OFF	~

 **Note:** Printer detects printer head temperature via thermal resistance. It will cut off print head power and stop printing if print head is overheat. The print head protection temperature is 80°C.

5 basic function

5.1 Power ON

The printer is power OFF status,press the button **【POWER】** for 2 seconds,the printer enter working status,the power indicator light(red).if you want to continue to use,please replace the battery or charge the battery as soon an possible.

5.2 Power OFF

The printer is power ON status, press the button **【POWER】** for 2 seconds, the printer OFF, all the indicator off.

5.3 print self-test

- 1) Make sure the printer loaded paper roll correctly.
- 2) Press down **【FEED】** button and hold on, then power ON the printer, the printer will print a self-test page.

5.4 Feed

Printer in normal working condition,press the **【FEED】** key,The printer paper will running.

5.5 Printer charging

If the printer battery indicator light (green) flashing and no out of paper status, indicating that the printer is about to running out of electricity, if you still want to use, please replace the battery or battery charging as soon as possible.

When the battery is charged, turn off the power. If the battery is fully charged, the battery indicator goes out.

Charger specifications:

INPUT:100-240V~50/60hZ 0.6A

OUTPUT:12V $\overline{\text{---}}$ 1.0A

6 printer connect and printing

6.1 WINDOWS driver installation

The printer CD has WINDOWS driver procedure ,the position is :Drivers\Windows file.

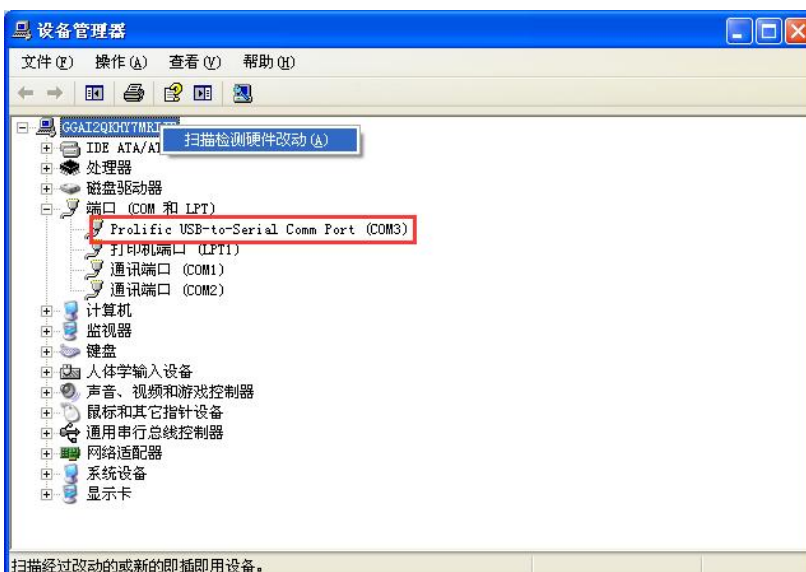
①A printer connected to the computer through the USB cable.on the desktop,click **【Cancel】** .



② Right click “PL2303_Prolific_.exe”,and run as administrator.(Double click to run in XP system,and it needs administrator to run in WIN7/WIN8)



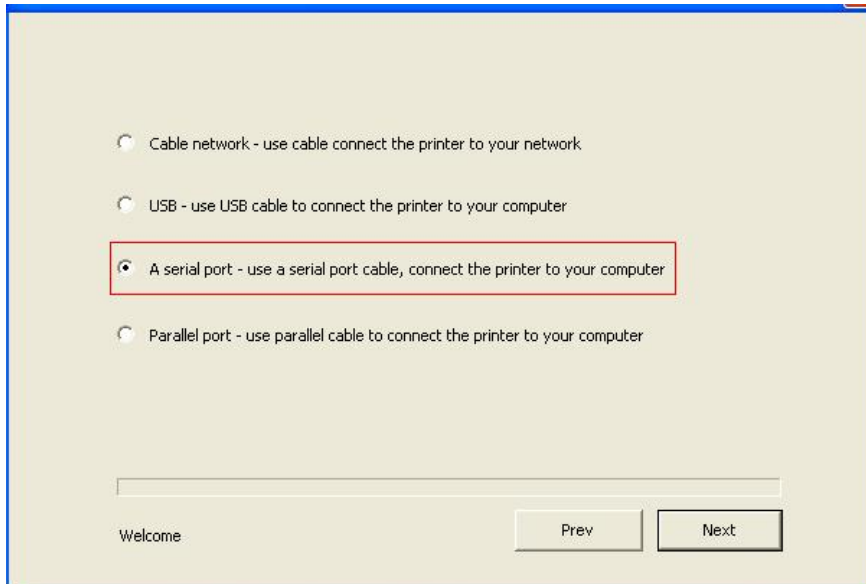
③After install,open **【device management】** --right click **【port】** --it will show COMx,it is OK.



④Install **【PC201A_LG DEVICE.EXE】**



⑤select serial

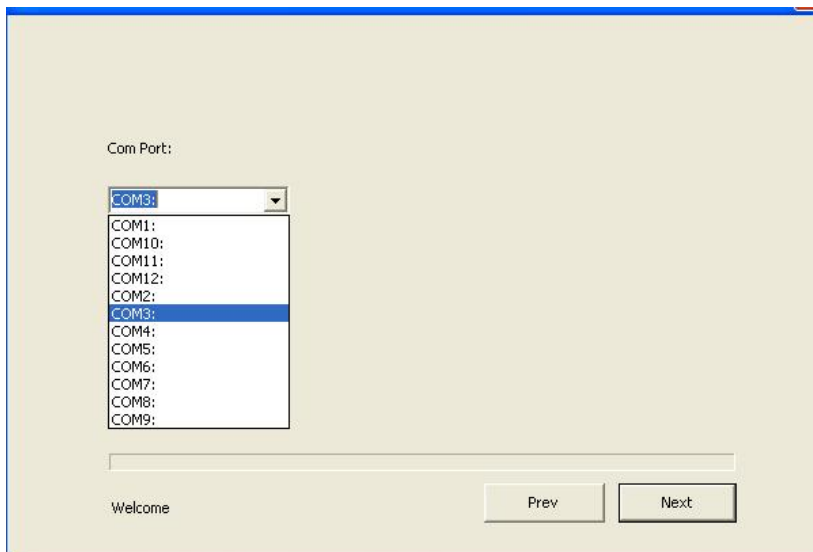


The screenshot shows a configuration window with a light beige background. At the top, there are four radio button options for connection methods:

- Cable network - use cable connect the printer to your network
- USB - use USB cable to connect the printer to your computer
- A serial port - use a serial port cable, connect the printer to your computer
- Parallel port - use parallel cable to connect the printer to your computer

The third option, "A serial port", is selected and highlighted with a red rectangular box. Below the options is a horizontal line. At the bottom left, the word "Welcome" is displayed. At the bottom right, there are two buttons: "Prev" and "Next".

⑥select COMx. (device management--PORT shown)

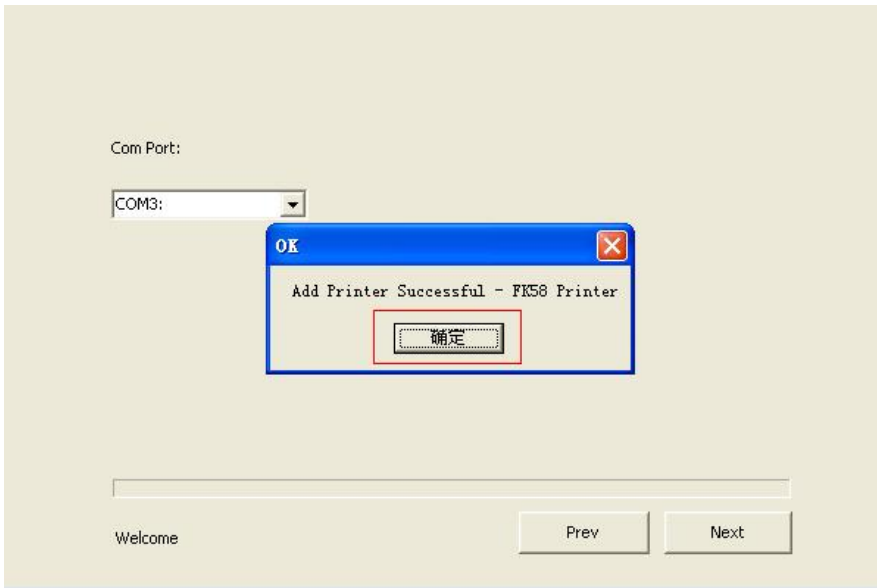


The screenshot shows a configuration window with a light beige background. The text "Com Port:" is displayed above a dropdown menu. The dropdown menu is open, showing a list of COM ports:

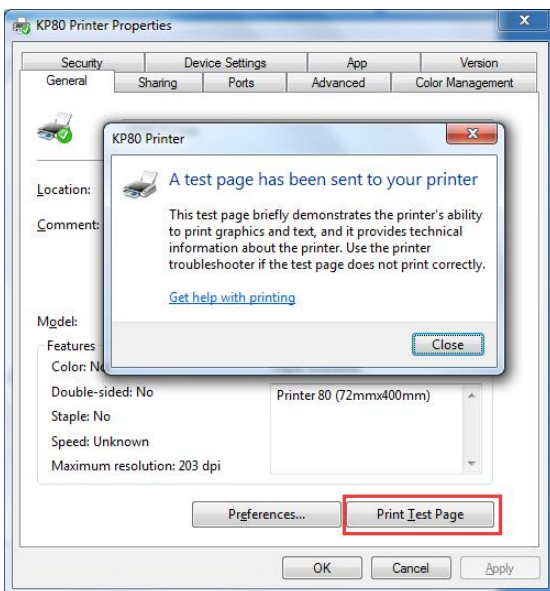
- COM1:
- COM10:
- COM11:
- COM12:
- COM2:
- COM3:
- COM4:
- COM5:
- COM6:
- COM7:
- COM8:
- COM9:

The "COM3:" option is highlighted in blue. Below the dropdown menu is a horizontal line. At the bottom left, the word "Welcome" is displayed. At the bottom right, there are two buttons: "Prev" and "Next".

⑦ 【next step】



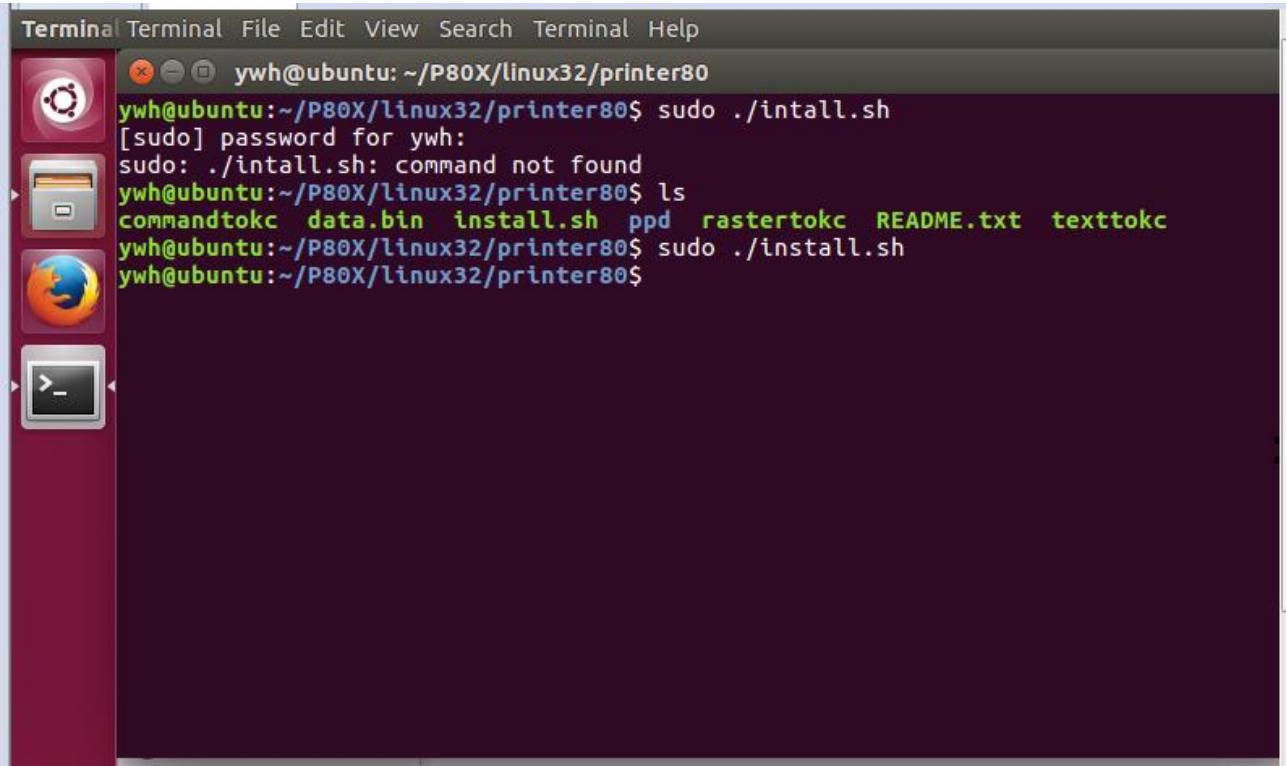
⑧if the printer can print self-test page,the driver is OK.



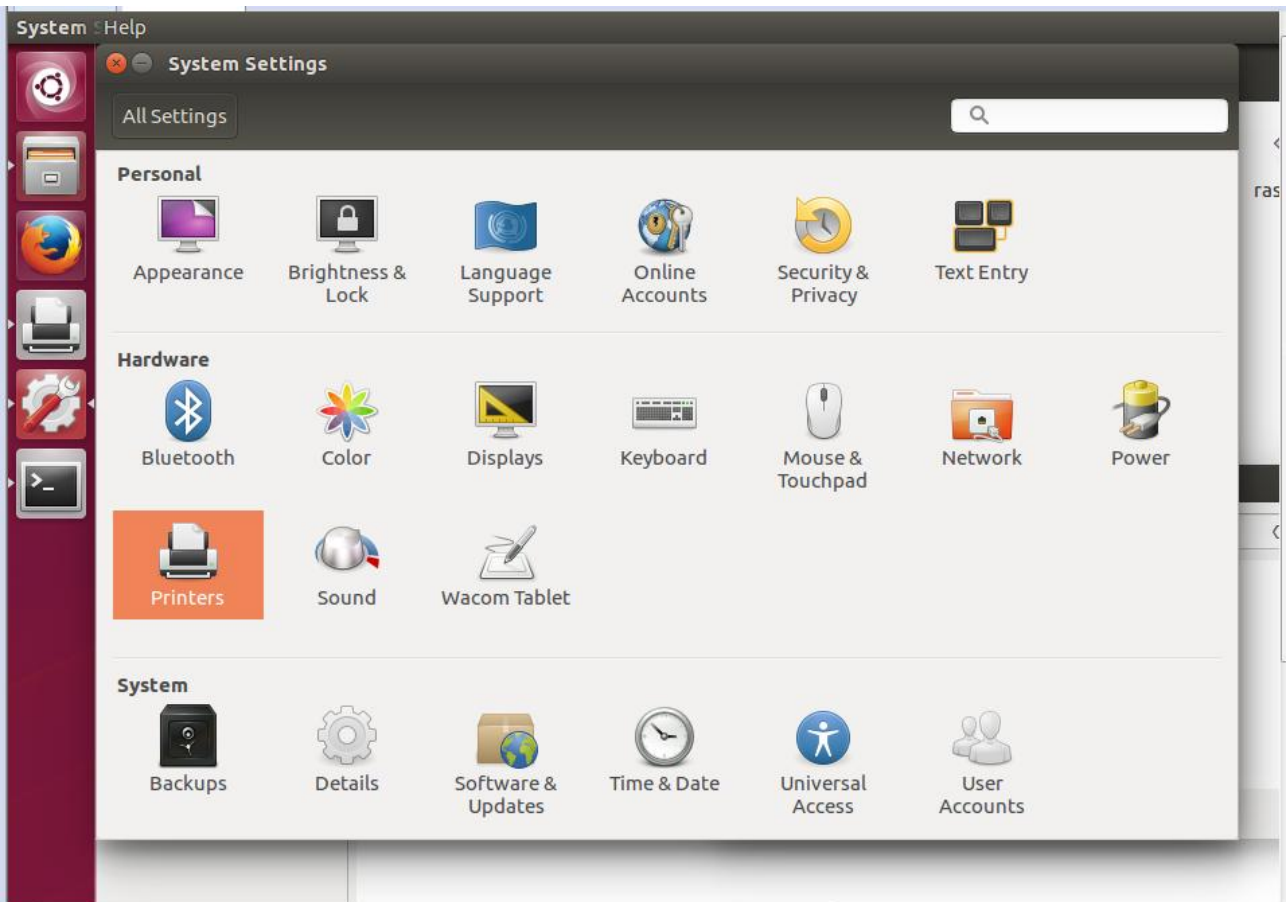
6.2 Linux driver installation

USB port driver installation

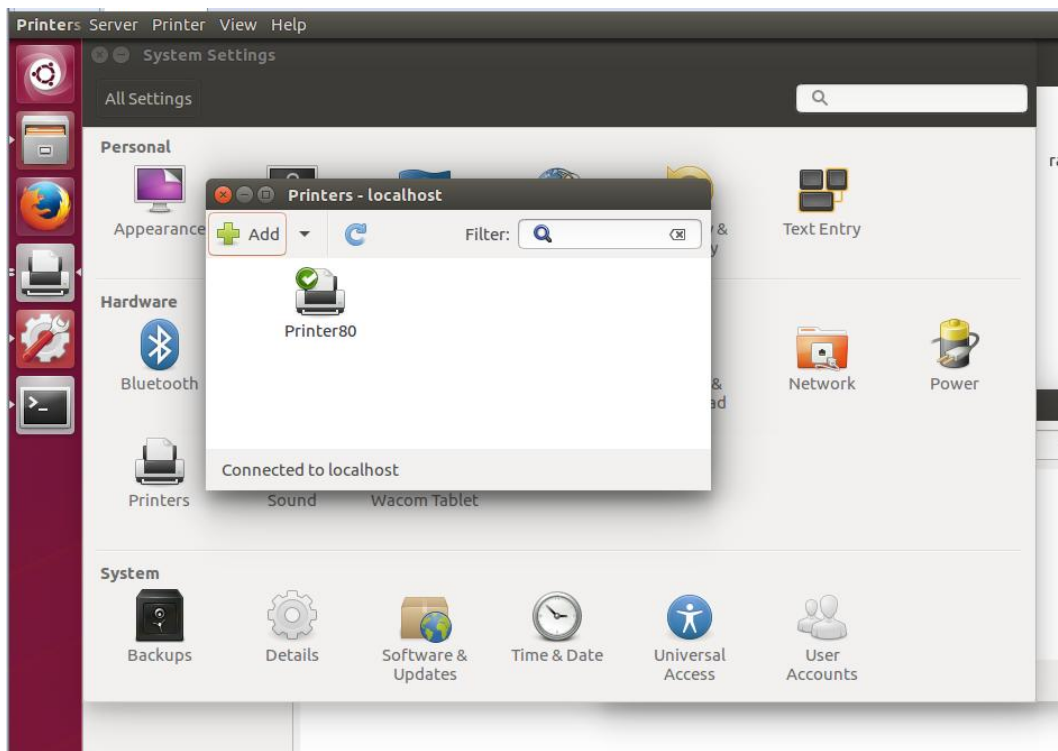
1.Copy commandtokc , rastertokc , texttokc in the catalogue to the filter catalogue of cups.This catalogue normally is /usr/lib/cups/filter/.The installation procedure has been written in shell for installing expediently.Pls run shell script in terminal,the run command is :sudo ./install.sh. If script can not run permission,pls run :sudo chmod a+rx install.sh in terminal,and add permission for it.



2. Click system setting after installing filter.

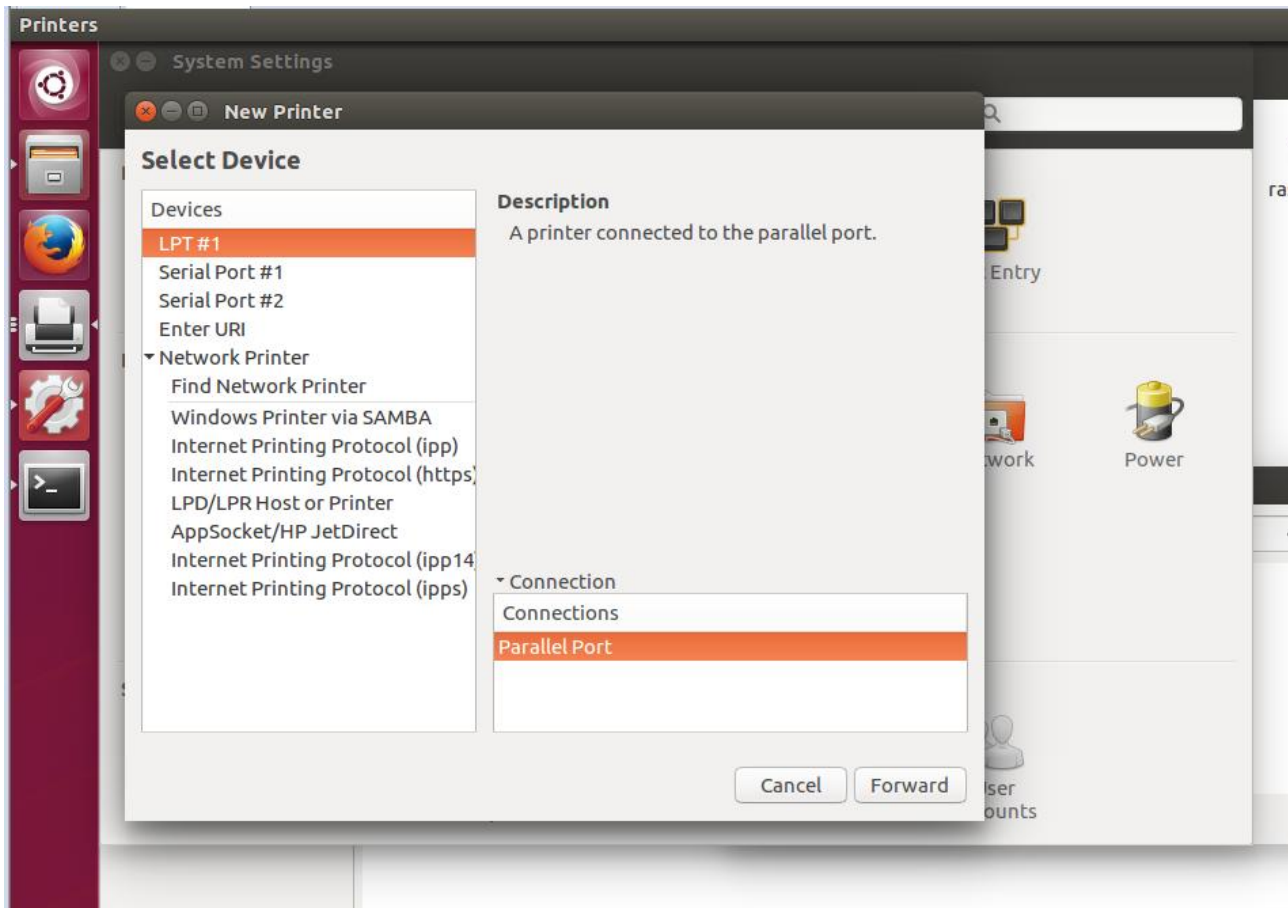


3. Click printer

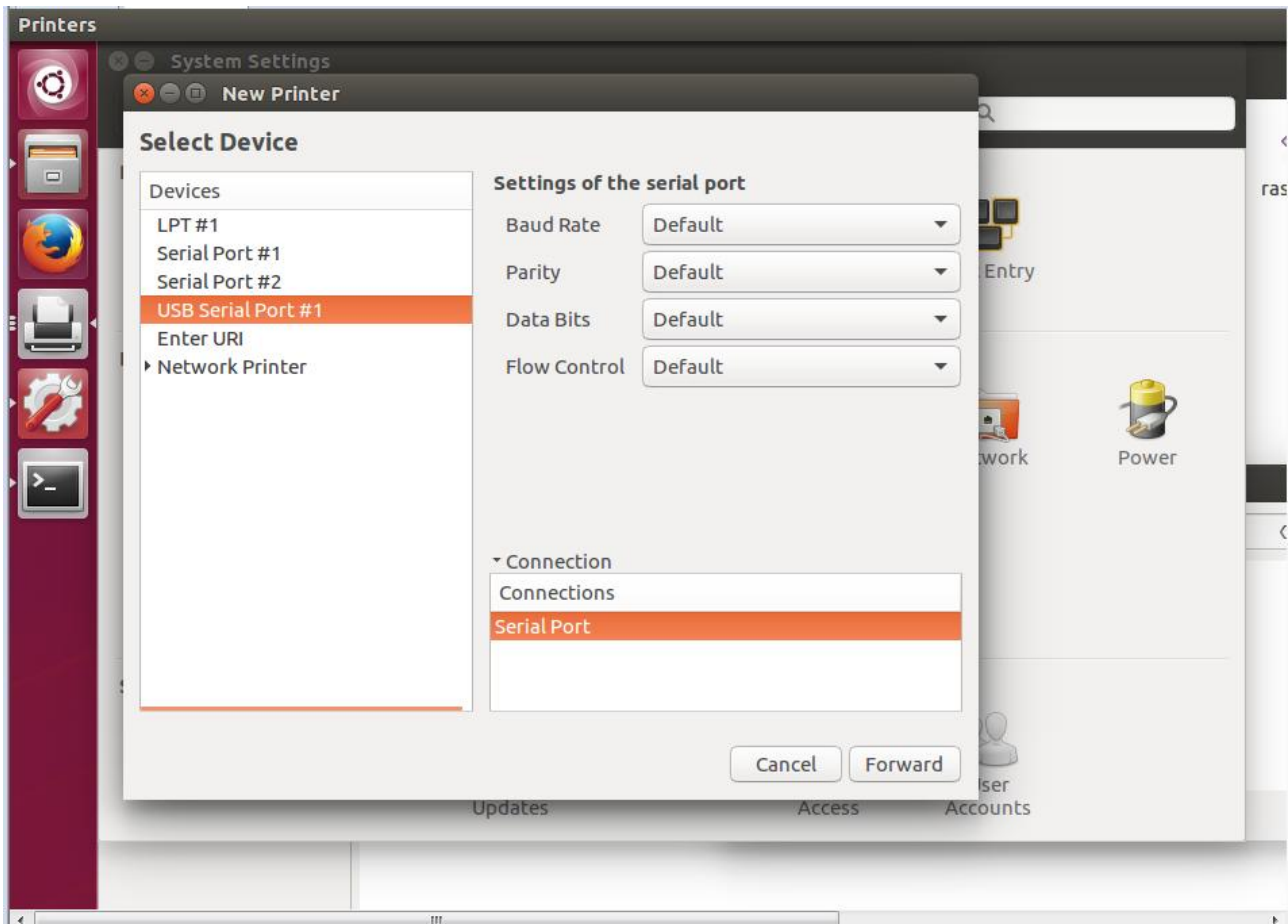


4. Add printer

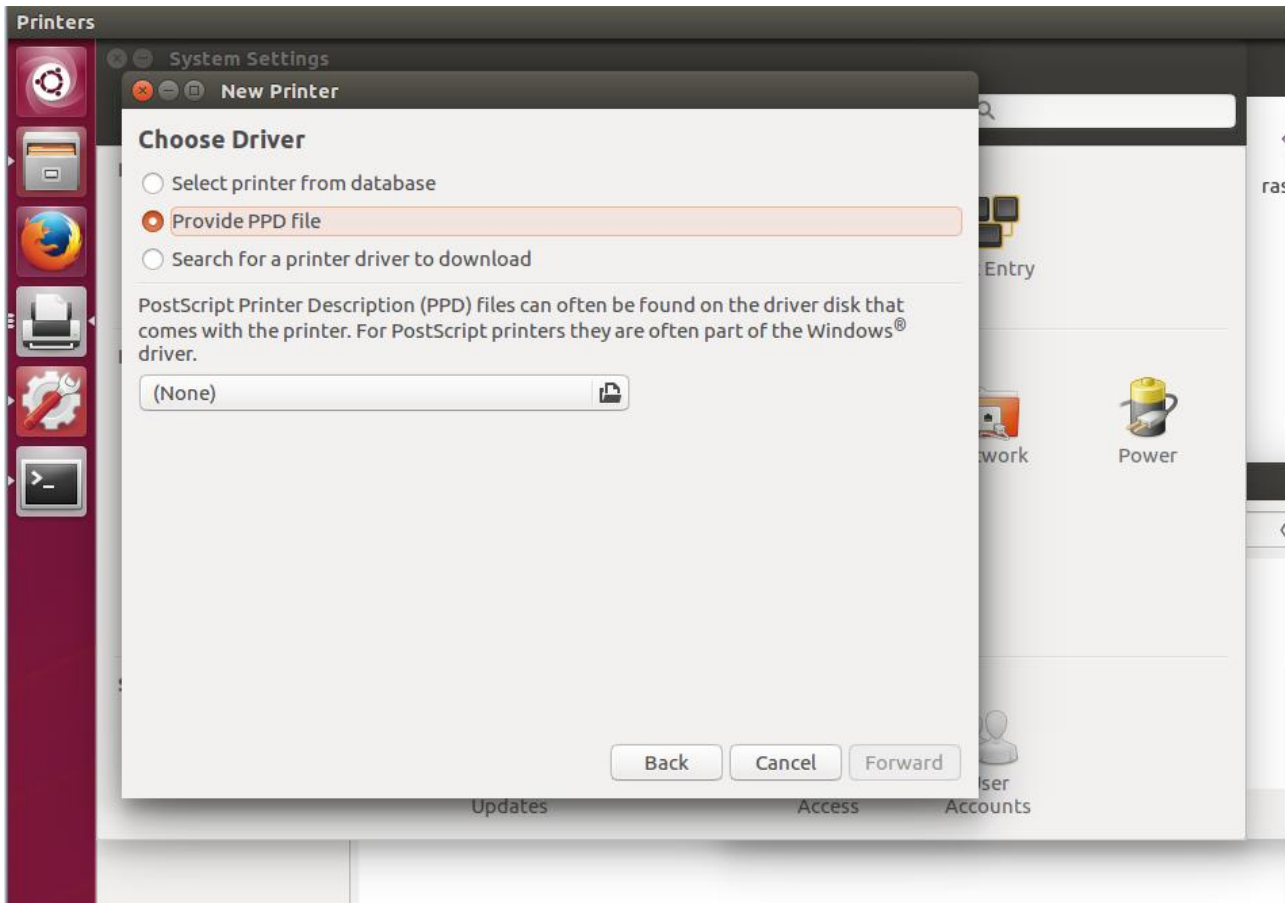
Serial port printer chooses serial port #1, or serial port #n. It is permission denied if it does not show serial port. Please modify serial port device file access right as all people can read and write, or input command in the terminal: `sudo chmod a+rw /dev/ttyS0;com1` in windows corresponds `/dev/ttyS0` in Linux; `com2` corresponds `s/dev/ttyS1`; by parity of reasoning. Wait for a few minutes after modifying permission, you will find serial port in "Add printer". Choose baud rate the same as printer's baud rate, no parity, data bit 8, flow control hardware (RTS, DTR are okay).



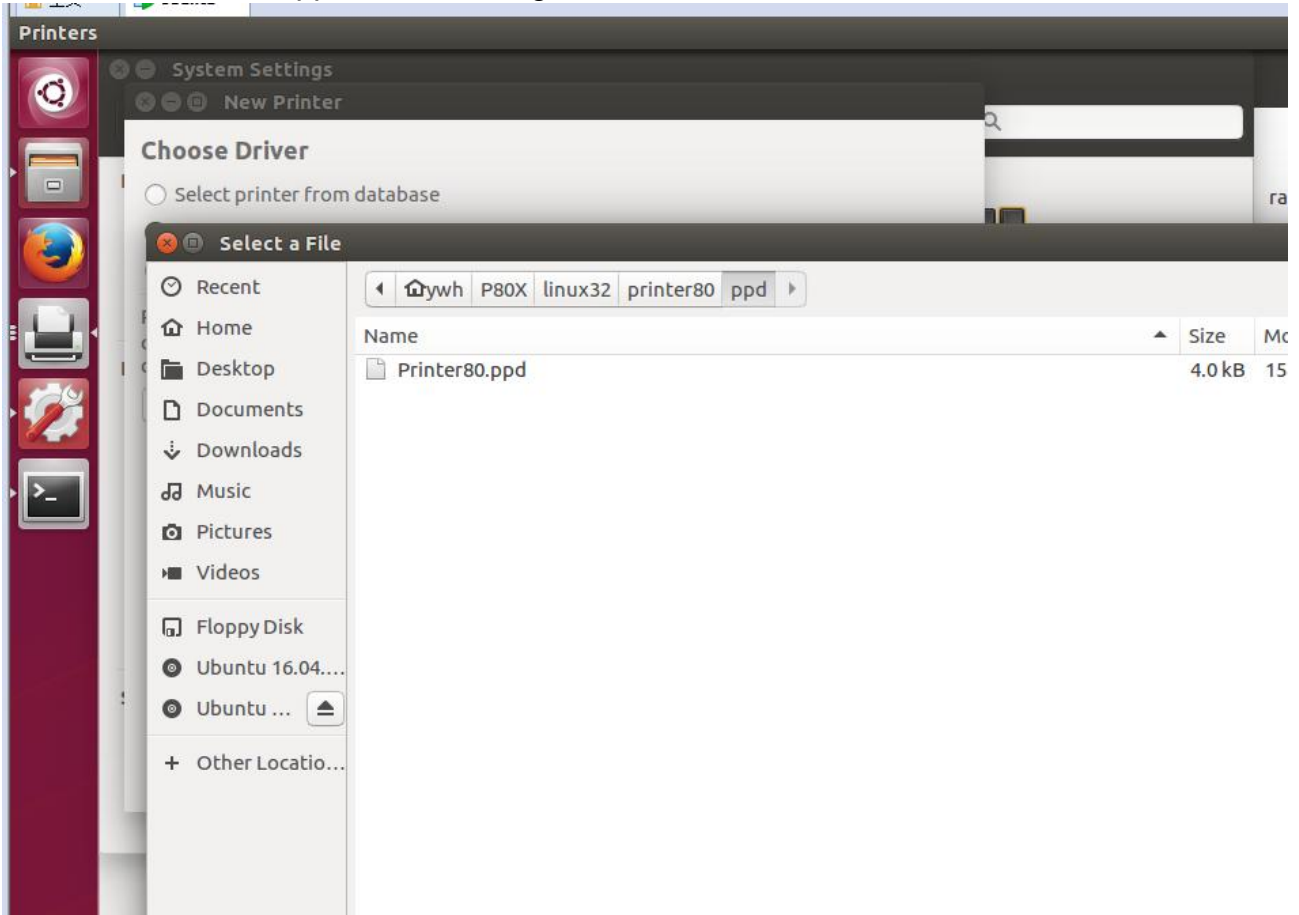
USB printer needs to connect PC first, and then click "add printer". You will find there is an extra Unknown in choice devices. It describes a printer connects to USB port. This is the USB printer what it just connected.



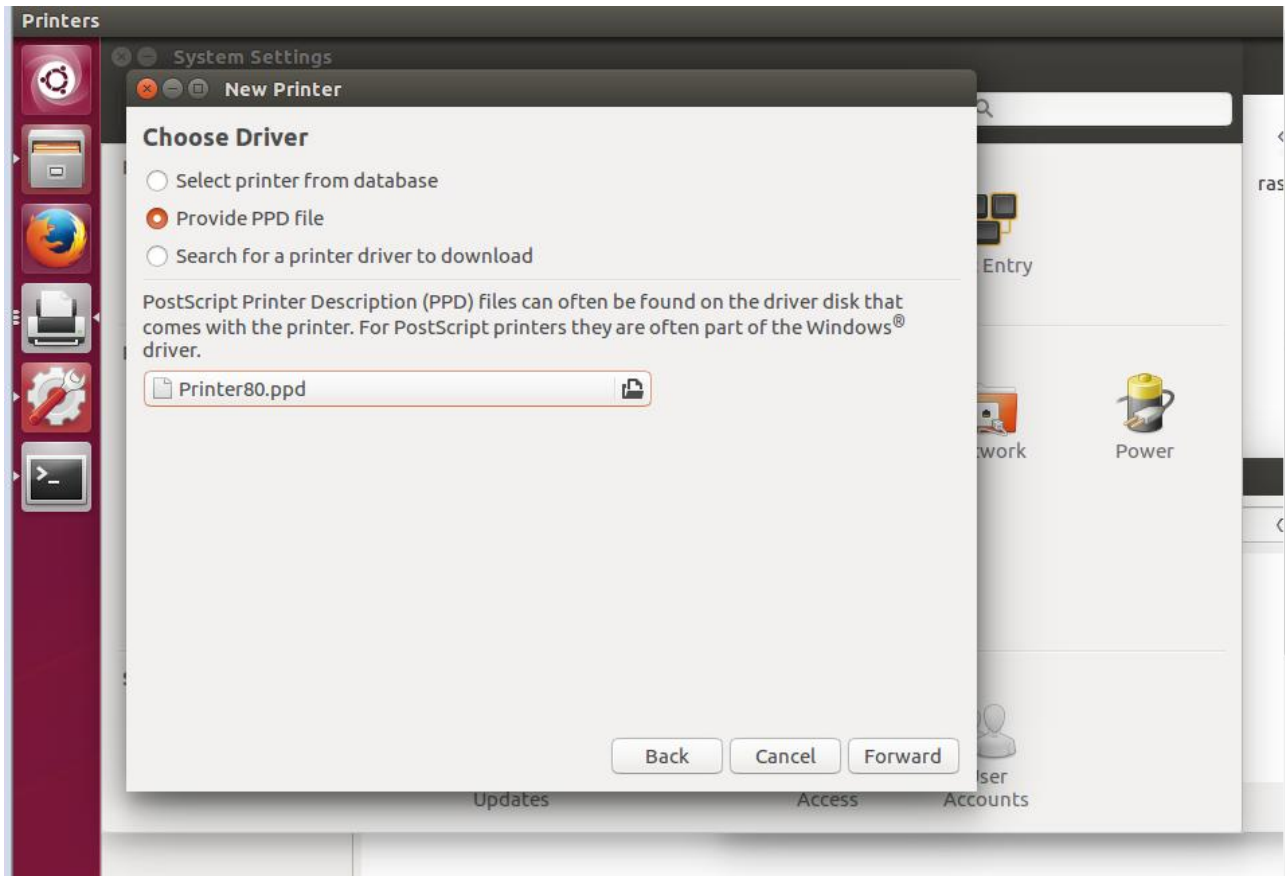
5. You will realize a searching driver hint when click forward after selecting the port. Choose PPD file in the page of choosing driver procedure.



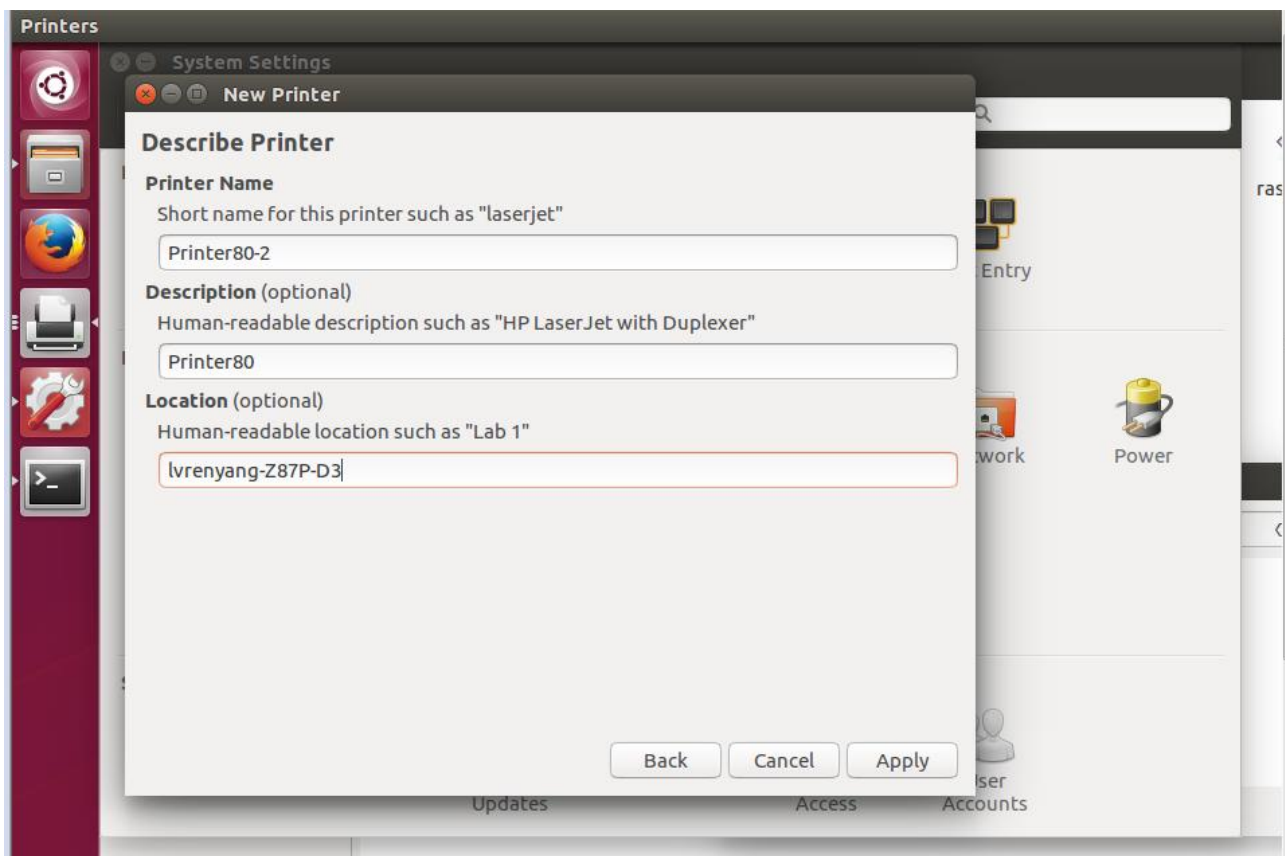
6. Choose Printer58.ppd in the catalogue



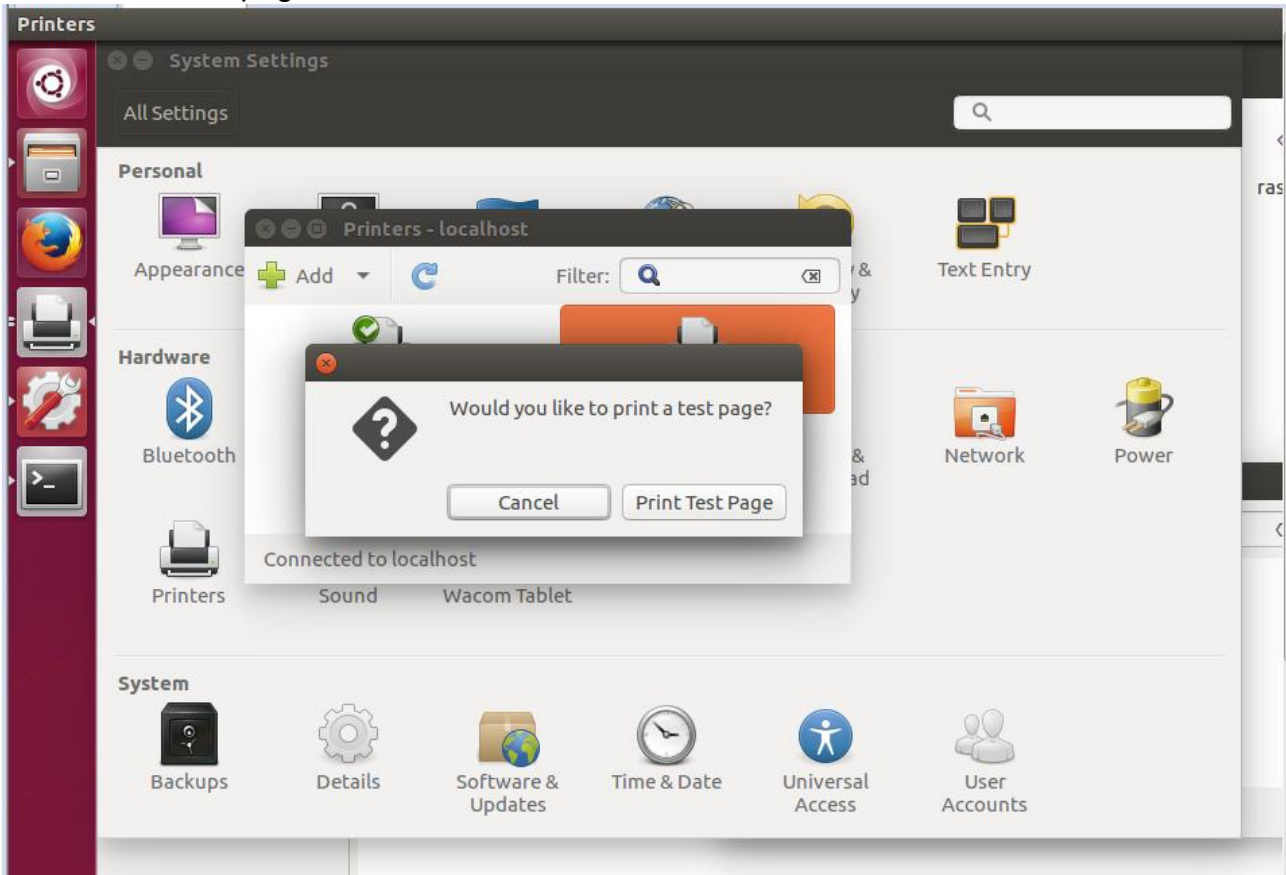
7. Click "Forward" button



8. Click "apply" button.



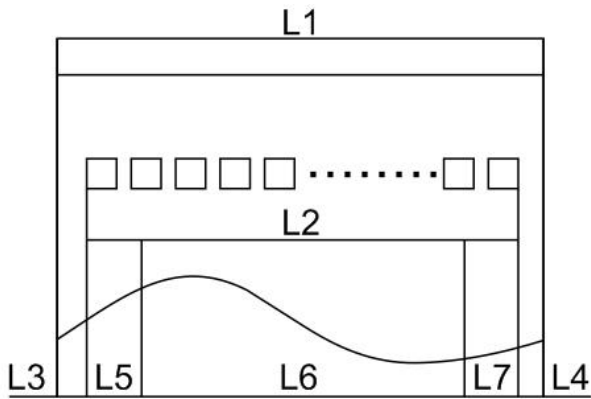
9. Print self-test page



The driver installs correctly if it can print self-test page.

6.4 Printing position

6.4.1 Printing position



L1-Paper storehouse's width: $58\pm 0.5\text{mm}$

L2-Effective printing width: 48mm

L3-Distance between print head to paper storehouse's left edge (fixed width): $4\pm 0.3\text{mm}$

L4-Distance between print head to paper storehouse's right edge (fixed width): $4\pm 0.3\text{mm}$

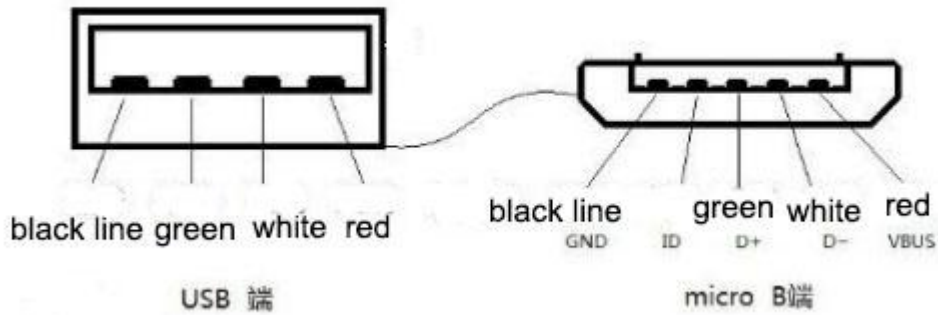
L5-Left margin: Default is 4mm

L6-Printing area width: it is set by commands (refer to programming manual). Default is 48mm.

L7-Right margin: Default is 4mm.

7 interface define

7.1 micro USB define



USB define:generally speaking,Red(Vcc), white(D-), green(D+), black(GND)

Pin	Name	Description
1	VCC	+5 VCC
2	D-	Data -
3	D+	Data +
4	GND	Ground

7.2 micro USB port(B) define

Pin	name	Line color
1	VBUS	Red
2	D-	White
3	D+	Green
4	ID	none
5	GND	Black

8 faults handling

Please refer to the methods as below when printer can't work normally. Please contact your supplier directly,if it still don't work normally.

8.1 Printer does not work

problems	Probably reasons	solutions
The power indicator is not light,printer does not work.	Battery is empty	Batteries need to be charged
	Printer power OFF	Press power key to two seconds
	PCB is damaged	Contact with agents or factory directly

8.2 Indicator error and buzzer warning

problems	Probably reasons	solutions
Battery and power indicator flashing	Out of paper	Load a new paper roll
Power indicator flashing	Printer is waiting status	normal

8.3 problems when it is printing

problems	Probably reasons	solutions
Color strips occur on the paper	Paper maybe out	Load a new paper roll.
Printing is not clear or have dirty spots	Paper roll loading incorrectly	Check paper roll loading correctly or not
	Paper can't meet the requirements	Use the recommended thermal paper
	Print head or printer rubber roller is dirty	Clean print head or printer rubber roller
	Printing density sets too light	Increase printing density to satisfy the requirements
Paper can output normally	Paper jam	Open upper cover or check paper feed channel to get to know paper jam.
Vertical printing contents get lost	Print head or printer rubber rollers is dirty	Clean print head or printer rubber roller
	Print head error	Contact supplier or factory directly.