2C-POS58-BU Thermal Printer

User's Manual

Catalogue

1 Introduction 1
1.1 Brief introduction 1
1.2 Main features 1
2 Specification 2
2.1 Specification 2
2.2 Printing material requirements 4
2.2.1 Paper parameters 4
2.2.3 Printing paper using attention 4
2.3 Printing and paper cutting position 5
2.3.1 Printing position 5
3 Appearance and components 6
3.1 Appearance and components 6
3.2 Indicator instruction 8
4 Printer installation 8
4.1 Open the package 8
4.2 Requirements of installation position 8
4.3 Connect to power adapter 9
4.4 Connect Communication cables 9
4.5 Connect to cash drawer 9
4.6 Paper roll loading 9
4.6.1 Printing paper type confirmation 9
4.6.2 Loading or change paper roll 9
4.7 Printing self-test page 11
4.8 WINDOWS driver installation 11
4.8.1 USB/parallel port driver installation 12
4.9 LINUX driver installation 13
5 Interface pin definitions 21
5.1 Parallel interface pin definition（DB25M） 21
5.2 USB interface pin definition（standard B type female base) 21
5.3 Power interface pin definition（MPC-3-001B） 22
5.4 Cash drawer interface pin definition（RJ11-6P6C） 22
6 Faults handling 23
6.1 Printer does not work 23
6.2 Indicator error 23
6.3 Problems when it is printing 23

1 Introduction

1.1 Brief introduction

KP206B 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.

KP206B connects other devices via USB port, optional Bluetooth. It offers drivers for WINDOWS, ANDROID and LINUX operating systems.

The supported operating systems are as below:

WINDOWS XP
WINDOWS 7 32/64
WINDOWS 8
WINDOWS 10
UBUNTU 12.04 32/64
UBUNTU 14.04 32/64
ANDROID (4.0~6.0)

1.2 Main features

1) Optional communication interfaces(USB and Bluetooth)
2) With cash drawer interface
3) Low noise and high stability
4) Good printing quality
5) Easy paper loading
6) Easily use and maintain
7) Support continuous paper printing

2 Specification

2.1 Specification

Item		Parameter
Printing parameter	Printing method	Thermal printing
	Resolution	203DPI,8 dots/mm
	Printing width	48mm(384 dots)
	Printing speed	90mm/s
	Interfaces and printer types	Bluetooth：KP206B-UB USB: KP206B-U Parallel：KP206B-P
Page mode	/	No support
Command set	/	ESC/POS compatible commands
	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 256K, and the total capacity of download bitmap is 256K.
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	Statue indicator	Blue
	Paper out indicator	Red
Paper Requirement	Type	Standard thermal receipt paper
	Width	57.5±0.5mm
	Thickness	0.056~0.1mm
	Diameter	50mm(Max.)
Physical characteristics	Paper loading	Easy paper loading
	Operating condition	-10℃ ~ 50℃，25% ~ 80%RH
	Storage condition	~40℃ ~ 70℃，≤93%RH（40℃）
	Outline dimension	177mm×130.5mm×107mm（W×L×H）
	Weight	0.5Kg
Reliability	TPH life	50km
	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

2.2 Printing material requirements

2.2.1 Paper parameters

1) Paper type: thermal receipt paper/thermal black mark paper
2) Paper width:58±0.5 mm
3) Paper roll diameter: 50 mm (Max.)
4) Paper thickness:0.065 ~ 0.10mm

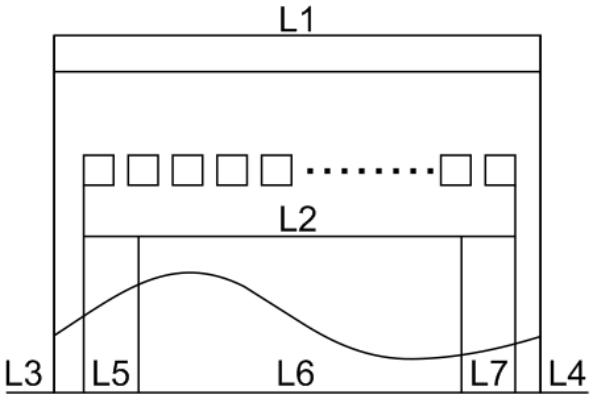
2.2.3 Printing paper using attention

⚠ 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.

2.3 Printing and paper cutting position

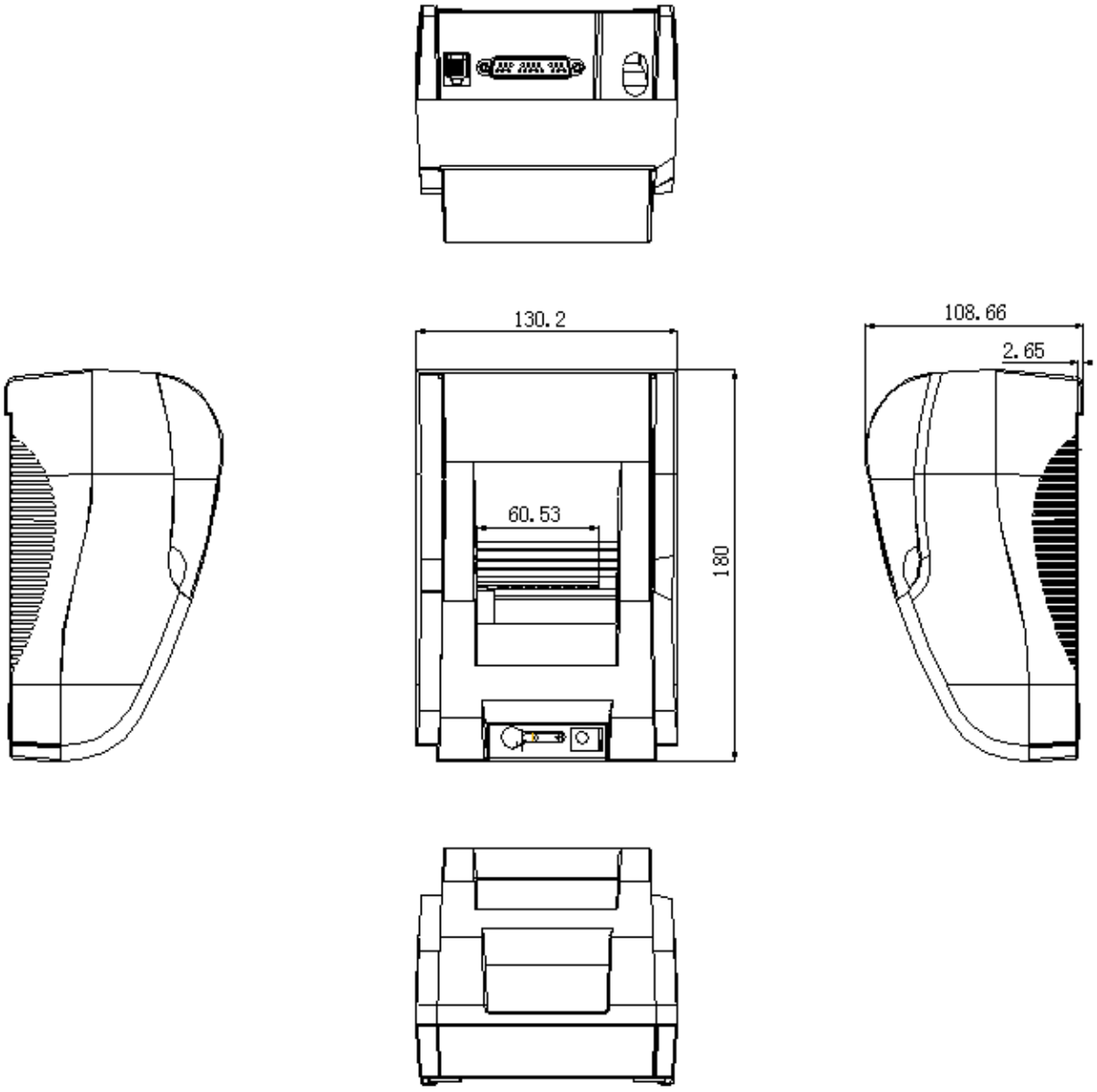
2.3.1 Printing position

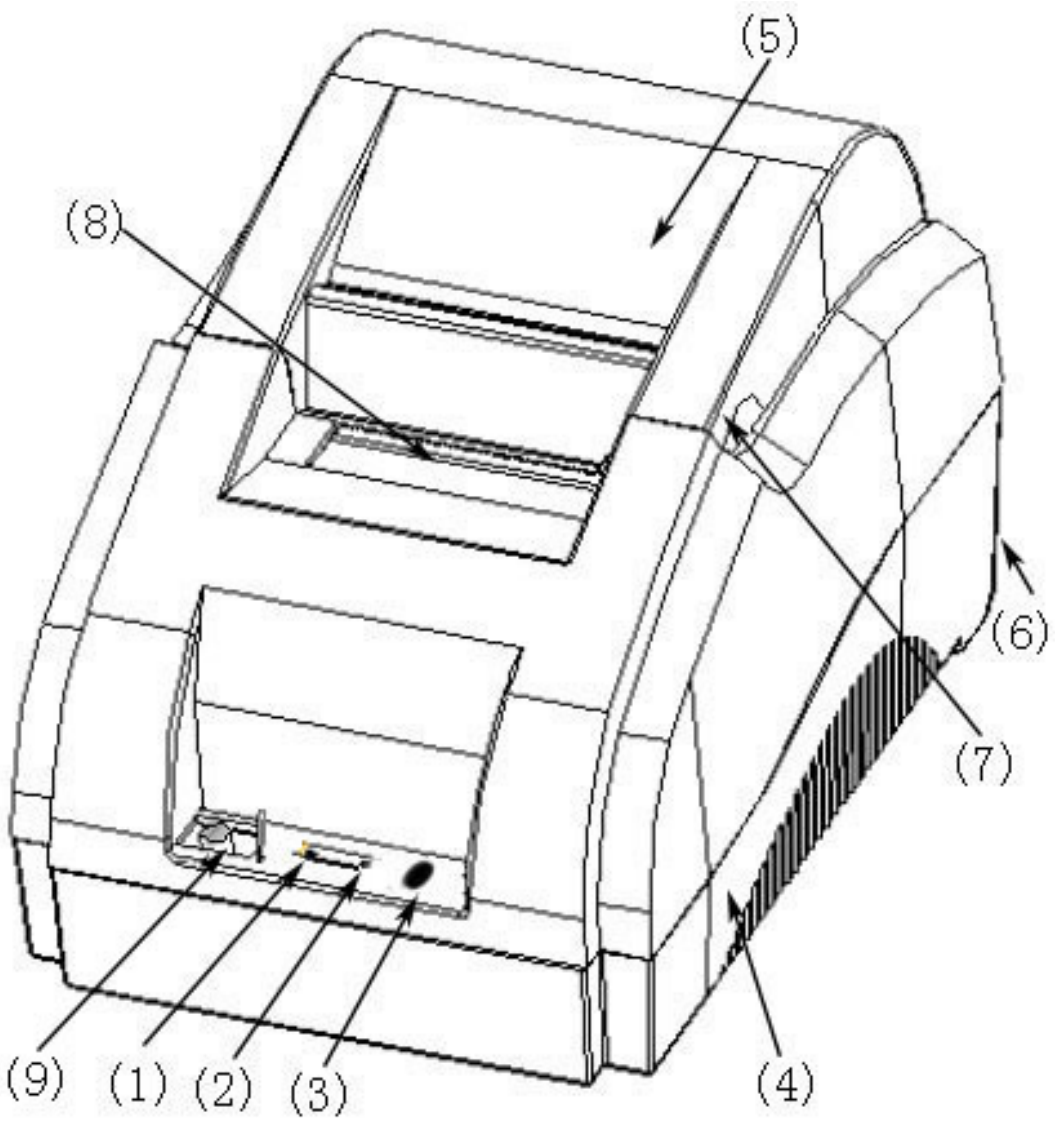


L1-Paper storehouse's width:58±0.5mm
L2-Effective printing width: 57mm
L3-Distance between print head to paper storehouse's left edge (fixed width): 3±0.3mm
L4-Distance between print head to paper storehouse's right edge (fixed width): 3±0.3mm
L5-Left margin: Default is 4mm
L6-Printing area width: it is set by commands (refer to programming manual). Default is 48mm.
L7-Right margin: Default is 4mm.

3 Appearance and components

3.1 Appearance and components





(1)Power indicator **(6)Power port**

(2)Bluetooth indicator **(7)Open lid notch**

(3) FEED button **(8)Paper tearing port**

(4)Under cover of printer **(9)ON-OFF button**

(5)Cover of paper warehouse

Function instruction of components

1）Power switch

Press "O" side to power off, press "I" side to power on.

2）statue indicator(blue)

The indicator is on when power on, and statue of printer.

3）Blue indicator (Red)

Blue indicator is on when Bluetooth connected. .Flashing indication disconnected.

3.2 Indicator instruction

1）Function instruction of indicators and buzzer

Name	Status	Instruction
Statue indicator (Power)	Bright	Printer is in normal status
	flashing	Printer is out of paper or open paper warehouse
	Bright off	Printer is power off
Bluetooth indicator （Paper）	Bright	Bluetooth is connected
	Bright off	Bluetooth is disconnected

Description	Statue Indicator	Bluetooth Indicator
Open paper warehouse	Flashing	Bright off
Paper is enough	Bright	Bright off
Paper out	Flashing	Bright off
Bluetooth is connected	Bright	Bright

⚠ **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℃.**

4 Printer installation

4.1 Open the package

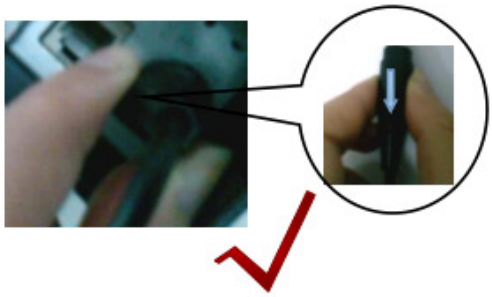
Please make sure everything is in good status when you open the package. Otherwise, please contact to distributor in time.

4.2 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

4.3 Connect to power adapter

1) Make sure the printer is power off.
2) Connect power adapter's DC output plug to the printer.
3) Connect power adapter's AC input plug to a power outlet.
4) Please be careful to operate correctly when plug out the plug of power cord to avoid damage.



4.4 Connect Communication cables

1) Make sure the printer is power off.
2) Connect communication cable to the printer's port, and fix it as plug lag spike (or snap spring).
3) Connect communication cable to the other side host.

4.5 Connect to cash drawer

1) Make sure the printer is power off.
2) Connect cash drawer to cash drawer port behind the printer.

⚠ **Warning: The Voltage of cash drawer port is 12V. (It cannot connect to telephone cable.)**

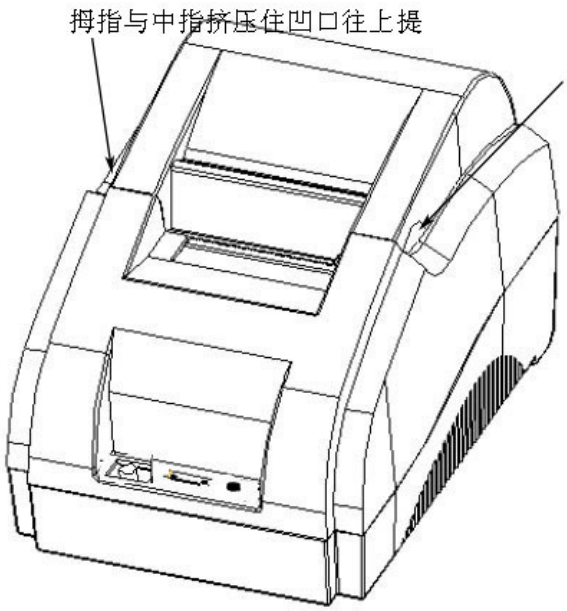
4.6 Paper roll loading

4.6.1 Printing paper type confirmation

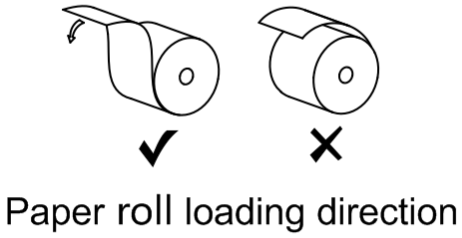
You can load paper roll to print after connecting power adapter and communication cables. Please make sure the printing paper type before printing. The default paper type is continuous thermal receipt paper.

4.6.2 Loading or change paper roll

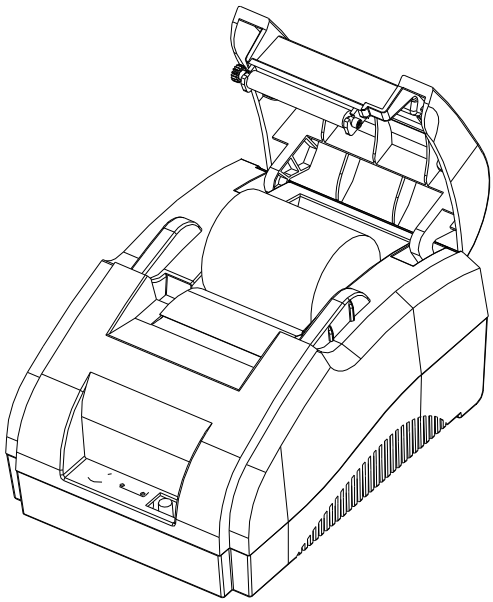
1) Power off the printer.
2) Slide or press paper roll storehouse button, and then open storehouse cover.



3) Draw out paper roll tap, and load paper roll as below.



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



⚠ **Warning: Please make sure the paper roll in tense status, if not, it maybe cause paper jam or other problems.**

5) The status after paper loading

4.7 Printing self-test page

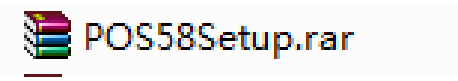
1) Make sure the printer loaded paper roll correctly.
2) Press down [FEED] button and hold on, then power on the printer, the printer will print a self-test page.

4.8 WINDOWS driver installation

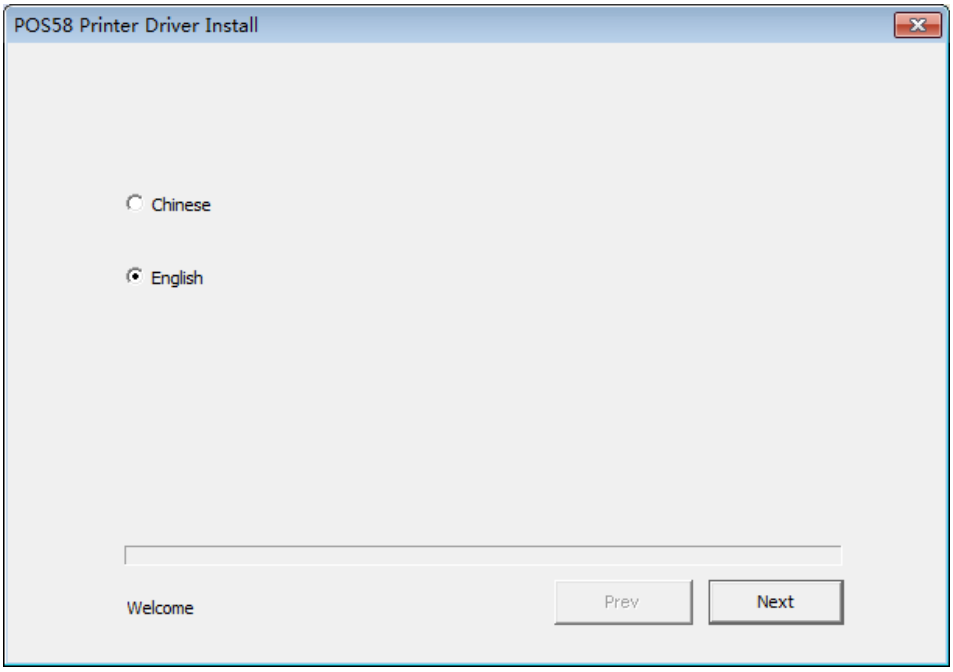
The printer CD has WINDOWS driver procedure ,the position is :Drivers\Windows file.

4.8.1 USB/parallel port driver installation

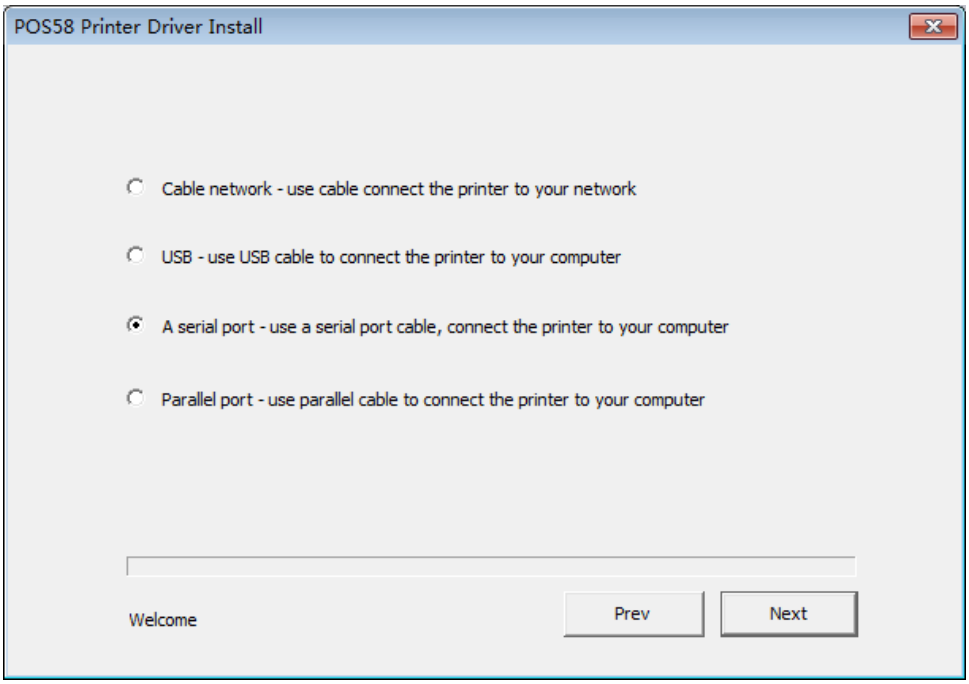
1） Right click "InstallMFC.exe",and run as administrator.(Double click to run in XP system,and it needs administrator to run in WIN7/WIN8)



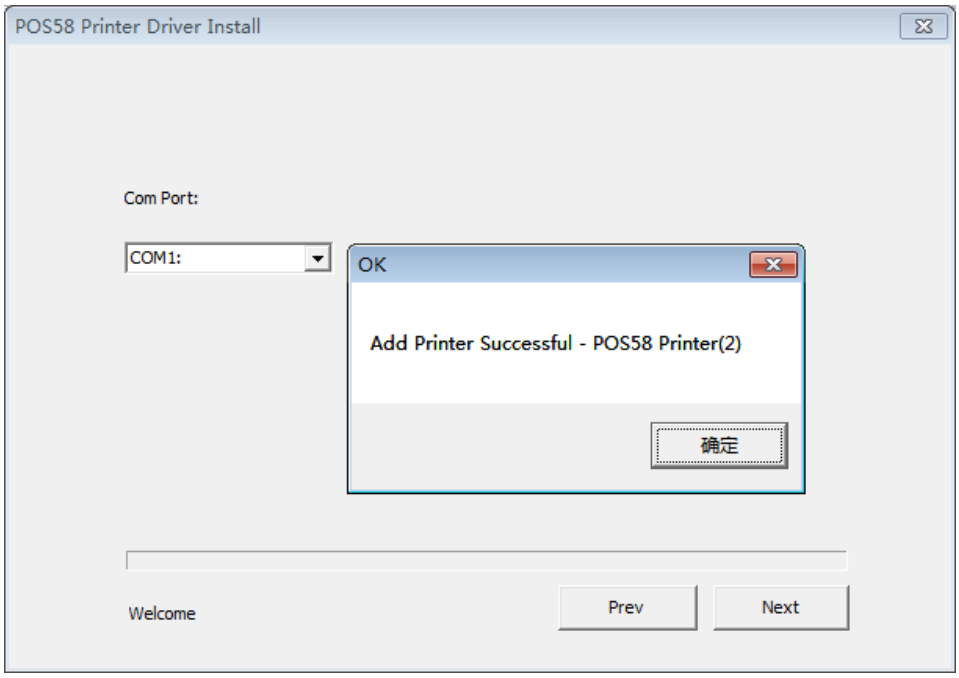
2）Choose language as "Simplified Chinese",and choose printer to connect PC port.



3）Choose the port and model what you need(USBxxx corresponds USB port,COMx correspondS serial port,LPTx corresponds parallel port),and click to install.



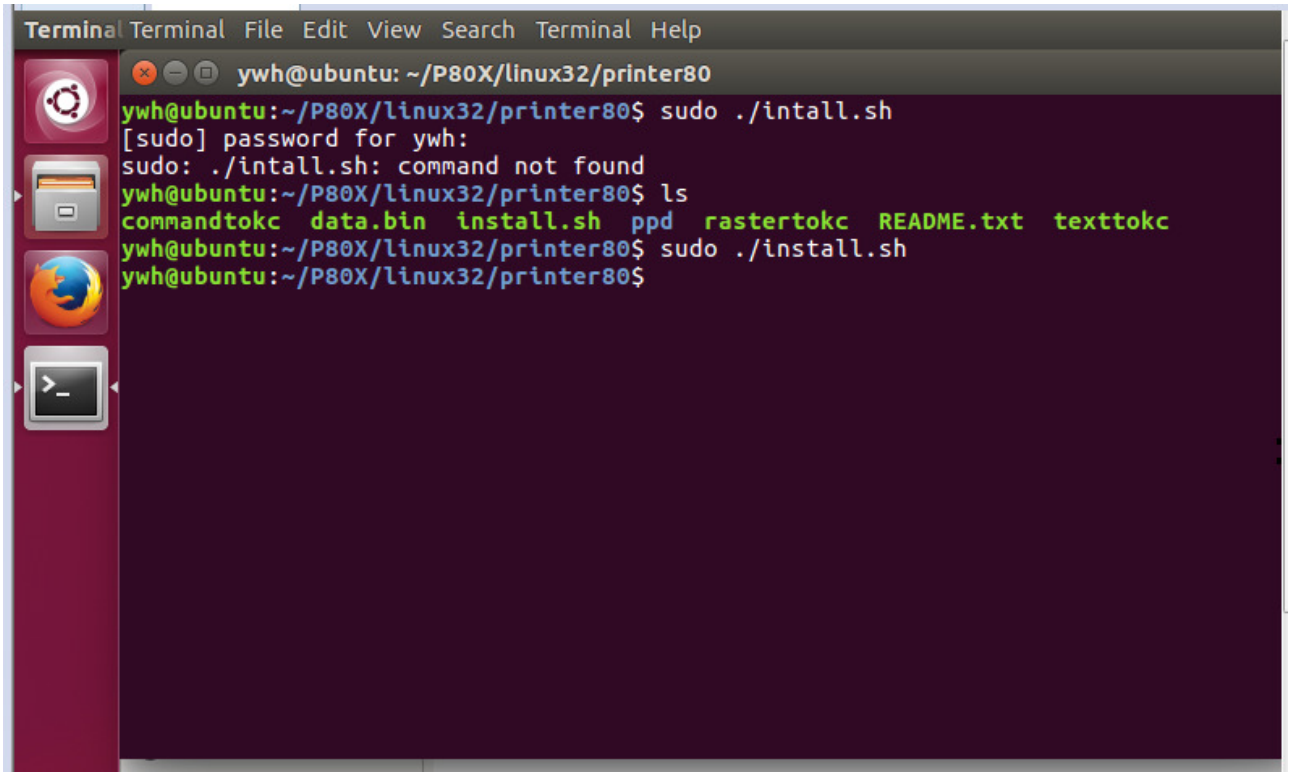
4）Then it will show "Add Printer successfully"



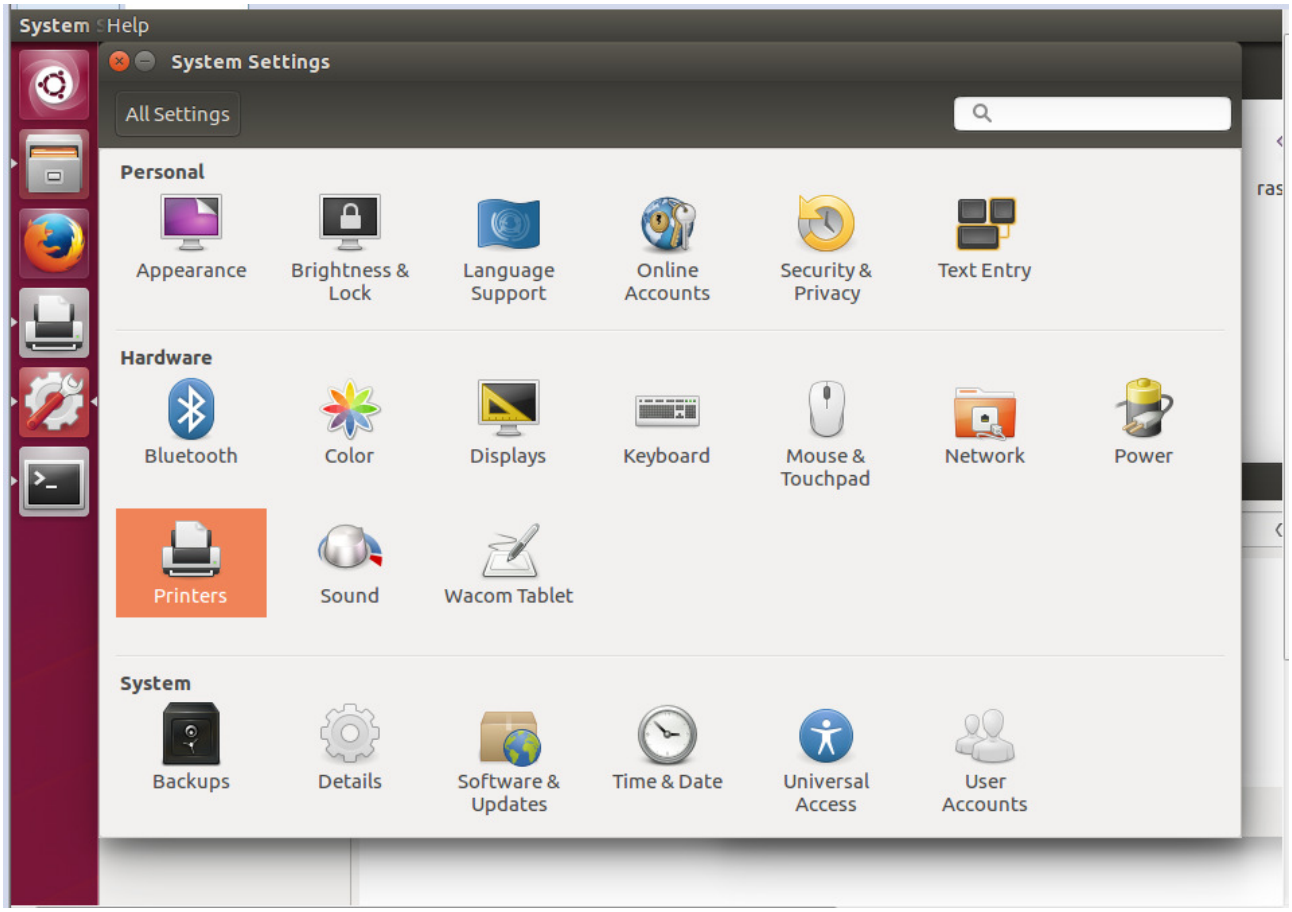
4.9 LINUX driver installation

USB port driver installation

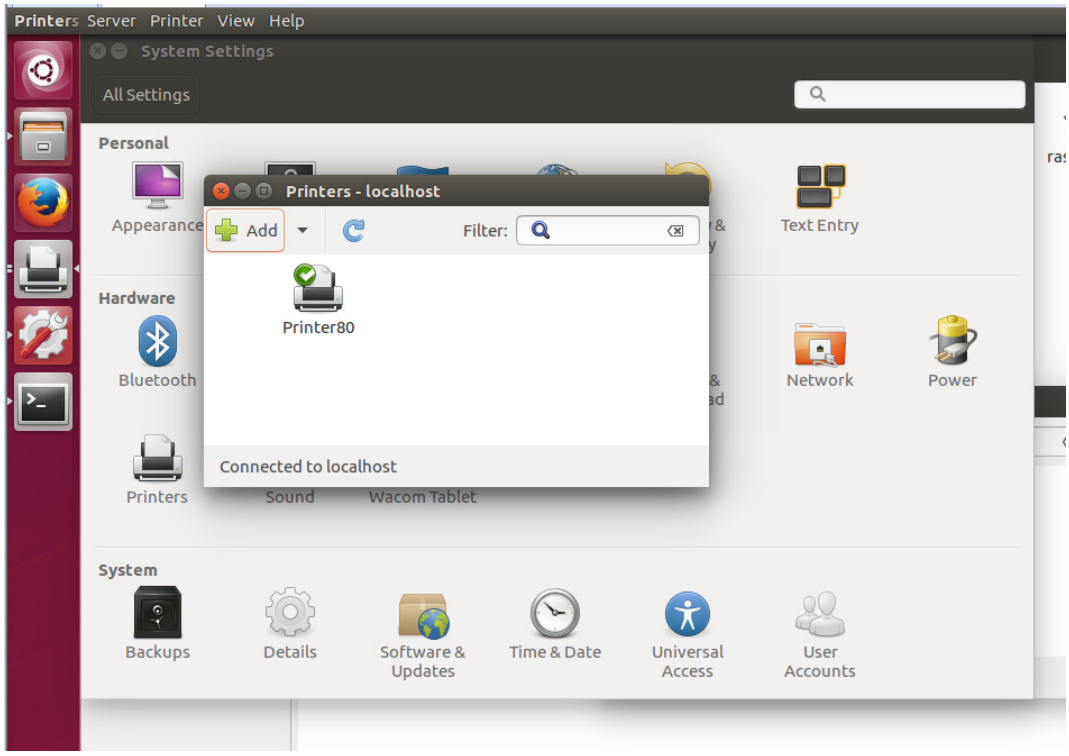
1.Copy commandtokc，rastertokc，texttokc in the catalogue to the filter catalogue of cups.This catalogue normally is /usr/lib/cups/filter/.The installation procedure has been written in shell for installing expediently.Pls run shell script in terminal,the run command is :sudo ./install.sh. If script can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



2.Click system setting after installing filter.

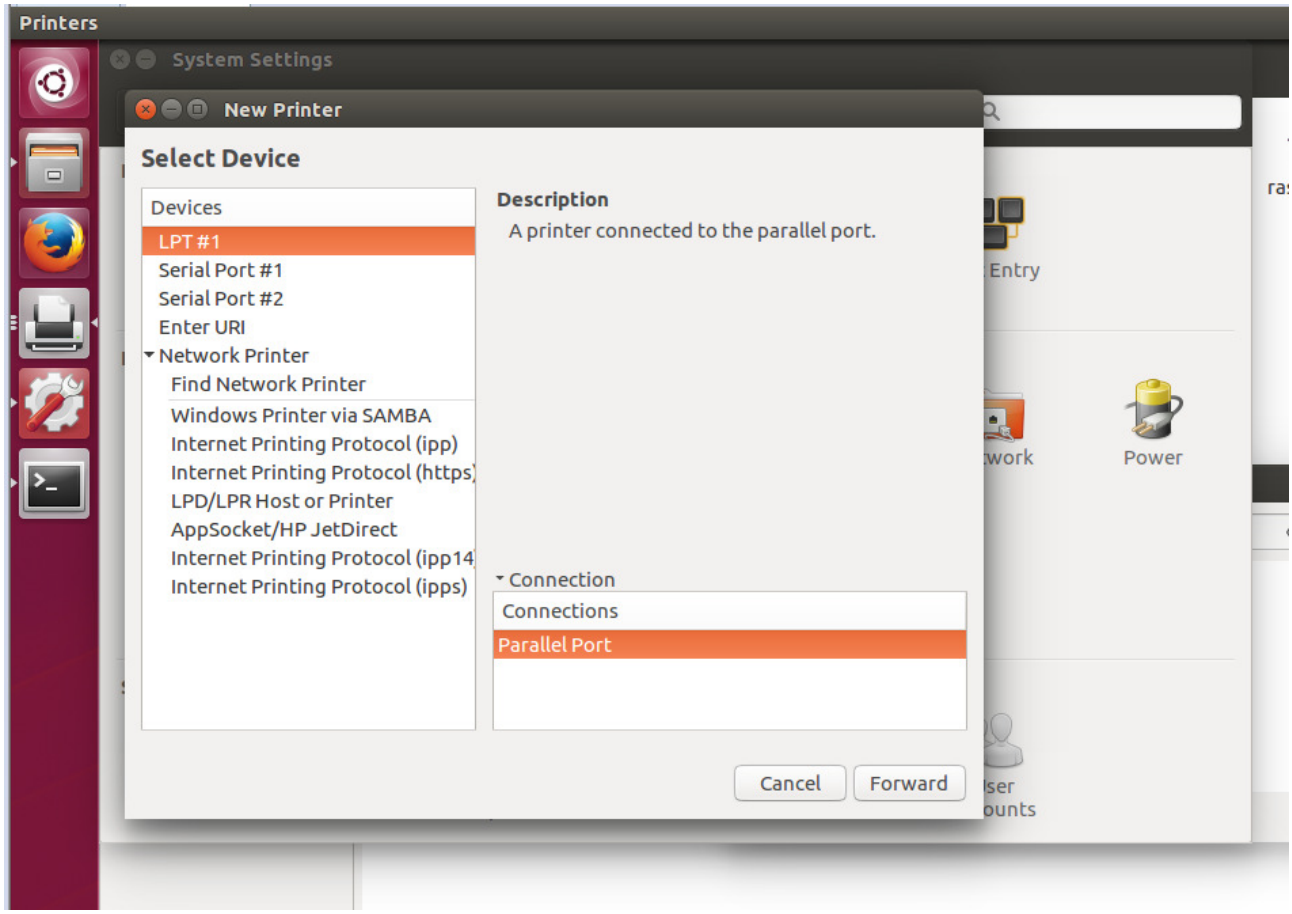


3.Click printer

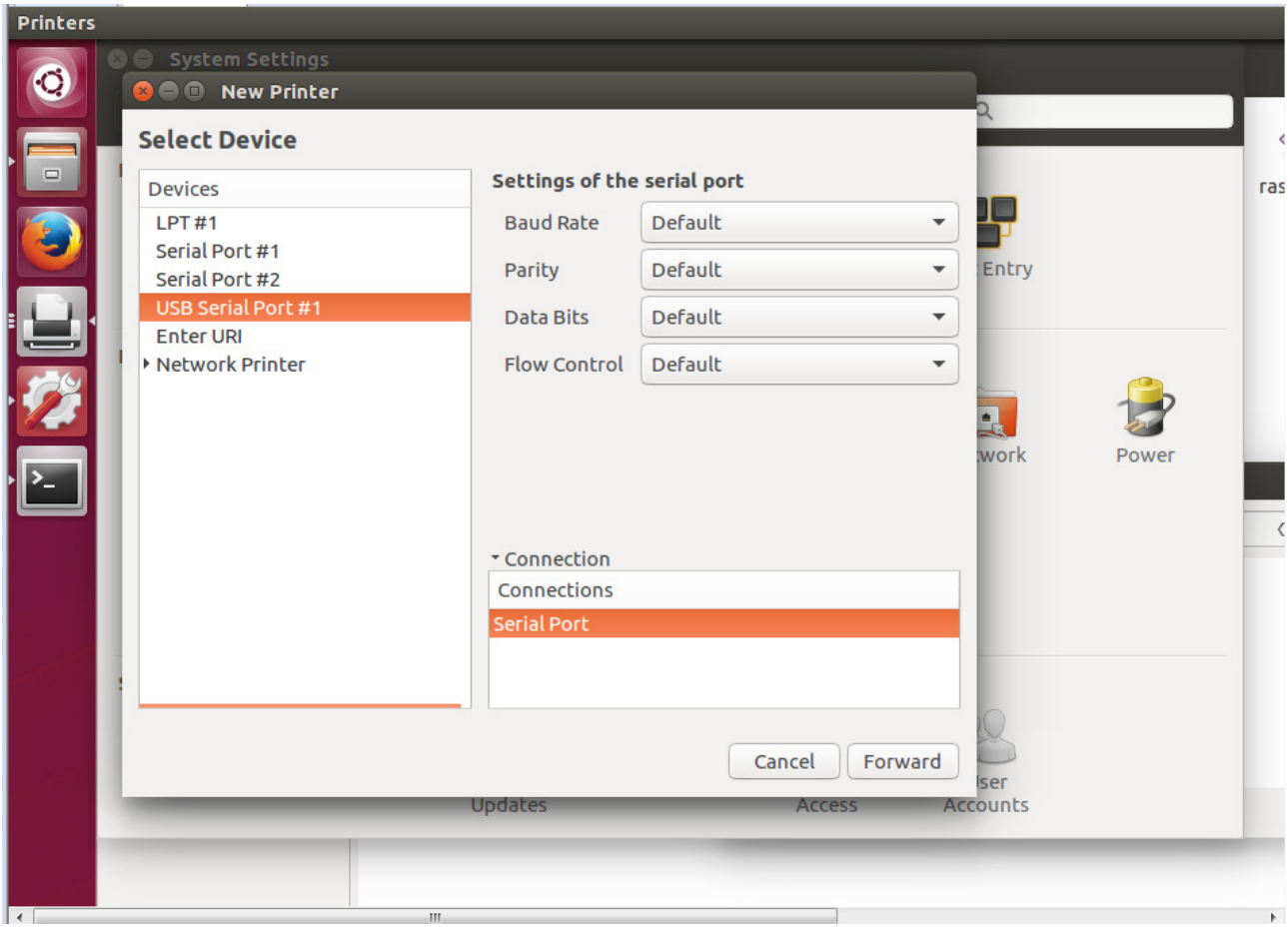


4. Add printer

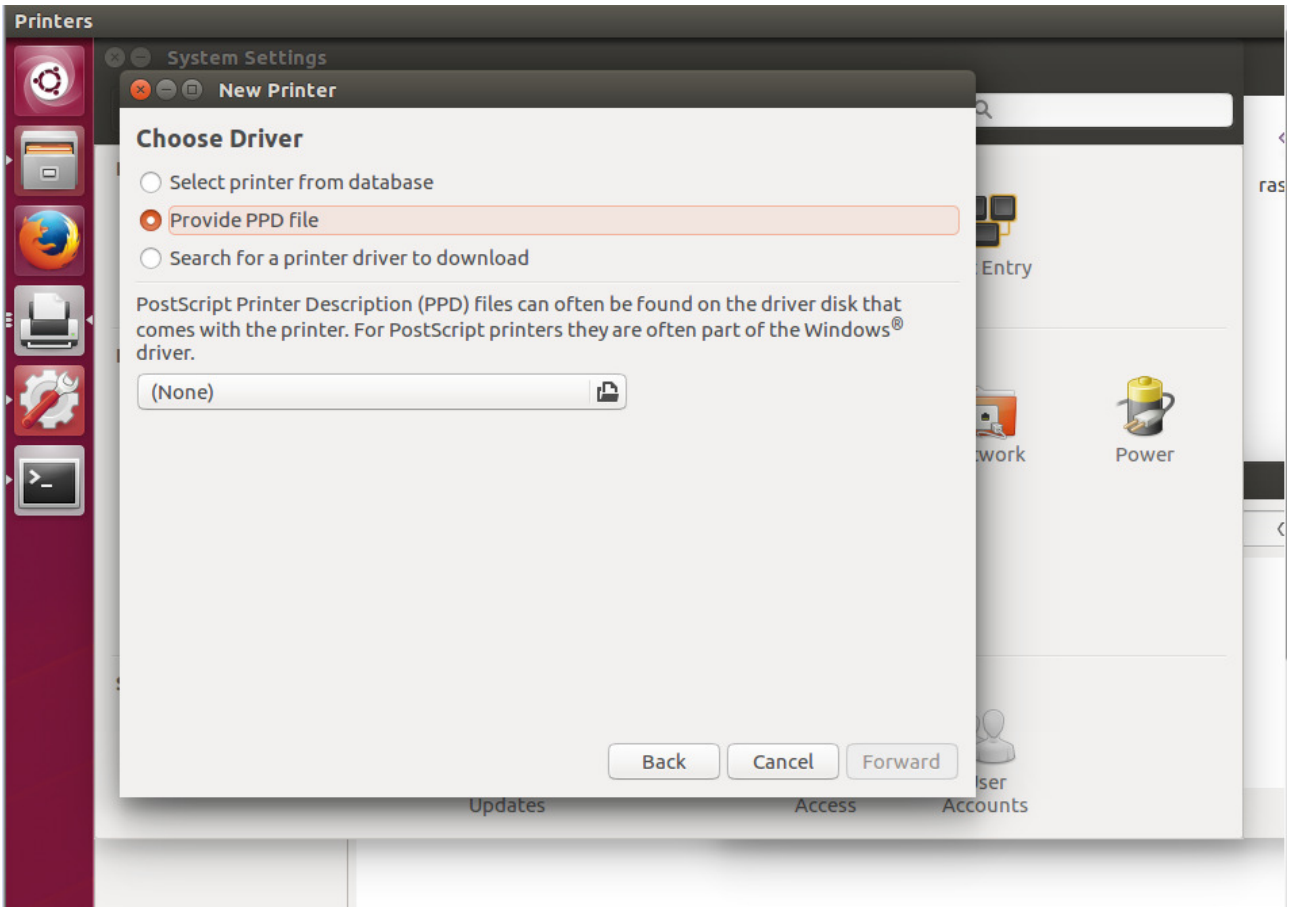
Serial port printer chooses serial port #1,or serial port #n.It is permission denied if it does not show serial port.Please modify serial port device file access right as all people can read and write,or input command in the terminal:sudo chmod a+rw /dev/ttyS0;com1 in windows corresponds /dev/ttyS0 in Linux;com2corresponds 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).



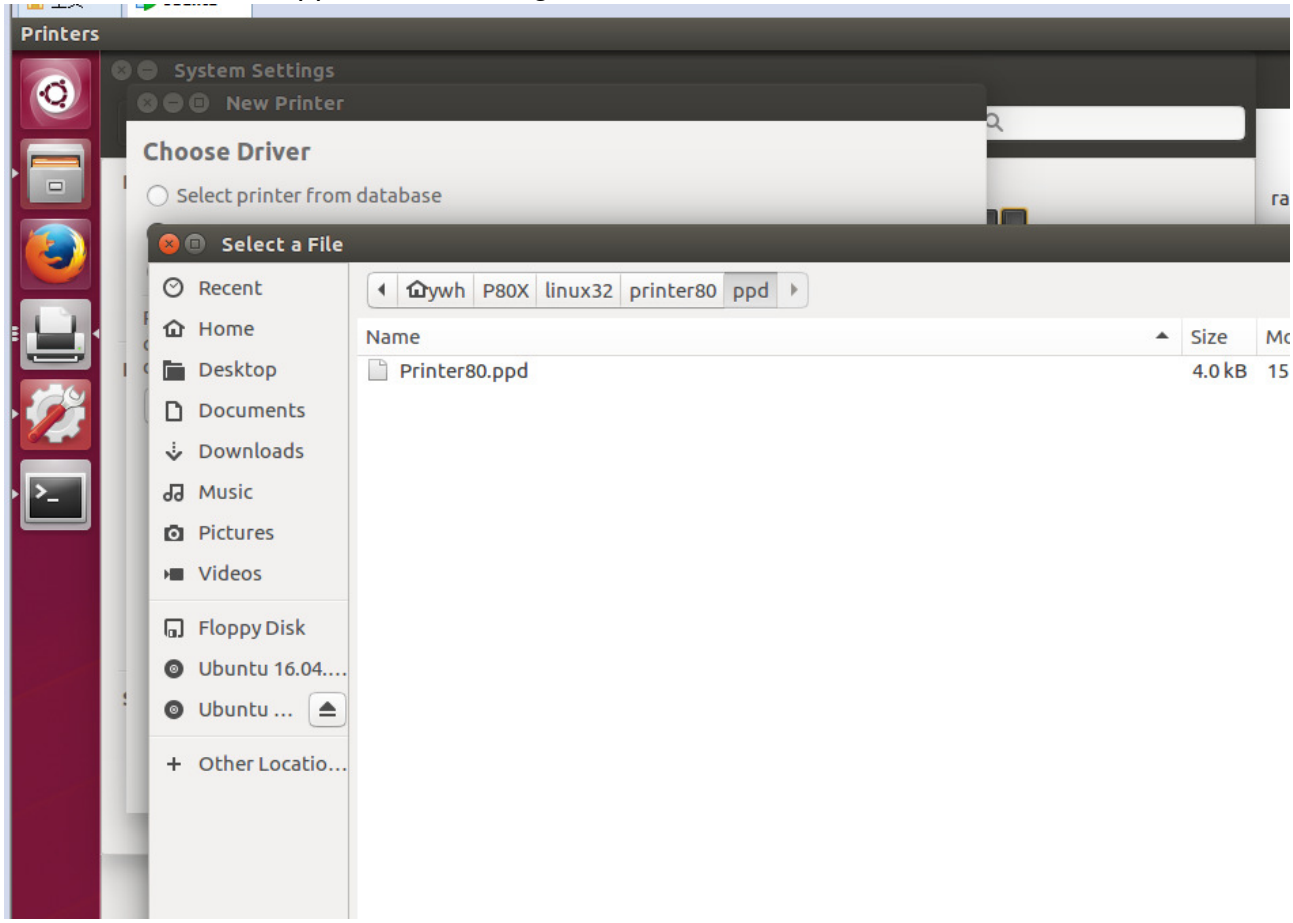
USB printer needs to connect PC first,and then click "add printer".You will find there is a extra Unknown in choice devices.It describes a printer connects to USB port.This is the USB printer what it just connected.


Printers
System Settings
New Printer
Select Device
Devices
LPT #1
Serial Port #1
Serial Port #2
USB Serial Port #1
Enter URI
Network Printer
Settings of the serial port
Baud Rate
Default
Parity
Default
Data Bits
Default
Flow Control
Default
Connection
Connections
Serial Port
Cancel
Forward
Entry
Power
Updates
Access
Accounts

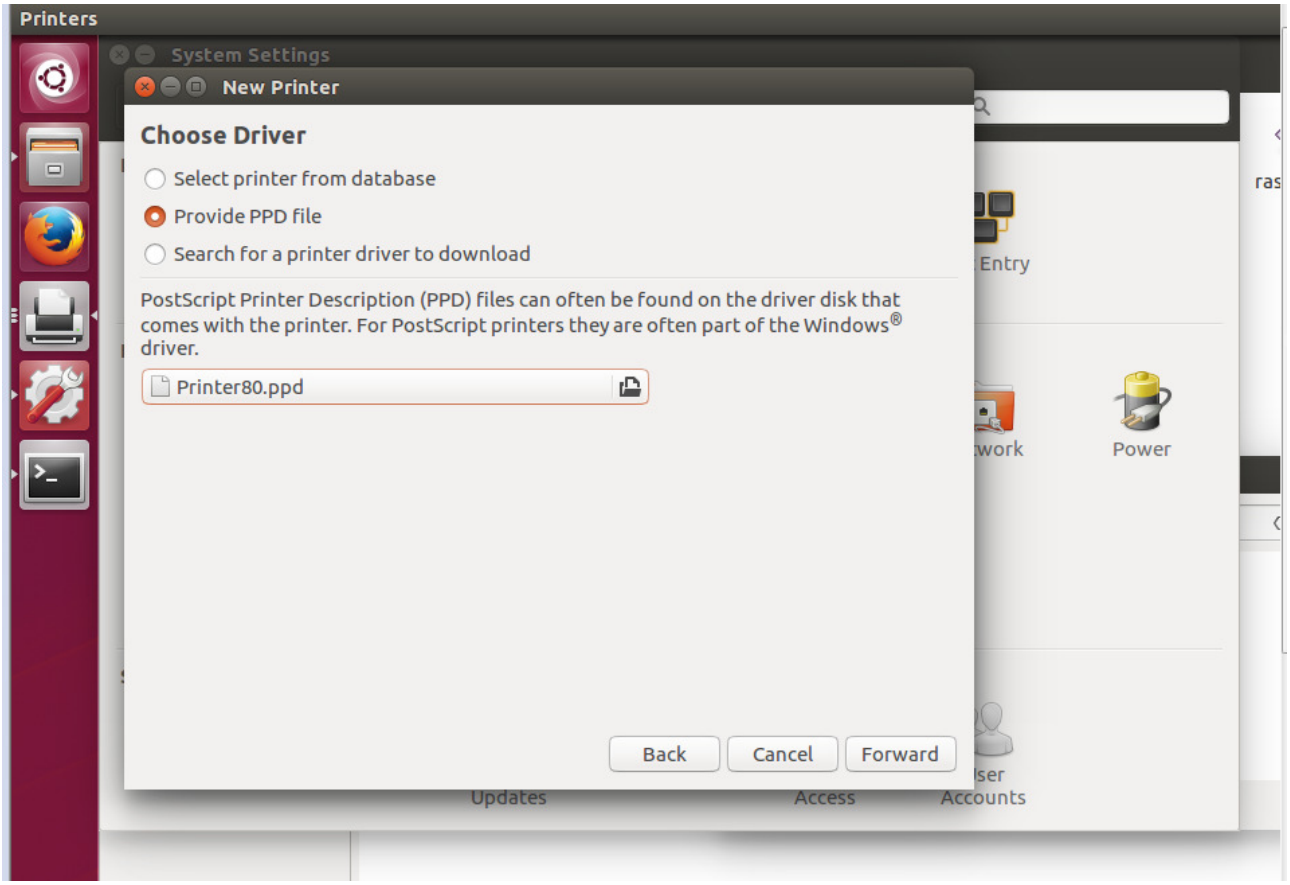
5. You will realize a searching driver hint when click forward after selecting the port.Choose PPD file in the page of choosing driver procedure.



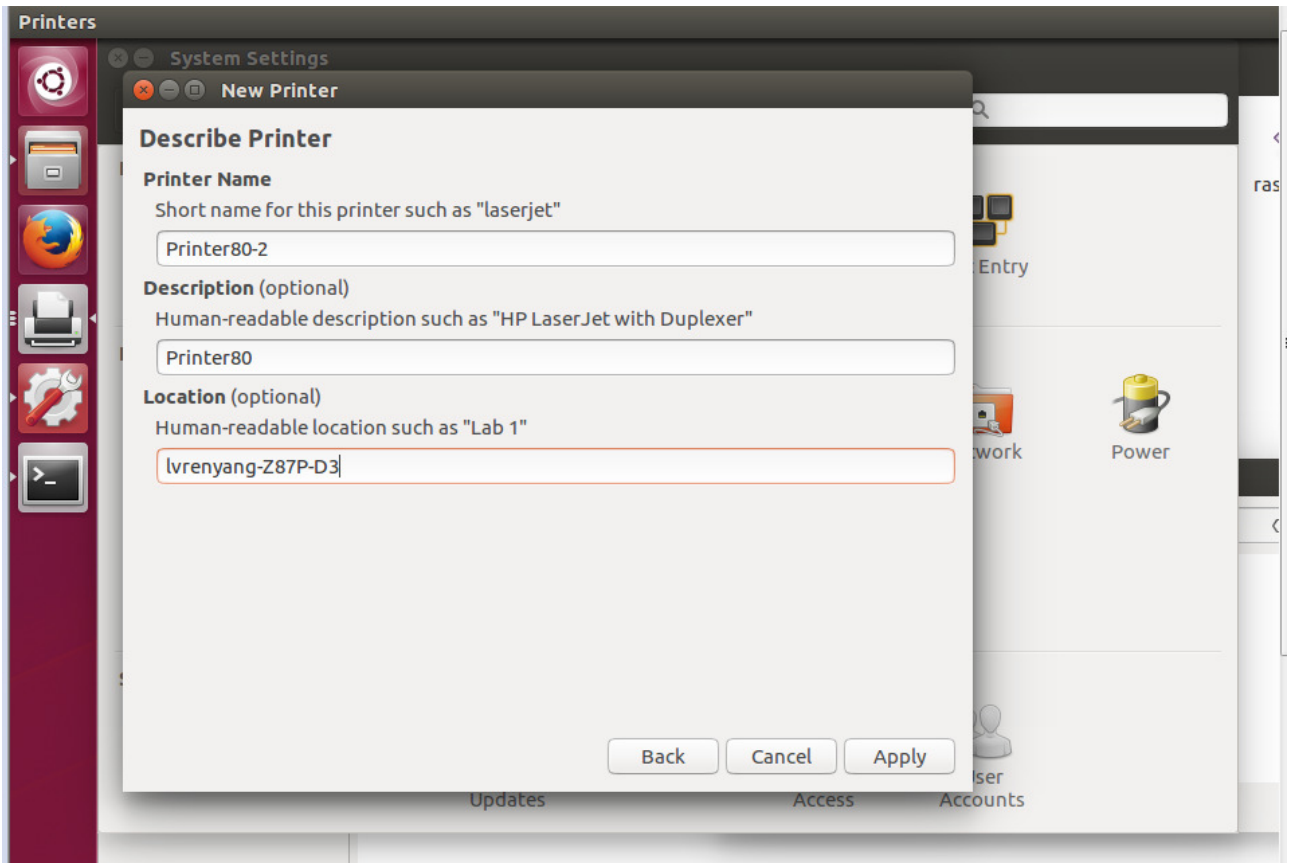
6. Choose Printer58.ppd in the catalogue



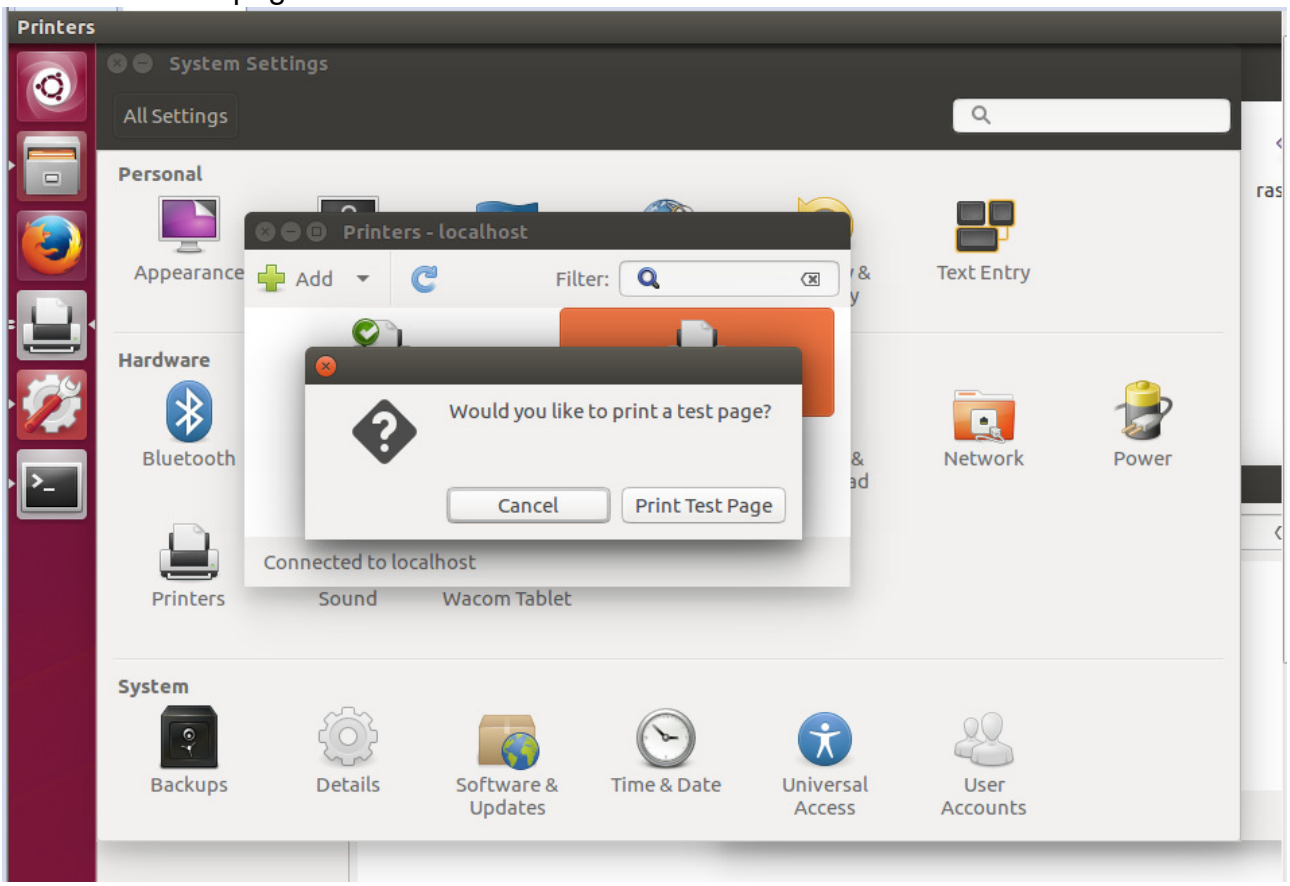
7. Click "Forward" button



8. Click "apply" button.



9. Print self-test page

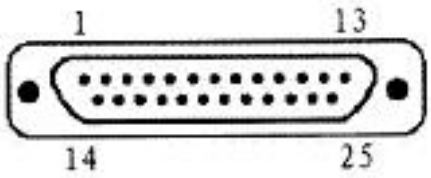


The driver installs correctly if it can print self-test page.

5 Interface pin definitions

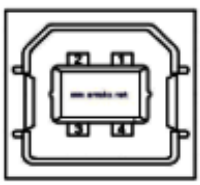
The printer has a cash drawer driver interface and many kinds of communication interfaces: parallel and USB . USB port and cash drawer interfaces are standard interfaces, and it has USB and parallel ports as optional.

5.1 Parallel interface pin definition（DB25M）



Number	Signal	Function	Number	Signal	Function
1	/STROBE	Gate. Low level is effective	10	/ACK	Confirm. Low level is effective
2	DATA0	Data bit is 0	11	BUSY	Busy
3	DATA1	Data bit is 1	12	PE	Paper out
4	DATA2	Data bit is 2	13	SEL	Choose
5	DATA3	Data bit is 3	14	/AUTOFEED	Change line automatically. Low level is effective
6	DATA4	Data bit is 4	15	/ERROR	Error. Low level is effective
7	DATA5	Data bit is 5	16	/INIT	Initialize. Low level is effective
8	DATA6	Data bit is 6	17	/SELIN	Choose input. Low level is effective
9	DATA7	Data bit is 7	18-25	GND	Ground wire

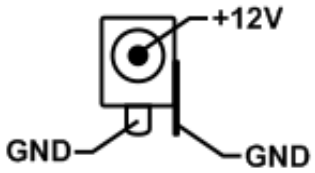
5.2 USB interface pin definition（standard B type female base)



1） Pin definition

Pin Number	Signal name	Typical wire color
1	VBUS	Red
2	D-	White
3	D+	Green
4	GND	Black

5.3 Power interface pin definition（MPC-3-001B）



1）Pin definition

Pin number	Signal name
1	+12V
2	GND
3	GND

2）Interface type: DC-005 Power socket.

5.4 Cash drawer interface pin definition（RJ11-6P6C）

1）Electrical specification

Driver voltage: DC12V

Driver current: Max. 0.8A (within 510ms)

Cash drawer status tests signal: "L" = 0～0.5 V ; "H" = 3～5 V

2) Cash drawer interface socket uses RJ-11 6P type connector;

3) Interface signal definition

Pin number	Signal	function
1	FG	Printer cover
2	DRAWER 1	Cash drawer 1 driver signal
3	DRSW	Cash drawer status detection signal
4	VDR	Cash drawer driver power
5	DRAWER 2	Cash drawer 2 driver signal
6	GND	Common ground circuit

⚠ **Notes:**

1) Prohibit socket with power to pull out communication wire plug.

2) Please avoid to parallel with strong power when wring communication cables.

3) Communication cables use with shielded cables.

6 Faults handling

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

6.1 Printer does not work

Problems	Probably reasons	Solutions
The Power indicator is not light. Printer does not work	Printer is not power on.	Power on printer
	Printer switch is not on.	Press down the "O" side of printer button
	PCB is damaged	Contact with agents or factory directly

6.2 Indicator error

Problems	Probably reasons	Solutions
Paper indicator is on constantly	Paper maybe out	Load a new paper roll
Paper out indicator light is on constantly Error indicator is on constantly	Paper roll warehouse cover maybe lit up	Close paper roll warehouse cover correctly
Error indicator is blinking	Print head is overheated	Power off printer power, and wait that print head temperature returns normal.
	Voltage is too high	Use assigned voltage to print
	Voltage is too low	Use assigned voltage to print

6.3 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 roller is dirty	Clean print head or printer rubber roller
	Print head error	Contact supplier or factory directly