User 's manual

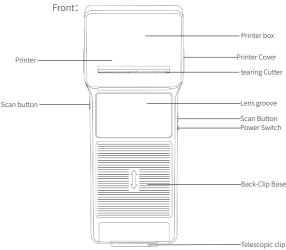
# BROCHURE

### **Attention**

- Read this user manual carefully before using this product
- 2. The charging voltage of this product is 5V1A or 5V2A.
  Do not use a fast charger . Please make sure you are using the original cable from package
- 3. Copyright and Patent Rights
  This product and its accessories (including firmware, software, documentation, appearance, etc.) has applie
- software, documentation, appearance, etc.) has applied for a number of patents, copyrights and software copyrights.
- 4. Our company reserves the right to make changes to any product to improve reliability, function or design. Our company shall not be liable for any liability arising out of or in connection with the application or use of
- any product, circuit, or other application
- 5. Accessories
- Standard: Back-Clip All in One Device 1 unit,
- Type-C 1 unit, User Manual 1 unit
- The contents of this manual are subject to change without notice.

1. Appearance	1-3
2.Printer Parameter	4
3.Scanner Parameter	5
4.NFC Function (Optional)	6
5. Environment	7
6.Regulations	7
7.Programming code of Scanner	8
7.1.Default Setting&Version Info	8
7.2.Serial Port	8
7.3.Baudrate	8
7.4.Scan mode	9
7.5.Encoding format	10
7.6.Positioning light	10
7.7.Illumination light	11
7.8.Terminator	11
7.9.Reverse code	12-13
7.10.Case conversion	13
7.11.Invoice mode	13
8.SDK	14
PrinterInstance	14-15
Table	16
Barcode	17
Canvas Print	18
USB Master Mode can't find the USB device solu	tion19
9. Disclaimer	20

# 1.Appearance description:



Telescopic cl
Power Switch: press and hold for 3 seconds to turn on/off.

and tap to feed paper when turned on

Scan Button: Press Button to Scan barcodes

Tearing Cutter: Tear the paper after feeding

Printer Cover: Open the printer and load paper roll

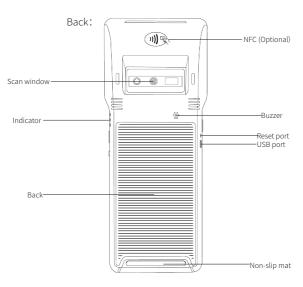
Printer box: Load57\*40 Roll Paper。Printer: Thermal Printer, Print receipt

Lens Groove: To Make camera Better and more stable

Back-Clip Base: Compatible MAX size 6.7 inch phone

Telescopic clip: Max length 35MM

1



Scan Window: 2D High Speed Scan module

Indicator: Green: Always on when Charging, always off when fully charged

 ${\sf Red:} Error\ status, normally\ off, flashing\ when\ paper\ is\ running\ out.$ 

Blue:Flashing when bluetooth is not connected.

Always on when bluetooth connected

Reset port: Press 2 seconds for reset device

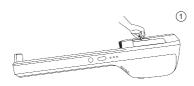
USB port:type-c data port

#### Printer:

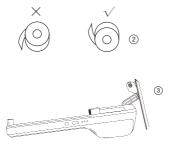
Support 58mm thermal paper (57mm\*40mm)

Open the printer through the printer cover on the printer (as shown in Figure 1)

Do not force open the paper tray to prevent the print head gear from being worn.



Follow the steps shown in the picture to load roll paper into printer box Then pull out part of the paper from the outside of the tray Tearing cutter(as shown in Figure 2), and close the cover (as shown in Figure 3)



Attention: If the printer prints out paper without any words Check orientation of the paper roll is not reversed.

# 2. Printer Parameter:

Resolution	203DPI
Print method	Thermal
Print speed	3-5inch/sec
Print width	48mm
Tear paper	Yes
Paper Roll	57MMx40MM
Charging voltage	5V
Communication	Bluetooth
Fonts	GBK or code page+ASCII (2MB)
Roll diameter	40mm
English	ASCII9×17/12×24
Print content	English,Chinese,Numbers,symbols,pictures,barcodes.
Working voltage:	DC7.4V, 3.0A
1D	CORD39 CORD128A/B/CEan13
2D	Printing as image
Contol panel	Power、FEED
Commands	ESC/POS
Black tag inspection	Support
Battery	3000mAh/7.4V
Print time	Standby≥30days
RAM	8K

# 3. Scanner Parameter:

Performance	Sensor	640×480 CMOS			
	Illumination	White LED			
	Focus	Red LED			
	Decode	2D:QR Code、Micro QR、Data Matrix、			
	Capability	PDF417 Code 128、EAN-13、EAN-8、UPC-E、			
		UPC-A、ISBN、ISSN、Code11、			
		1D:ITF-25 (Interleaved 2 0f 5) 、Code39、			
		Code93、Code32、Codabar Matrix 2 of 5、			
		Industrial 25、IATA 25、MSI Plessey			
		Code93、Codabar			
	Resolution	≥5mil			
	Scan of depth	EAN-13 45mm-269mm (13mil 13 Byte)			
		Code39 35mm-119mm (5mil 7 Byte)			
		Code128 43mm-310mm (13mil10 Byte)			
		QR Code 19mm-185mm (15mil 30 Byte)			
		Data Marix 45mm-116mm (10mil30 Byte)			
		PDF 417 40mm-105mm (6.67mil 30 Byte)			
	Print contrast	≥10%			
	Scan angle	rotate 360°, elevation $\pm$ 55°, deflection $\pm$ 55			
	field of view	orizon 36°, Vertical 27°			
Mechanical parameters	Working Voltage	DC 3.3V			
	Working Current	150mA			
	Power consumption	750mW			
	Standby Current	70mA			

# 4.NFC(Optional)

Regulation	ISO14443 TypeA/B, M1	
Reading	NXP M1 S50 0~4 cm	
distance	ID card 0~2.5cm	
Function	Continuous card reading/command card reading,	
	adding prefixes and suffixes, terminators	
Output	Decimal forward or reverse output can be set,	
	hexadecimal forward or reverse output can be set	

#### 5.Environment:

Working temp:32°F to 104°F/0°C to 40°C Storage temp:-40°F to 140°F/-40°C to 55°C Humidity: 5%-95% (non-condensing) drop specification:1.5 meter fall drop to concrete

Ambient light anti-winding ability: It will not be affected by normal office and factory lighting or direct exposure to sunlight

Electrostatic discharge: meet the requirements of

Electrostatic discharge: meet the requirements of 15kV air discharge and 8kV contact discharge

# 6 Regulation

L1950, CSA C22.2 No.950,

EN60950/IEC950 EMI/RFI:FCC Part 15 Class B.

European Union EMC Directive, Taiwan EMC,

Environment: Compliance RoHS directive 2002/95/EEC

# 7.Programming code: Default Setting&Version info



Factory default



Version info

# Serial interface



Serial port

#### **Baudrate**



4800



9600



115200

#### Scan Mode

In this mode, scanner working by pressing the button



Manual mode

In sensing mode, the scan module will monitor the captured image, output the information after reading successfully, and re-enter the state of monitoring scene changes.



Sensing mode

The scanning device will always be in working state.



Continuous mode

## **Encoding format**



\*Output GBK



Output UNICODE



Output UTF8



data output

#### Positioning light

Normal: The aiming light flashing during scanning only Always on: The aiming light is always on in working state Always off: The aiming light is always off.



Normal



Always off



Always on

#### Illumination

Normal: The light will be turned on when scanning only Always on:The light will be turned on always when device power on Always off: The light always off



Normal



Always on

#### Terminator



Add terminator



Add CR





Cancel terminator



Add CR+LF

Note: You need to turn on the add terminator before adding a carriage return or carriage return + line feed

### **Reverse Setting**



Enable All reverse code



Enable 1D revese code



Enable PDF417 reverse



Enable DM reverse



Disable All reverse code



Disable 1D revese code



Disable PDF417 reverse



Disable DM reverse



Enable QR reverse



Disable QR reverse

#### case conversion



\*Normal



Case inversion



Capslock Invoice mode



All lowercase



\*Enable



Disable

a) //use BluetoothDevice

#### 8 SDK

zoom in

printlmage(Bitmap bitmap): printlmage(String bitmap, int left); printlmage(Bitmap bitmap, int multiple); printImage(String bitmap, int left, int multiple); e) Print table. Use Table class set table data.

PrintBarCode(Barcode barcode)

printTable(Table table)

### Class "PrinterInstance" provides the following method: PrinterInstance(Context context, BluetoothDevice bluetoothDevice, Handler

handler) b) //use UsbDevice PrinterInstance(Context context, UsbDevice usbDevice, Handler handler) c) //use wifi address and port number PrinterInstance(String ipAddress, int portNumber, Handler handler) Handler: use for receive connect state change. Use constant value: PrinterConstants.Connect.SUCCESS; PrinterConstants.Connect.FAILED; PrinterConstants.Connect.CLOSED; 2. Open and close connection: a) openConnection() open connection. b) closeConnection() close connection. Common method: a) Init printer. init() b) Print common text. printText(String content) c) Send byte data. sendByteData(byte[] content)\
user can use this method send command to printer if the SDK don' t provide the method in printer development document, such as: byte[] command = new byte[3]; command[0] = 0x1B: command[1] = 0x31command[2] = 49: sendByteData (command); d) Print image. bitmap is image: left is left margin: multiple is stylus printer multiple for

Print barcode. Use Barcode class to set barcode data.

```
g) Cut pager
cutPaper()
```

h) Ring buzzer, param is ring time

ringBuzzer(byte time)

i) Open cashbox

openCashbox(boolean cashbox1, boolean cashbox2) 4. Set method:

a) Set character encoding of print text.

setEncoding(String encoding)

b) Set character width and height, x is width, y is height, 0<=x,y<=7, default is 0

setCharacterMultiple(int x, int y)

c) Set left edge distance of print area, usually nH value is 0.

setLeftMargin(int nL, int nH)

d) Set print model.

setPrintModel(boolean isBold, boolean isDoubleHeight,

boolean isDoubleWidth, boolean isUnderLine)

isBold: bold

isDoubleHeight: double height. isDoubleWidth: double width

isUnderLine: under line.

e) Set printer (Command constant start with "PrinterConstants.Command." setPrinter(int command)

INIT PRINTER: init printer( equal to method init() )

WAKE PRINTER: wake up printer PRINT AND RETURN STANDARD: page model print and return to standard

PRINT AND NEWLINE: print and move to next line.

PRINT AND ENTER: print and enter.

MOVE NEXT TAB POSITION: move to the position of next tab.

DEF LINE SPACING: restore default line space.

setPrinter(int command, int value) PRINT AND WAKE PAPER BY LNCH:

print and wake paper "value" height (Inch) ....

PRINT AND WAKE PAPER BY LINE: print and wake paper "value" lines CLOCKWISE ROTATE 90: clock wise rotate 90degree, 0-false, 1-true

LINE HEIGHT: Set line height

CHARACTER RIGHT MARGIN: Set character right margin

ALIGN: Align model. Three model' s const value is:

ALIGN LEFT: left margin

ALIGN CENTER: center margin

ALIGN RIGHT: right margin

#### Table class

1. Table construct.

Table(String column, String regular, int[] columnWidth)

Parameter column is table title column, separate by the regular. Such as:" index, unit price, number, price".

Parameter regular: the separator of the column data. Such as","

Parameter Column width: width of all columns. One Chinese character width is 2, one English character is 1.

2. Add a row data.

addRow(String row)

Add a row data to the table. Data form should equals with table title. If the table cell width exceeds the limit, printer can word wrap, if want manual line, can add "\n" in where you want.

3. Set Table column align left. Default is aligning right. setColumnAlignLeft(boolean left)

Barcode class

1. Construct:

Barcode(byte barcodeType)

Barcode(byte barcodeType, int param1, int param2, int param3)

Barcode(byte barcodeType, int param1, int param2, int param3, String content)

i. barcodeType is barcode type.

Constant start with "PrinterConstants.BarcodeType." :

One-dimensional: UPC\_A, UPC\_E, JAN13, JAN8, CODE39,

ITF, CODABAR, CODE93, CODE128.

Two-dimensional: PDF417, DATAMATRIX, ORCODE,

ii, param1, param2, param3 are barcode param s:

Bar Code type is One-dimensional:

param1: bar code width, 2<=n<=6, default is 2.

param2: bar code height, 1<=n<=255, default is 162.

param3: bar code note position, 0-don' t print, 1-above,2-below,3-both.

Bar Code type is Two-dimensional:

a) PDF417

param1: The characters per line, 1<=n<=30.
param2: Error correction level, 0<=n<=8.

param3: Longitudinal magnification.

b) DATA MATRIX

param1: height, 0<=n<=144(0:auto select).

param2: width, 8<=n<=144(when param1 is zero, param2 Invalid).

param3: Longitudinal magnification.

c) QR CODE

param1: Graphical version, 1<=n<=30(0:auto select).

param2: Error correction level,

n = 76,77,81,72(L:7%,M:15%,Q:25%,H:30%).

param3: Longitudinal magnification.

iii. Content is barcode data.

#### CanvasPrint class

 Init CanvasPrint, Parameter is PrinterType. If use this method. The canvas was init to max width. Such as T9. the width is 72mm.

init(PrinterType printerType)

2. Set font property. Parameter is a FontProperty type,

setFontProperty(FontProperty fp)

FontProperty is a collections of font property. User can call method of setFont() to set detail property.

If don't use this method, you also can use the following method:

setLineWidth(float w) set paint width.

setTextSize(int size) set text size.

setItalic(boolean italic) set whether italic.

setStrikeThruText(boolean strike) set whether strikethrough.

setUnderlineText(boolean underline) set whether under line.

setFakeBoldText(boolean fakeBold) set fake bold.

3. Draw text on the canvas. Parameters x and y is text coordinate

in the left bottom corner. Y must greater than 0.

drawText(String nStr)

drawText(float x, String nStr)

drawText(float x, float v, String nStr)

 Draw a line. Parameters startX, startY is start coordinate; stopX, stopY is end coordinate.

drawLine(float startX, float startY, float stopX, float stopY)

- 5. Draw a rectangle. Parameters are the distance of edge to the left and top. drawRectangle(float left, float top, float right, float bottom)
- Draw an ellipse. Parameters is coordinate of edge which a bounding rectangle of the ellipse.

drawEllips(float left, float top, float right, float bottom)

7. Draw an Image. "image" is bitmap file of image.

drawImage(Bitmap image);

drawImage(float left, Bitmap image);

drawImage(float left, float top, Bitmap image);

8. Get the canvas image. Return a bitmap.

getCanvasImage();

9. Set text aligns right. Against the special language. Such as Arabic.

setTextAlignRight(boolean alignRight);

Set print new line if the text exceeds the valid width.

setTextExceedNewLine(boolean newLine); 11. Avoid a word was split to Independent letter. Default is space.

setUseSplit(boolean useSplit);

setUseSplitAndString(boolean useSplit, String splitStr);

#### Enable USB Host API support

- 1. adb pull /system/etc/permissions/tablet core hardware.xml
- 2. Update that file and create android.hardware.usb.host.xml as specified by
- Greg-q.
- <feature name="android.hardware.usb.host"/>
- </permissions>
- 3. adb push android.hardware.usb.host.xml /system/etc/permissions
- 4. Push handheld\_core\_hardware.xml or tablet\_core\_hardware.xml to permissions:
- adb push tablet core hardware.xml /system/etc/permissions
- 5. Reboot.

#### 9. Disclaimer

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