Shenzhen Alacrity Barcode Technology Q10 Back-Clip Print-Scan All-In-One Device User Manual

Contents

SHENZHEN

Shenzhen Alacrity Barcode Technology Q10 Back-Clip Print-Scan All-In-One Device

Features

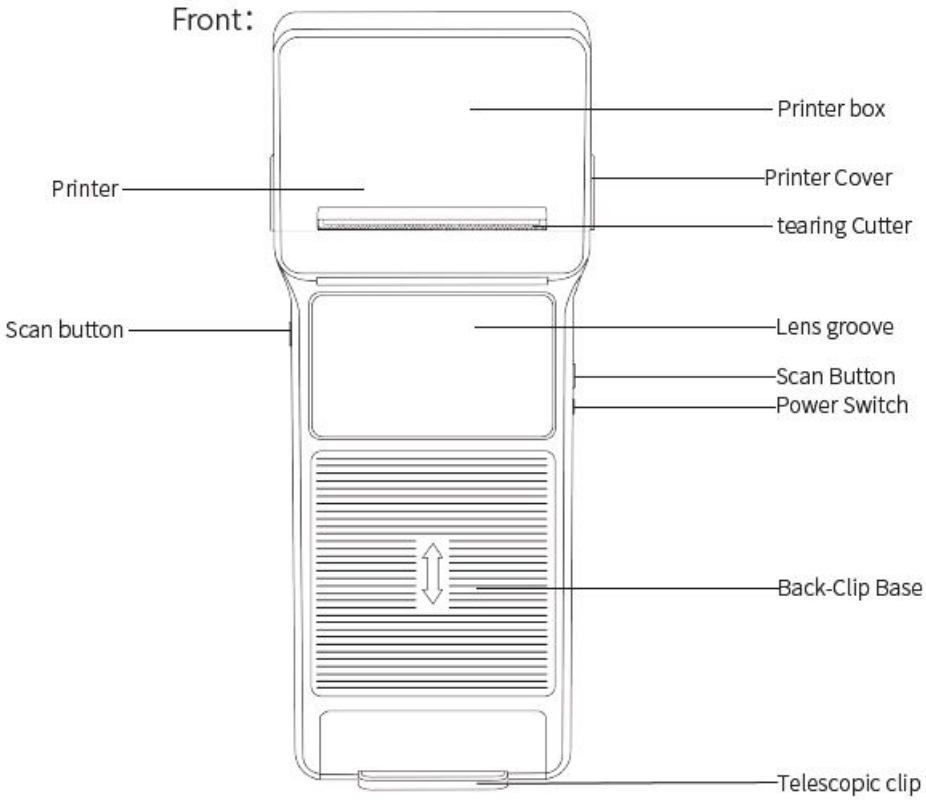
1. Built-in thermal printer, which can print tickets, menus, invoices, etc. It can replace the PDA handheld terminal, which is used in various industries. There are at most one set and a wide range of applications.
2. The built-in high-precision QR code scanning module can accurately scan various 1D/2D barcodes such as payment, commodities, labels, etc. It is suitable for commercial, retail, cashier, warehousing, logistics inventory and other industries.
3. Built-in Bluetooth module.
4. Compatible with Bluetooth and devices of Android, IOS, HarmonyOS and other systems.
5. Support a variety of third-party software printing, such as: takeaway software, printing software, cash register software.
6. Large-capacity 3000mAh battery, long-lasting battery life, continuous work, and longer standby time.
7. It is more convenient to carry and use. There is no need for ribbon, ribbon, ink, and it can be easily printed with thermal printing paper, which is efficient and convenient.

Attention

1. 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 applied for a number of patents, copyrights and software copyrights.

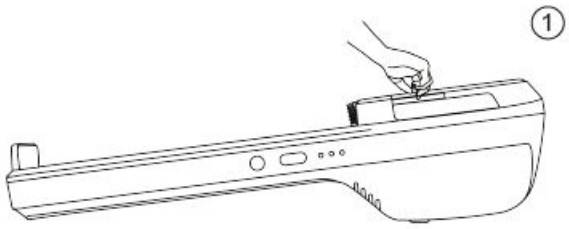
4. Our company reserves the right to make changes to any product to improve reliability, function or design. Our company shall not be liable for any liability arising out of or in connection with the application or use of any product, circuit, or other application
5. Accessories
   Standard Back-Clip All in One Device 1 unit,
   Type-C 1 unit, User Manual 1 unit
6. The contents of this manual are subject to change without notice.

Appearance description

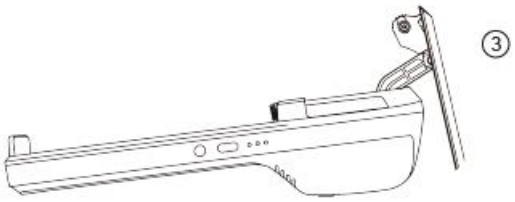


- Power button: press and hold for 3 seconds to turn on/off, and tap to feed paper when turned on
- Power off status Press the button for 3sec to power on (1 beep)
- Power on status Press the button for 3sec to power off (3 beeps)
- Power on status Press the button for 5sec to start self-print test
- Scan Button Press the button to scan barcodes
- Tearing Cutter Tear the paper after feeding
- Printer Cover Open the printer and load the paper roll
- Printer box Load57*40 Roll Paper
- Printer Thermal Printer Print receipt
- Lens Groove To Make the camera Better and more stable Back-Clip Base Compatible MAX size 6.7-inch phone Telescopic clip Max length 35MM

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 paper (as shown in Figure 3)



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

Printer Parameter

Resolution Print method	203DPI 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+ASCI I 2MB
Roll diameter English	40mm ASCII9×17/12×24
Print content	
Working voltage:	DEnCgl7is.h4,CVh in3es.e0,NAumbers,symbols,pictures,barcodes.
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

.Scanne Performance	r Param Sensor	eter 640×480 CMOS
	Illumination	White LED
	Focus Decode	Red LED
	Capability	2D:QR Code Micro QR Data Matrix 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 Matri x 2 of 5 Industrial 25 IATA 25 MSI Plessey Code93 Codabar
	Resolution	≥5mil EAN-13 45mm-269mm (13mil 13 Byte)
	Scan of depth	Code39 35mm-119mm 5mil 7 Byte Code128 43mm-310mm (13mil 10 Byte) QR Code 19mm-185mm (15mil 30 Byte) Data Marix 45mm-116mm 10mil30 Byte PDF 417 40mm-105mm (6.67mil 30 Byte) ≥10%
	Print contras	rotate 360° elevation ± 55° deflection ± 55
	Scan angle	orizon 36° Vertical 27°
	field of view	
Mpeacrahmaneitce arls	Working Voltage	DC 3.3V
	Working Current	150mA 750mW
	Power consumpti o	
	Standby Current	70mA

Test Software Download

Pls download software from below website: **https://www.pgyer.com/V6YR**
Or scan below QR code to download software (Currently, Support Android system only)

(software)

1. Turn on Bluetooth, search for Barcode+Printer BT and click it to connect with your phone.

2. After connecting successfully→Run software →
   Click Bluetooth option“Open connection Bluetooth ”
   Click Barcode+Printer BT→It can be used after connecting successfully SDK can be downloaded from below website: **https://share.weiyun.com/MMzfcghP**
   Or scan below QR code to download the software

(SDK)

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 15kV air discharge and 8kV contact discharge

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

Programming code

Default Setting&Version info

Factory default

Version info

Serial interface

Serial port

Baudrate

4800

9600

115200

Scan Mode

In this mode, trigger the scan by pressing the key

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 UTF8

Output UNICODE

data output

Positioning light

Normal The aiming light flashing during scanning only Always on: The aiming light is always 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 off

Always on

Terminator

Add terminator

Cancel terminator

Add CR

Add CR+LF

Reverse Setting

Enable All reverse code

Disable All reverse code

Enable 1D revese code

Disable 1D revese code

Enable PDF417 reverse

Disable PDF417 reverse

Enable DM reverse

Disable DM reverse

Enable QR reverse

Disable QR reverse

case conversion

*Normal

Case inversion

Capslock

All lowercase

Invoice mode

*Enable

Disable

SDK

1. **Class "PrinterInstance" provides the following method:**
   - **a)** //use Bluetooth device
     PrinterInstance(Context context, BluetoothDevice Bluetooth device, Handler handler)
   - **b)** //use USB device
     PrinterInstance(Context context, USB device USB device, 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)** close connection() close connection.
3. **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 a command to printer if the SDK don't
     provide the
     the method in printer development documents, such as
     byte[] command = new byte[3];
     command[0] = 0x1B;
     command[1] = 0x31;
     command[2] = 49;

sendByteData (command);

- **d)** Print image.

  a bitmap is an image left is left margin multiple is stylus printer multiple for zoom in.

  print image(Bitmap bitmap);

  print image(String bitmap, int left);

  print image(Bitmap bitmap, int multiple);

  print image(String bitmap, int left, int multiple);
- **e)** Print table. Use Table class set table data. printTable(Table table)
- **f)** Print barcode. Use Barcode class to set barcode data. PrintBarCode(Barcode barcode)
- **g)** Cut pager

  cutPaper()
- h) Ring buzzer, param is ring time

  ringBuzzer(byte time)
- i) Open cashbox

  open cash box(boolean cashbox1, boolean cashbox2)

4. **Set method**
   - **a)** Set character encoding of print text. encoding(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. setpoint model(boolean isBold, boolean is double height,

     boolean is double width, boolean isUnderLine)
     - bold bold
     - is double height double height.
     - is double width double width.
     - isUnderLine under line.
   - **e)** Set printer (Command constant start with “PrinterConstants.Command.” set printer(int command)
     - INIT_PRINTER init printer(equal to method init())
     - WAKE_PRINTER wake up the 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. set printer(int command, int value)
     - PRINT_AND_WAKE_PAPER_BY_LNCH
     - print and wake paper “value ” height (lnch ….
     - 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[] column width) Parameter column is table title column, separate by the regular. Such as:"index, unit price, number, price".
   Parameter is 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 barcode type)
   Barcode(byte barcode type, int param1, int param2, int param3)
   Barcode(byte barcode type, 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 QRCODE
   - **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

1. 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. The parameter is a FontProperty type,
   set on property(FontProperty fp)
   FontProperty is a collection of font properties. Users can call a method of setFont()
   to set detail property.
   If don't use this method, you also can use the following method:
   set line width(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 y, String nStr)
4. Draw a line. Parameters startX, startY is started coordinate; stops stopY is end coordinate.
   drawLine(float startX, float startY, float stops, float stops)
5. Draw a rectangle. Parameters are the distance of edge to the left and top. draw rectangles(float left, float top, float right, float bottom)
6. 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);
10. 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.

android.hardware.usb.host.xml contains the following lines:

<permissions>

<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.

Disclaimer

The company does not assume any responsibility for losses caused by natural disasters (such as earthquakes, floods, etc.) that exceed our ability to act.
The company is not responsible for any product liability associated with or arising from the application or use of any product, circuit, or other application described herein.About the system, equipment, machinery, materials, methods or processes that may be used in this product, or any combination with this product, the company does not express, imply, estoppel permission in any other means in connection with a patent or patent.
The company only provides implied licenses for the equipment, circuits and subsystems included in its products.
The company does not assume any responsibility for the loss caused by improper use of communication hardware or software not specified. The company does not assume any form of guarantee and technical support responsibility for third-party software used by this product.

FCC Rules

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

  Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment

Documents / Resources

	Shenzhen Alacrity Barcode Technology Q10 Back-Clip Print-Scan All-In-One Device [pdf] User Manual Q10, 2A4TH-Q10, 2A4THQ10, Q10 Back-Clip Print-Scan All-In-One Device, Back-Clip Print-Scan All-In-One Device

References

- Tencent Drive
- PrintDemoV3.0