# FQA: RT206, RT207, RT208, RT209, RT230H RT231, RT232--BARCODE SCANNER

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Q. Can the barcode scanner be connected directly via TTL-RS232? What kinds of interface are supported?

A. Yes. The barcode scanner itself with 12 pins TTL-RS232 interface, but if you buy the development kit board together, the interface can be USB-HID, USB Virtual COM, or DB9 RS232.

Q. What is the difference between USB Virtual-COM and USB-HID?

A.USB HID interface is keyboard simulation interface, no need driver install, it's plug-and-play. The decoded data can be output directly to any document just like you type and input by keyboard. For USB-Virtual COM interface, a driver is required, and only software that support serial signal transmit can communicate with the barcode scanner, and the software's parameters (COM port number, baud rate...) also must be properly configured. If for test purpose, you can ask RTscan sales representatives for COM tool test software.

Q. What is the best reading distance of the barcode scanner?

A. Please refer to the product integration guide, the "best distance" related to the barcode type and barcode size. But first of all, we need make sure the barcode image is fully visible for the scanner. And if a bar code is very small, the nearest distance can be around 3cm-5cm, and if a bar code is lower density and big size, the barcode scanner would read it as far as 50cm (different for different scanner). But for most of bar codes, the better distance is around 10cm-25cm,

Q: Does the barcode scanner support sense / presentation mode?

A: Yes, All of RTscan barcode scanner modules support sense / presentation mode, continuous mode and command trigger mode.



Q: Does the barcode scanner support to read multiple bar codes one time simultaneously?

A: Only our RT200 /RT220 series barcode scanners support this function.

Q: How to fix the barcode scanner in my terminal?

A: All of RTscan's barcode scanner modules with fix screw holes, we provide structure introduction in our integration guide, please refer to the document. We also provide useful suggestion about the window /glass in the integration guide.

Q. Can the barcode scanner work on Linux, Android system?

- 1. Generally, if you use TTL interface, the barcode scanner can work with any OS, because the only thing you need to do is make your system communicate with the scanner via the 12pins.
- 2. If your system with DB9 RS232 or USB-HID interface, then you can buy our development kit board together which with DB9 RS232 or USB-HID interface, and then the barcode scanner can work with Linux or Android because DB9 RS232 or USB-HID interface no need to install driver.
- 3. If you need the barcode scanner work with USB virtual COM port, we do not ensure the scanner work with Linux or Android, and you can test it for compatibility because the scanner's driver is not optimized for Linux and Android.

Q: Does the barcode scanner module can capture image?

A: No, not support, but if you need this function, you can use our RT203 scanner that support image capture.

Q. How to improve the scanning speed?

A.

- 1. Setup the time interval between the same or different bar codes to be shorter, you can also consider to setup it to continuous mode.
- 2. Adjust the sensitivity of the scanner according to the ambient light. If it's dark, reduce the sensitivity and if bright enough, increase the sensitivity.
- 3. Disable all of bar codes that you don't need to scan during usage.



Q. The barcode scanner read bar code but without any output

#### A.

If you test the scanner with USB HID development kit board, please use the scanner to scan setting code: "Enter setup"> "USB HID-KBW"

If you test the scanner with USB virtual Com kit board or DB9 RT232 kit board:

- 1. Check if you chose the wrong COM port (from device manager, check which COM port is connected with the bar code scanner)
- 2. Check if you chose the wrong baud rate (the baud rate must be the same with the scanner's baud rate, you can change the scanner's baud rate easily by scanning setting codes)

Q: Bar codes cannot be read.

#### A:

- 1. Find out the bar code type and verify that the bar code type is enabled. If the bar code parameters include check digit verification, select the Disable option.
- 2. If you do not know the bar code type, setup to enable all symbologies.
- 3. If they are inverse bar codes (white code images on a dark background), enable the Video Reverse feature.
- 4. Move the barcode scanner near or far to the bar code and try again.

## Q: Incorrect output.

### A:

- 1. If this problem happens to all bar codes and additional characters appear before/after bar code data, disable all prefix/suffix.
- 2. If this problem only happens to some bar codes and matches one of the following situations:
- a) Incomplete bar code data: Enable the check digit verification.
- b) Both the first and last characters are asterisks: Disable the transmission of start/stop characters of

Code 39.

c) "a" transmitted as "+A": Enable Code 39 Full ASCII.



- Q: Illumination and aiming beams are OFF.
- A: Solution:
- 1. Verify that the engine is properly powered up, or:
- 2. Send "?" to the engine. If the engine returns a reply of "!", then send programming commands to turn on illumination and aimer.
- Q. The barcode scanner does not work after the setting is completed, and the buzzer warns when scanning?
- A. 1. Re-plug.
  - 2. Scan the Reset Factory setting code.
- Q. Can the barcode scanner connect to the Microcontroller?
- A. Normally yes, you can connect the barcode scanner with microcontroller via the TTL interface, and remember connect the TX of the scanner to the RX of the microcontroller, and RX of the scanner to the TX of the microcontroller.
- Q. Can the barcode scanner read more than one setup codes one time?
- A. Not support, but you can do multiple setup by serial commands, please refer to the serial command user guide.
- Q. Can the scanner work in a dark environment?
- A. Yes, the scanner is equipped a flash LEDs light to make it can work in darkness, but the insufficient ambient light will be a factor to effect the reading performance.
- Q. Can the scanner connect to Wiegand?
- A: The scanner itself no, but via a Wiegand adapter / converter, you can do that, RTscan provide wiegand adapter, please ask our sales people for more information.



- Q: Does the barcode scanner can decode a bar code from smart phone screen? How about the performance of reading from phone screen?
- A: Yes, it scan decode bar codes either from phone screen/ iPad screen / computer screen or from paper.

All of RTscan's 2d barcode scanners can read mainstream 1D and 2D bar code from phone screen sensitively.

- Q. Do you provide support for software development?
- A. Currently we only provide hardware related support, for example: integration of the barcode scanner, configuration/ programming of the scanner, but thing like software coding, we do not support at the moment.
- Q. Why failed to use the serial command for settings?
- A. 1. When using the serial command setting, please remember to add the NLS at the beginning of the command.
  - 2. Do not include the factory-reset code together with other setting codes
- 3. If there are two contradictory settings command integrated together, the previous command setting will be invalid.
- Q. Can I setup suffix of line feed after outputting a result?
- A. Yes, and this also factory default setting.
- Q. Can the output of the scanner add prefixes and suffixes with key values such as F1 F2?
- A. Yes, please refer to the user guide that with detailed introduction about prefix and suffix, and if you need special prefix like F1 F2 function key, please contact RTscan representatives and we can provide extra detailed setup guide.
- Q. Can we use c #, c ++, VB ... program for the scanner?
- A. For a barcode scanner, there is no software development key because it's standard USB



signal, standard TTL UART signal or standard RS232 serial signal, you only need to program your software to communicate with these standard USB/TTL/RS232 interface, so basically, you can use whatever language, c# or VB or others.

Q: Does the barcode scanner can decode inverse bar code (usually bar code printed with white background and the bar code itself is black, but a inverse bar code with white color itself and with black background)?

A: Yes, scan the inverse setting code from the configuration tool to turn on the inverse bar code scanning.

Q. Does the scanner can be controlled by using command?

A. Yes, but it only supports for USB-COM, RS232, and TTL interfaces. USB-HID interface do not support this.

Q: Can we control the scanning by host to make the scanner only work when we need it work?

## A: Yes,

- 1. Most often, the sense mode (only active when the scanner detect a motion) would meet your requirement.
- 2. The scanner supports command control, you can design a button in your system interface and "link" the button to the trigger command, this way, only when people press the button, the barcode scanner active and read.

## Q: Do you provide API?

A: RTscan provides powerful/ detailed user guide and integration/ programming command guide, these document can help you for most of technical issue, please ask RTscan representative if you do not have them.



## Q: What's MOQ?

A: Basically, there is no MOQ limited for the first and second time order, but for the third or more orders, we would require MOQ like 20-50units according to different models. And the price will be differ for different order volume.

Q: What's lead-time for your barcode scanner?

A: Usually within 3 days after payment receive. And usually around 10 days for bulk volume order.

Q: Does the scanner support Aztec code or MaxiCode?

A: No. But our RT203/ RT830A, RT830B support Aztec code or MaxiCode, you can view our website for their details.

For more information, please feel free to email us: info@rtscan.net

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