

User Manual

QR10M/QR10ML/QR10MX

Date: March 2021

Doc Version: 1.0

English

Preface

Thank you for choosing our product QR10M series QR code collector. Please read this User Manual carefully before use.

We strongly believe that the QR code collector will provide you and your customers with an outstanding user experience and will elevate your brand image and management to a higher level.

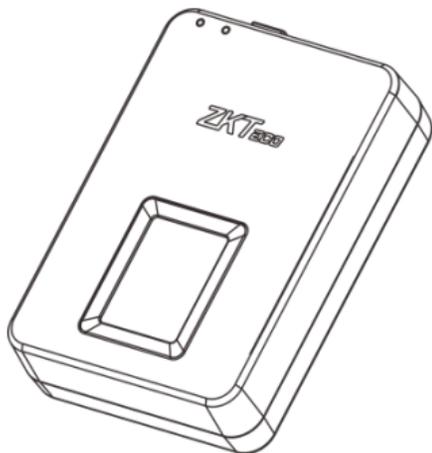
Please do not optionally dismantle the product or modify the system settings without professional instructions, as this could compromise the product's quality and service life. Please contact the local dealers if you have any questions.

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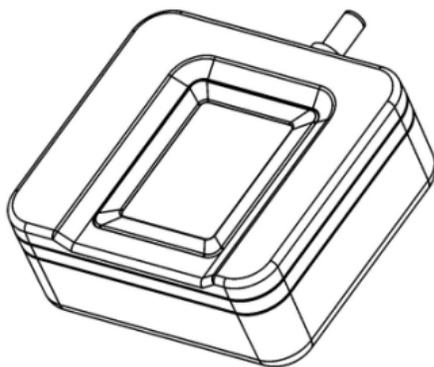
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1. Introduction

QR10ML, QR10MX QR code collector is a highly integrated, high-performance QR code collector that includes the QR code scanning engine algorithm and driver. The product has a delicate appearance and is equipped with a high-speed processor, making it suitable for all types of users. The collector supports Windows, Android, and Linux operating systems.

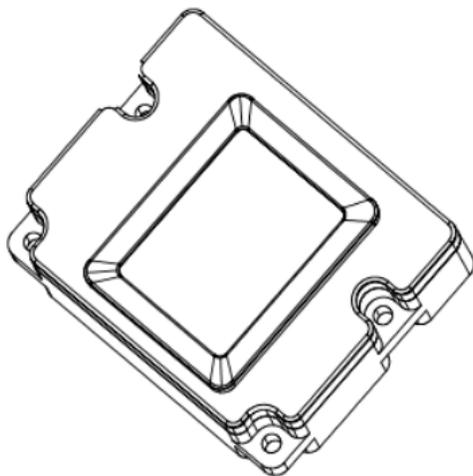


QR10ML



QR10MX

The QR10M module is a compact optical module. It not only has all the functions of the collector, but it can also integrate applications with various products in a flexible manner without the use of any accessories.



QR10M

2. Features

- It is the most recent and precise QR code Identification Technology.
- It is compatible with Windows, Android, and Linux operating systems.

3. Technical Specifications

Features	Specifications
Scanner Type	QR10ML and QR10MX
Material	Optical
Dimensions (L * W * H)	QR10ML: 75.5 * 53.2 * 19 mm
	QR10MX: 49 * 44 * 20.1mm
Operating System	Windows, Linux, and Android
Scanning Angle	Roll: 360°, Pitch: ±40°, Yaw: ±60°
FOV	Horizontal: 66°, Vertical: 50°
Image Size	648 * 488 pixels
Illumination Intensity	0 to 10000 Lux
One-dimensional Code Types	UPC-A, UPC-E, UPC-E1, EAN-8, EAN-13, EAN-14, EAN-128, UCC128, ISBN/ISSN, CODE11, CODE32, CODE39, CODE39 Full ASCII, CODE93, CODE128, interleaved 2 of 5, industrial 2 of 5, Matrix 2 of 5, China post code, UK/Plessey, and GS1

Types of QR Code	QR code, PDF417, Data Matrix, MicroPDF417, and Aztec
Operating Temperature	-10°C to +50°C
Operating Humidity	5% to 93% RH (Non-condensing)
Operating Voltage	5.0V ± 0.25V (USB)
Operating Current (Working Mode)	240mA
Operating Current (Idle Mode)	50mA
Anti-static Voltage	≥8kV
Product Certifications	FCC, CE, RoHS
Communication Interface	USB keyboard, USB HID

4. Scanning

Depth of Field			
Code Type	Barcode Size	Content Byte Size	Scanning Distance
Code128	6mil	6 bytes	5 to 6cm
Code128	12.5mil	15 bytes	10 to 15cm
Qrcode	40mil	28 bytes	5 to 25cm

5. Communication Mode Settings

- The module's default communication mode is the USB HID protocol, with the header and the tail of the data added.

To switch back to factory settings, scan:



Change the communication mode individually, set it to USB HID mode, and scan the setting code:



- USB virtual serial port mode

Scan the following code to switch to the USB virtual serial port mode, baud rate 115200, 8 data bits, 1 stop bit, and no parity bit.



- USB keyboard mode

Scan the setting code below to switch to USB keyboard mode, and the carriage return suffix is automatically added.



Red indicates the default factory settings; **Black** indicates optional functions.

Version Number

Firmware: 2137u210A315G180_20201224

Functions	Options	ON	OFF
One-dimensional Code Switch Settings	Code128	✓	×
	EAN-13	✓	×
	EAN-8	✓	×
	UPC-A	✓	×
	UPC-E	✓	×
	EAN-128	✓	×
	Code39	✓	×
	Codebar	✓	×
	Code93	✓	×
	Interleaved 2 of 5	✓	×
	Industrial 2 of 5	✓	×
	Matrix 2 of 5	✓	×

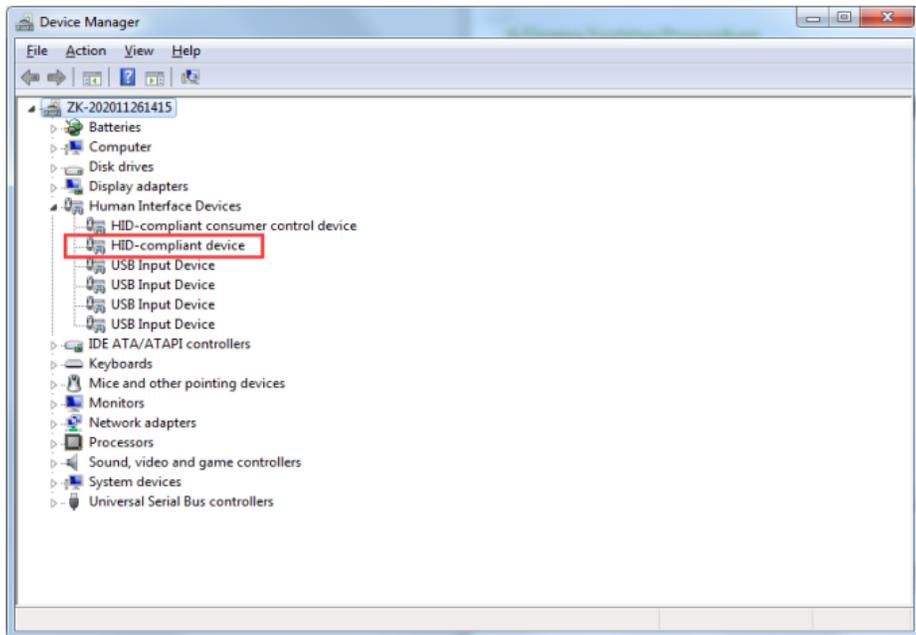
	Code11	✓	×
	MSI Plessey	✓	×
	GS1 Databar	✓	×
	ISBN	✓	×
QR Code Switch Settings	QRcode	✓	×
	Data Matrix	×	✓
	PDF417	×	✓
	MicroPDF417	×	✓
	Aztec	×	✓
Communication Mode	USB Virtual Serial	8 data bits, 1 stop bit, no parity bit	
		Baud rate	115200
	Port Mode	Message Data Structure	No header and tail
		USB keyboard mode	Keyboard case conversion

		Delay between keyboard characters	The default is 4ms
		UTF-8 Chinese output format	GBK
	USB HID mode	Message data structure	Adds header and tail
Motion Detection	Motion Detection	Normal mode	
Scanning device operation	Buzzer	Buzzer status at power-on	ON
		Buzzer status after decoding is successful	ON
		Buzzer Tone	Normal
		Buzzer Duration	Normal

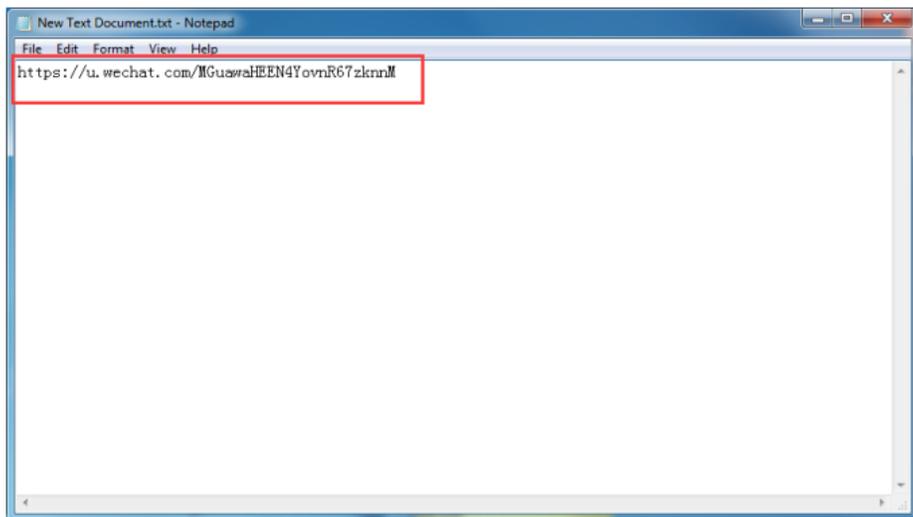
	Indicator and lighting	LED Indicator	LED indicator lights up when power on
			LED indicator lights up when decoding is successful
		Fill Light	ON (brightness of the fill light is 80%)
Prefix/Suffix	Add other Prefixes/Suffixes	No	
	Clear other Prefixes/Suffixes	No	
	End mark	Add carriage return suffix for all code types	All code types delete the carriage return suffix

6. Driver Installation

Insert the USB and open the device manager. The device will be displayed as shown in the figure.



It is not necessary to install the driver or use the SDK. After inserting the USB successfully, open the Notepad and scan the code directly. The public content will be displayed as the text of the successful scan, indicating that the device verification was successful. For other operations, please refer [5. Communication Mode Setting](#) in this manual.



❖ Suggestions

1. Please keep the sensor away from dust.
2. Please use adhesive tape to clean the collecting area.
-  Do not use water or other detergents, which may damage the sensor.
3. Please wipe the sensor with a wool-free cloth.
4. Please make sure the sensor is clean after each use.

Notes

- The product operating environment is indoors, and it is not recommended to install the product under direct sunlight.
- Please do not dismantle the product without proper guidance.
- The company cannot guarantee for any violations that interrupt the product activity.

Statements concerning Human Rights Privacy

Dear Customers,

First and foremost, thank you for utilizing ZKTeco's hybrid biometrics products. We continue to research and develop hybrid biometrics products as a world-renowned biometrics core technology provider. We also pay close attention to the global compliance of relevant human rights and privacy laws.

Statements as follows:

1. ZKTeco does not save any personal data.
2. ZKTeco, as the equipment provider, shall bear no legal liability for any improper use.
3. If you have any concerns about the use of equipment in terms of human rights or privacy, please resolve them internally.

Other QR code devices or development tools from ZKTeco can collect the original image of a QR code. If users believe it is an infringement, they should contact the Government or the equipment's end provider. ZKTeco, as the original manufacturer of the equipment, will bear no legal liability.

Users can refer to ZKTeco's official website to obtain relevant product information:

<http://www.zkteco.com>.

www.zkteco.eu

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