

symcode MJ-Q71

Symcode MJ-Q71 RFID Reader Writer User Manual

Model: MJ-Q71

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1. INTRODUCTION

The Symcode MJ-Q71 RFID Reader Writer is a dual-frequency device designed for reading and writing various RFID cards and tags. It supports both 125KHz and 13.56Mhz frequencies, making it compatible with a wide range of RFID technologies including EMID, FDX-A, FDX-B, ISO Prox 1326 family cards, MF S50, S70, and other ISO14443-A/B protocol labels. This device functions as a HID USB plug-and-play unit, requiring no additional driver installation for most operating systems.

It is suitable for applications such as animal management, fish management, automatic feeding equipment, and general access control systems. The MJ-Q71 offers high stability and features configurable output formats and keyboard layouts.



Figure 1: Symcode MJ-Q71 RFID Reader Writer.

Stable performance and strong compatibility

Use microelectronics RF module, Windows / LIUNIX / Android system plug and play without installing driver software

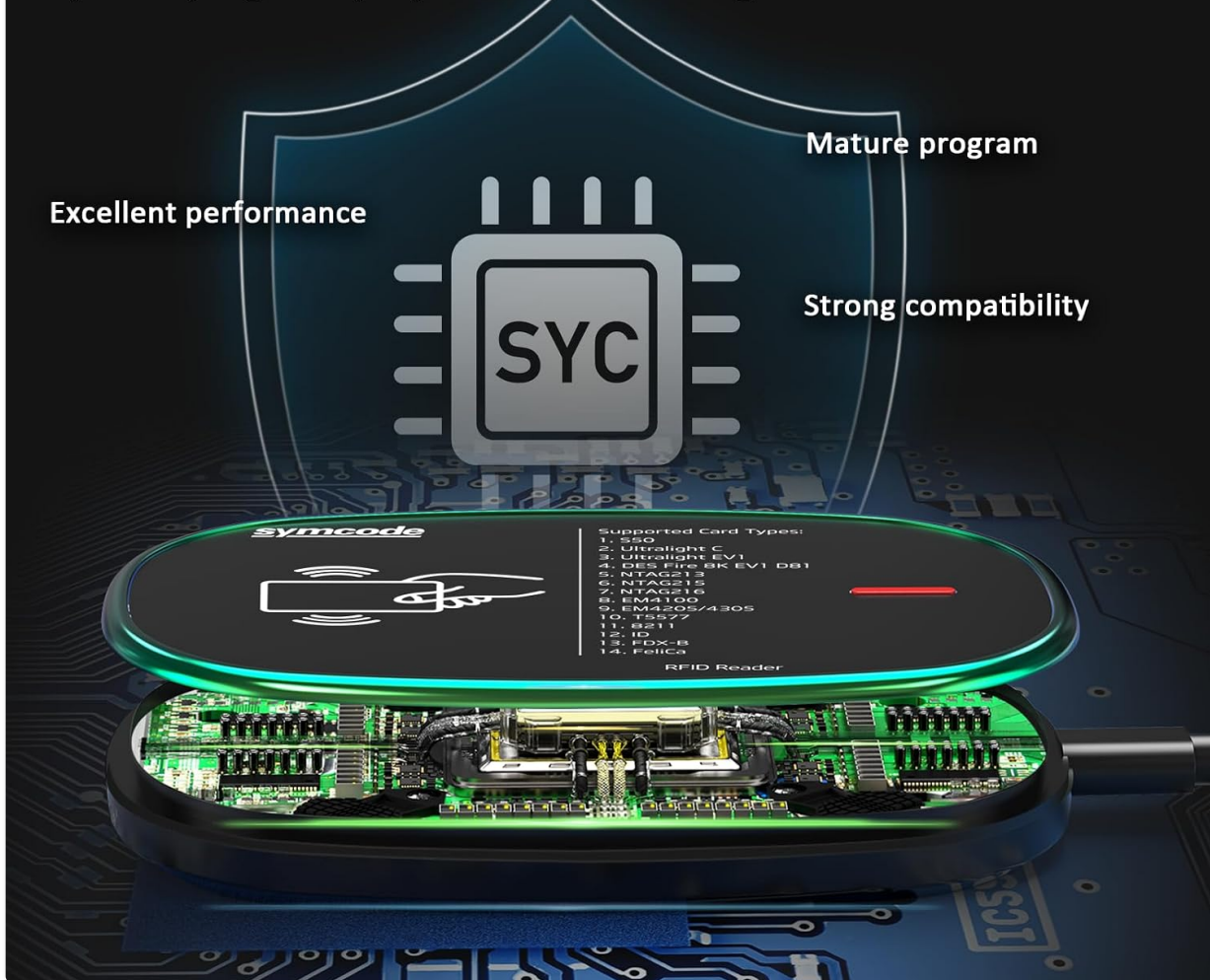


Figure 2: Device features stable performance and broad compatibility with various card types.

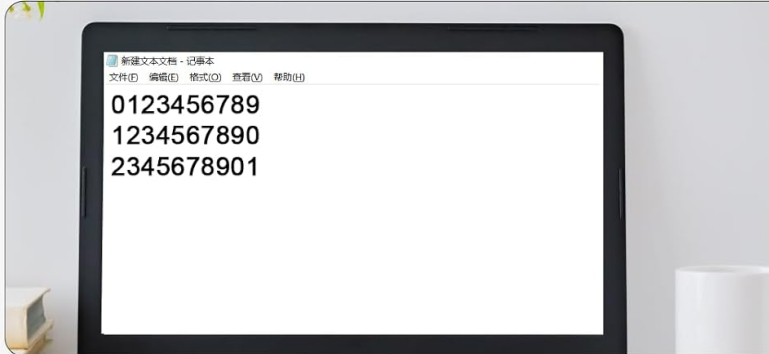
2. SETUP

The Symcode MJ-Q71 RFID Reader Writer is a plug-and-play device, requiring minimal setup.

How to use

1

Connect the device cable to the PC



2

Open software such as notepad or Word

3

Place the card above the card reader



Figure 3: Overview of the setup and basic operation steps.

1. **Connect the Device:** Connect the USB cable of the RFID reader writer to an available USB port on your computer (PC). The device will be automatically recognized by your operating system (Windows, Linux, Android, etc.) as a Human Interface Device (HID). (Refer to Step 1 in Figure 3).
2. **Prepare Software:** Open any text editing software such as Notepad, Microsoft Word, or a dedicated RFID reader application. The device will output card data directly into the active text field. (Refer to Step 2 in Figure 3).

No additional drivers are typically required for basic read operations.

3. OPERATION

3.1 Reading Cards

1. **Place the Card:** Position the RFID card or tag directly above the center of the reader. The device is designed for non-contact reading. (Refer to Step 3 in Figure 3).
2. **Observe Indicator:** The LED indicator light on the right side of the device will change color to indicate status. A **red light** indicates standby mode, and a **green light** indicates a successful read.

LED indicator light

There is LED indicator on the right side of the product, red is for standby mode and green is for read successfully



● Standby mode

● Read successfully

Figure 4: LED indicator status (Red for standby, Green for successful read).

3. **Data Output:** Upon a successful read, the card's data will be automatically entered into the active text field of your open software (e.g., Notepad). The reaction speed is typically less than 0.2 seconds.

Non-contact card reading Read quickly

The reaction speed is less than 0.2 seconds, the read and write distance can reach 8cm, the read card interval time is less than 0.2 seconds, and support IC card reading and writing



Figure 5: Non-contact reading and plug-and-play features.

3.2 Supported Card Types and Applications

The MJ-Q71 supports a wide range of card types and is versatile for various applications:

- **Supported Card Types:** S50, S70, Ultralight C, DES Fire 8K EV1 D81, NTAG213, NTAG215, NTAG216, EM4100, Felica, EM4205/4305, T5577, 8211, and other 1326 family ISO Prox cards.
- **Dual Frequency:** Reads both 125KHz and 13.56Mhz cards.
- **Applications:** Non-contact smart cards, bank cards, gatekeeper systems, and pet chips.

S50 \ S70 \ Ultralight C \ Ultralight EV1 \ DES Fire 8K EV1 D81 \ NTAG213 \ NTAG215 \ NTAG216 \ EM4100 \ FeliCa \ EM4205/4305 \ T5577 \ 8211 \ FDX-B



Figure 6: Versatile applications of the RFID Reader Writer.

3.3 Writing Cards (Advanced)

The device supports writing to compatible RFID tags. This typically requires dedicated software. The product description mentions 40 output formats for EM4100 ID card UID and configurable settings via a config card. For detailed writing procedures, refer to the specific software documentation or contact Symcode support.

The screenshot shows a software window titled "NFC" with a language dropdown set to "语言/Language". The interface is divided into two main sections: "Function" on the left and "Card operation" on the right.

Function Section:

- A "Search Card" button is highlighted with a blue rectangle.
- Under "Function", there are five radio button options:
 - ☒ S20/S50/S70 (circled in red)
 - ☐ Ultralight C
 - ☐ Second ID card
 - ☐ EM4305/EM4205 (circled in red)
 - ☐ H125 (circled in red)

Card operation Section:

- Fields for "Card Number" and "Sector" (a dropdown menu).
- A "Password" field and radio buttons for "KeyA" (selected) and "KeyB".
- Three rows of card blocks (Block0, Block1, Block2). Each row has:
 - A text input field for the block number.
 - Buttons for "INC" and "DEC" (present for the second and third rows).
 - "Read" and "Write" buttons.
- A "Passwords and permissions" button at the bottom.

Figure 7: Example of a software interface for card operations.

The device supports 40 output formats for EM4100 ID card UID, with a maximum of 40 bits card number in 10H or 13 digital decimal format. These formats are configurable by the user using a configuration card. For 1326 family cards, the reader sends the card number in 40 type formats or in raw Wiegand bit data format (from 24 bit to 80 bits data).

3.4 Instructional Videos

RFID Card Operating Methods

Your browser does not support the video tag.

Video 1: This video demonstrates the general operating methods for RFID cards with the Symcode reader. It shows how to place cards and observe the output.

EM4100 Card Writer Method

Your browser does not support the video tag.

Video 2: This video illustrates the process of writing data to an EM4100 card using the Symcode device and its associated software.

4. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the surface of the device. Avoid using abrasive cleaners or solvents, as these can damage the casing.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the device with care. Avoid dropping it or subjecting it to strong impacts.
- **Cable Care:** Ensure the USB cable is not bent sharply or subjected to excessive strain, which could damage the internal wires.

5. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not recognized by PC.	• Loose USB connection. • Faulty USB port. • Operating system compatibility issue.	• Ensure the USB cable is securely connected to both the device and the PC. • Try a different USB port on your computer. • Test the device on another computer or operating system (Win XP/CE/7/10, Linux, Vista, Android).
No data output when scanning a card.	• Card not placed correctly. • Card type not supported. • No active text field in software. • Device in standby (red LED).	• Ensure the card is centered directly above the reader. • Verify the card type is listed as supported by the MJ-Q71. • Click into a text field in Notepad, Word, or your application before scanning. • Check the LED indicator; it should turn green upon a successful read.
Inconsistent reading distance.	• Interference from other electronic devices. • Card type variations.	• Move the reader away from other electronic devices that might cause interference. • Reading distance can vary (0-150mm) depending on the specific tag or card.

6. SPECIFICATIONS

Model Number	MJ-Q71
Brand	Symcode
Working Frequency	125KHz / 13.56Mhz Dual-frequency
Communication Interface	USB Type A (HID USB device)
Card Reader Type	EMID, FDX-A, FDX-B, ISO Prox 1326 family, MF S50, S70, Ultralight C, DES Fire 8K EV1 D81, NTAG213, NTAG215, NTAG216, EM4100, Felica, EM4205/4305, T5577, 8211, and other ISO14443-A/B protocol labels.
Operating Voltage	5V

Working Current	100mA
Operating Temperature	-20°C to 70°C (-4°F to 158°F)
Reading Distance	0-150mm (varies with tag type)
Card Reading Time	<100ms
Card Reading Speed	0.2s
Dimensions (L x W x H)	105mm x 65mm x 15mm (4.13" x 2.56" x 0.59")
Weight	Approx. 120g
Operating System Support	Windows XP, Win CE, Win 7, Win 10, Linux, Vista, Android
Status Indicator	2-color LED (Blue: Power, Green: Status)
Built-in Features	Buzzer (configurable), 40 output formats, QW/AZERTY keyboard layout configurable.

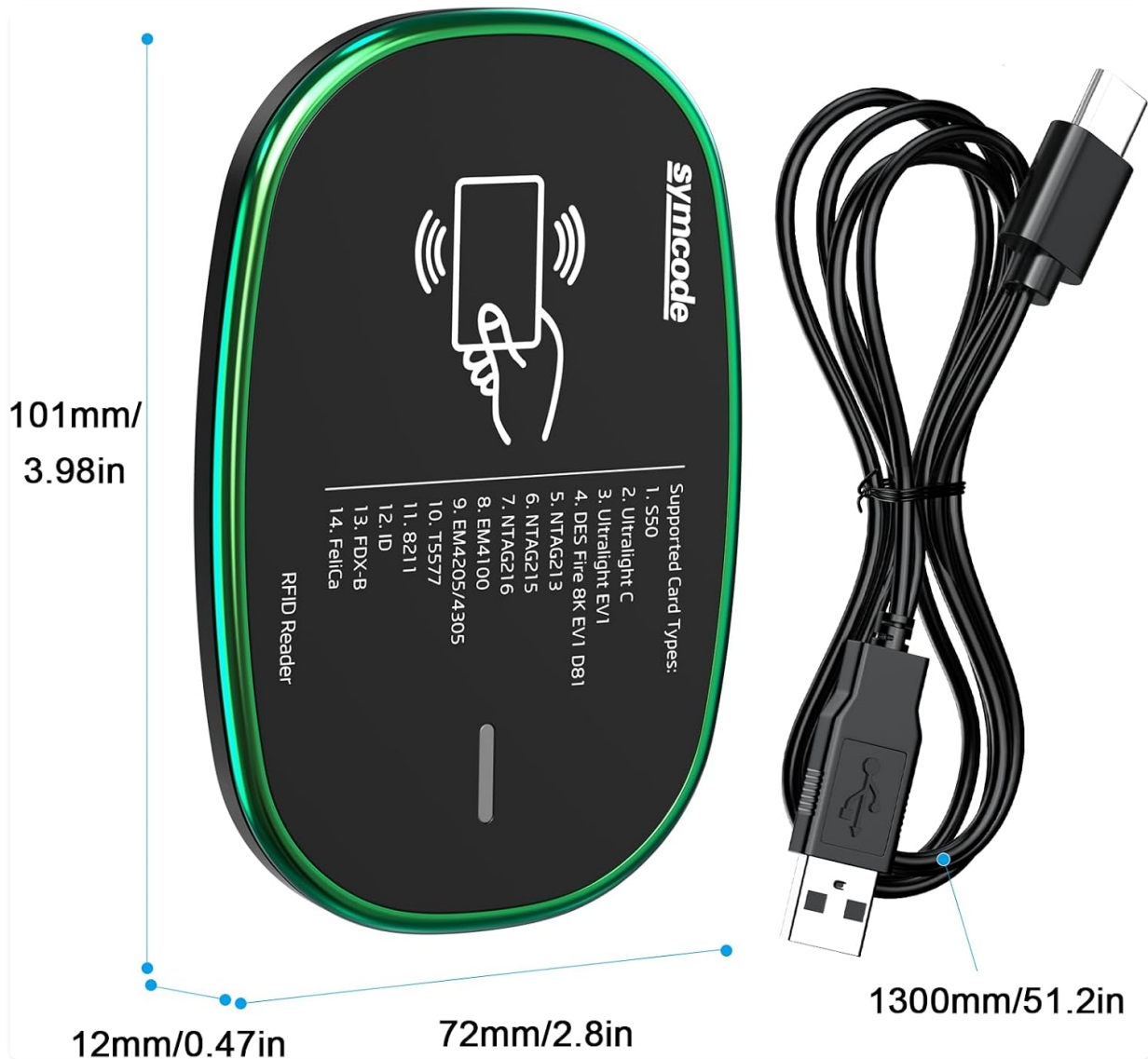


Figure 8: Device dimensions.

7. WARRANTY & SUPPORT

7.1 Warranty Information

The Symcode MJ-Q71 RFID Reader Writer comes with a **2-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

For specific warranty terms and conditions, please refer to the documentation included with your product or contact Symcode customer support.

7.2 Customer Support

If you encounter any issues not covered in the troubleshooting section, or require assistance with advanced features like custom output formats or keyboard layouts, please contact Symcode customer support.

For customization requests or further inquiries, you may send an email to the manufacturer as indicated in the product information.

Visit the official Symcode store for more information: [Symcode Store](#)