Symcode MJ-Q80

Symcode MJ-Q80 Multi-Function Card Reader User Manual

Model: MJ-Q80

Introduction

The Symcode MJ-Q80 is a versatile multi-function card reader designed for various applications, including point-of-sale systems and membership management. It supports magnetic stripe card reading, IC chip card reading and writing, and NFC contactless card functions. This device offers a convenient plug-and-play experience without the need for additional drivers or power supplies.

1. Setup

1.1 Package Contents

- Symcode MJ-Q80 Multi-Function Card Reader
- USB Cable
- SDK (Software Development Kit)

1.2 Connecting the Device

The MJ-Q80 card reader connects to your computer or compatible device via a standard USB interface. No external power supply is required, and the device is designed for plug-and-play operation, eliminating the need for driver installation.

1. Connect the USB cable to the MJ-Q80 card reader.
2. Plug the other end of the USB cable into an available USB port on your computer or host device.
3. The device will perform a self-check upon booting.

Image: The Symcode MJ-Q80 card reader connected to a laptop via USB, illustrating its plug-and-play functionality. The screen displays card data in a text format.

1.3 System Compatibility

The Symcode MJ-Q80 is compatible with Windows and Android operating systems.

1.4 Indicator Lights

The device features two LED indicator lights. Both lights illuminate when the device is successfully connected. The green light will flash when a card is being swiped or read.

2. Operating Instructions

The MJ-Q80 supports three primary card reading methods: magnetic stripe, IC chip, and NFC contactless.

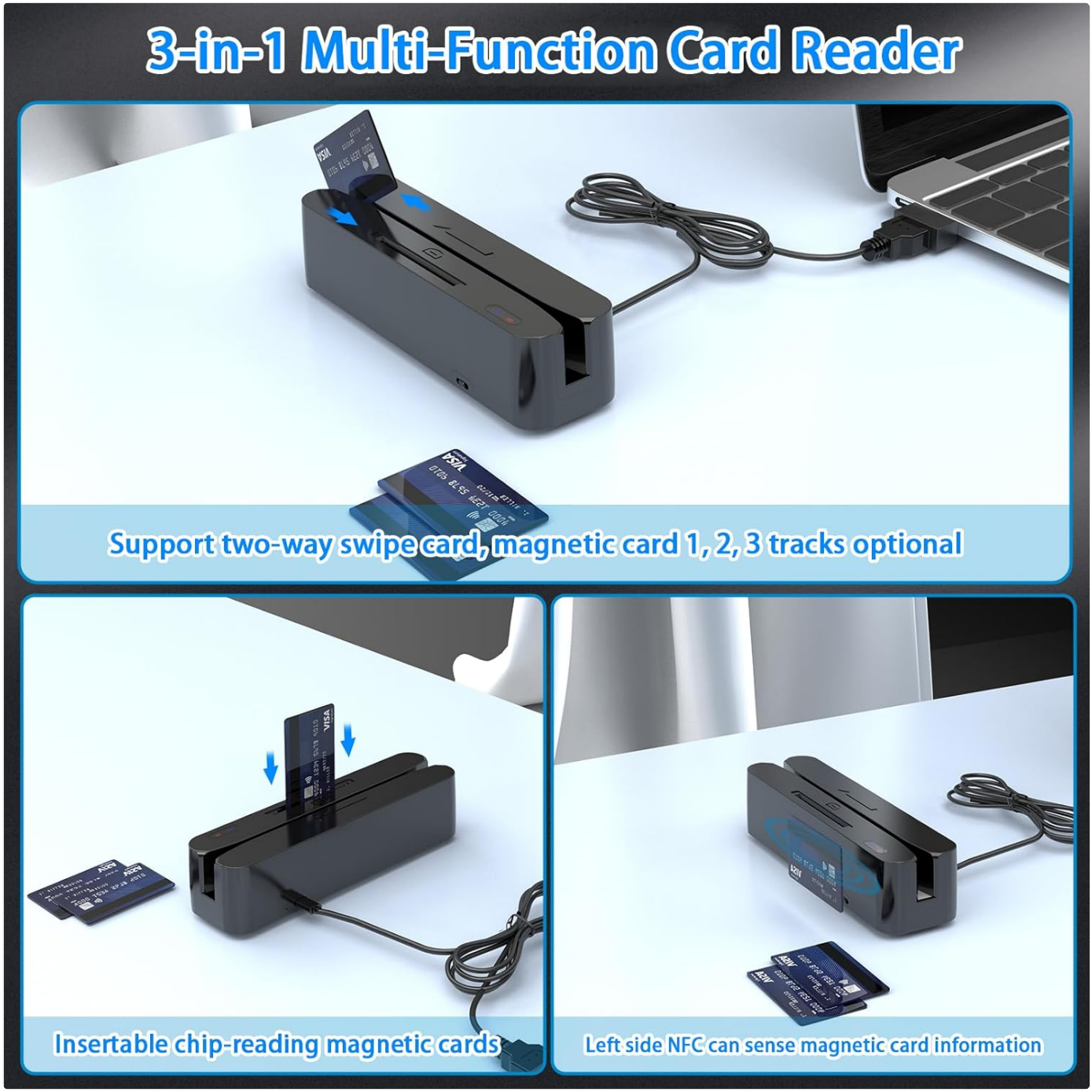

Image: The Symcode MJ-Q80 card reader demonstrating its 3-in-1 functionality, including magnetic stripe swiping, chip card insertion, and NFC contactless reading.

2.1 Magnetic Card Reading

The device can read all three tracks of magnetic stripe cards. It supports bidirectional swiping, meaning you can swipe the card in either direction through the slot.

1. Ensure the magnetic stripe on the card is facing the correct direction (typically towards the device's interior).
2. Swipe the card smoothly and consistently through the magnetic card slot.
3. The green indicator light will flash during a successful read.

Note: This device is a magnetic card reader only and does not support magnetic card encoding (writing).

2.2 IC Chip Card Reading and Writing

The MJ-Q80 is equipped with a slot for reading and writing IC chip cards, including EMV chip cards and SLE4442 chip cards. For advanced functionalities with CPU chip cards, APDU commands are required for deep development.

1. Insert the IC chip card into the designated chip card slot with the chip facing downwards.
2. Ensure the card is fully inserted until it clicks or is firmly seated.
3. The device will automatically attempt to read or write to the chip.

Image: An IC chip card being inserted into the Symcode MJ-Q80 card reader, demonstrating the correct orientation for chip reading.

2.3 NFC Contactless Card Reading

The device includes a built-in NFC reading module for contactless card transactions. The NFC sensing area is located on the left side of the device.

1. Locate the NFC sensing area on the left side of the card reader.
2. Ensure the NFC sensing mode is enabled via the toggle switch (refer to Section 2.4).
3. Hold the contactless card near the NFC sensing area.
4. The device will read the card information automatically.

Image: A contactless card being used with the NFC reading module on the side of the Symcode MJ-Q80 card reader, with a laptop in the background.

2.4 NFC Sensing Mode Switch

A toggle switch is present on the device to enable or disable the NFC sensing mode. Ensure this switch is in the "on" position for NFC functionality.

Image: Close-up of the Symcode MJ-Q80 card reader highlighting the NFC reading module and the toggle switch for NFC sensing mode.

2.5 Data Output

The card reader can output card data to various file formats, including TXT, Word, and Excel, depending on the software used with the device.

3. Maintenance

Proper maintenance ensures the longevity and optimal performance of your Symcode MJ-Q80 card reader.

- **Cleaning:** Regularly clean the card slots and exterior with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the device with care to prevent physical damage. Avoid dropping or subjecting it to strong impacts.
- **Liquid Exposure:** Keep the device away from liquids to prevent internal damage.

4. Troubleshooting

If you encounter issues with your Symcode MJ-Q80 card reader, refer to the following common problems and solutions:

Problem	Possible Cause / Solution
Device not recognized / No indicator lights	• Ensure the USB cable is securely connected to both the card reader and the host device. • Try connecting to a different USB port. • Verify that your operating system (Windows or Android) is compatible.
Magnetic card not reading	• Ensure the magnetic stripe is facing the correct direction. • Swipe the card smoothly and at a consistent speed. • Check if the magnetic stripe is damaged or worn. • Remember, this device is for reading only, not encoding.
IC chip card not reading	• Ensure the chip card is inserted correctly with the chip facing downwards and fully seated. • Check if the chip on the card is clean and undamaged.
NFC contactless function not working	• Verify that the NFC sensing mode toggle switch on the device is in the "on" position. • Ensure the card is held close enough to the NFC sensing area on the left side of the device.
Card data not displaying correctly	• Ensure the software you are using is correctly configured to receive data from the card reader. • Refer to the SDK documentation for development examples if you are integrating with custom software.

If the problem persists after attempting these solutions, please contact Symcode customer support for further assistance.

5. Specifications

Feature	Detail
Model Number	MJ-Q80
Hardware Interface	USB
Compatible Devices	Windows, Android, iPad (via USB)
Total USB Ports	1
Number of Card Interfaces	2 (Magnetic Stripe, IC Chip/NFC)

Feature	Detail
Magnetic Card Support	Tracks 1, 2, 3 (read only), Bidirectional
IC Chip Card Support	EMV, SLE4442, CPU chip cards (APDU commands for deep development)
Contactless Card Support	NFC (Built-in module)
Security Features	Built-in data encryption options: triple DES, advanced security features
Standards Compliance	ISO, AAMVA, CADM
Package Dimensions	7.56 x 3.62 x 2.36 inches
Item Weight	7.4 ounces (0.21 Kilograms)

6. Warranty and Support

6.1 Warranty Information

Specific warranty details for the Symcode MJ-Q80 are typically provided at the point of purchase or within the product packaging. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, contact Symcode customer service.

6.2 Customer Support

For technical support, inquiries, or assistance with your Symcode MJ-Q80 card reader, please contact our support team. We are available to provide guidance and resolve any issues you may encounter.
The product includes an SDK (Software Development Kit) with complete dynamic library functions, development examples, key points, and source code examples in various development languages (e.g., C#, C++ for 2003) to assist with integration and custom applications.