symcode MJ-2023

Symcode MJ-2023 2D Barcode Scanner User Manual

Model: MJ-2023

1. INTRODUCTION

This manual provides comprehensive instructions for the operation and maintenance of your Symcode MJ-2023 Upgraded 2D Industrial Barcode Scanner. Please read this manual thoroughly before use to ensure proper functionality and to maximize the lifespan of your device.

Key Features:

- **Unique Designed Screen:** 1.9-inch TFT Color LCD Screen displays barcode content, type, number, length, battery power, and transmission status in real-time.
- **Switchable Storage Modes:** Easily toggle between Storage mode (stores up to 10,000 codes for later upload) and Normal mode (direct transmission to PC).
- **High-Resolution Industrial Scan Engine:** Equipped with a 1-megapixel optical lens for swift and accurate reading of various printed and screen-displayed barcodes, even if damaged or poorly printed.
- **Exceptional Signal Range:** 433MHz RF wireless transmission up to 1968 feet (600 meters) in unobstructed environments and 656 feet (200 meters) with obstacles.
- **Wireless Charging:** Convenient wireless charging by placing the scanner on its stand.
- **Broad Compatibility:** Compatible with Windows, Mac OS, iOS, Android, and software like QuickBooks, Word, Excel.
- **Durable Design:** Shock and dust proof, designed to withstand multiple drops from 8 feet (2.5 meters).

2. SETUP

Package Contents:

- Symcode MJ-2023 Barcode Scanner
- Charging Cradle
- Charging Cord (USB Cable)
- User Manual (this document)

Charging the Scanner:

Place the scanner onto the charging cradle. The scanner supports wireless charging. Ensure the charging cradle is connected to a power source via the provided USB cable. A full charge takes approximately 2.5 hours and provides up to 30 hours of battery life.

Figure 2.1: Symcode MJ-2023 Barcode Scanner in its charging cradle, ready for use or charging.

Connection Modes:

The Symcode MJ-2023 offers multiple connection options for versatility:

- **433MHz Wireless:** Connects via the charging base, which has a built-in 433MHz wireless receiver. This mode offers an extended transmission range, ideal for large warehouses.
- **Bluetooth:** Connects directly to Bluetooth-enabled devices like laptops, tablets, or smartphones.
- **USB Wired:** Connects directly to a computer via the USB cable for a stable, direct connection.

Figure 2.2: Illustration of the two primary connection modes: 433MHz wireless via the charging base and direct Bluetooth connection.

Figure 2.3: Transmission range comparison: Bluetooth (15m/49ft interior) and 433MHz Wireless (600m/1968ft outdoor).

3. OPERATING INSTRUCTIONS

Basic Scanning Operation:

To scan a barcode, aim the scanner's light at the barcode and press the trigger button. The scanner will emit a beep and the display screen will show the scanned data.

Display Screen Functionality:

The 1.9-inch TFT color LCD screen provides real-time feedback on your scanning activities and scanner status.

1.77 Inch TFT colorful screen

Can display the current scanning barcode, code type, the amount of scans, wireless signal status information

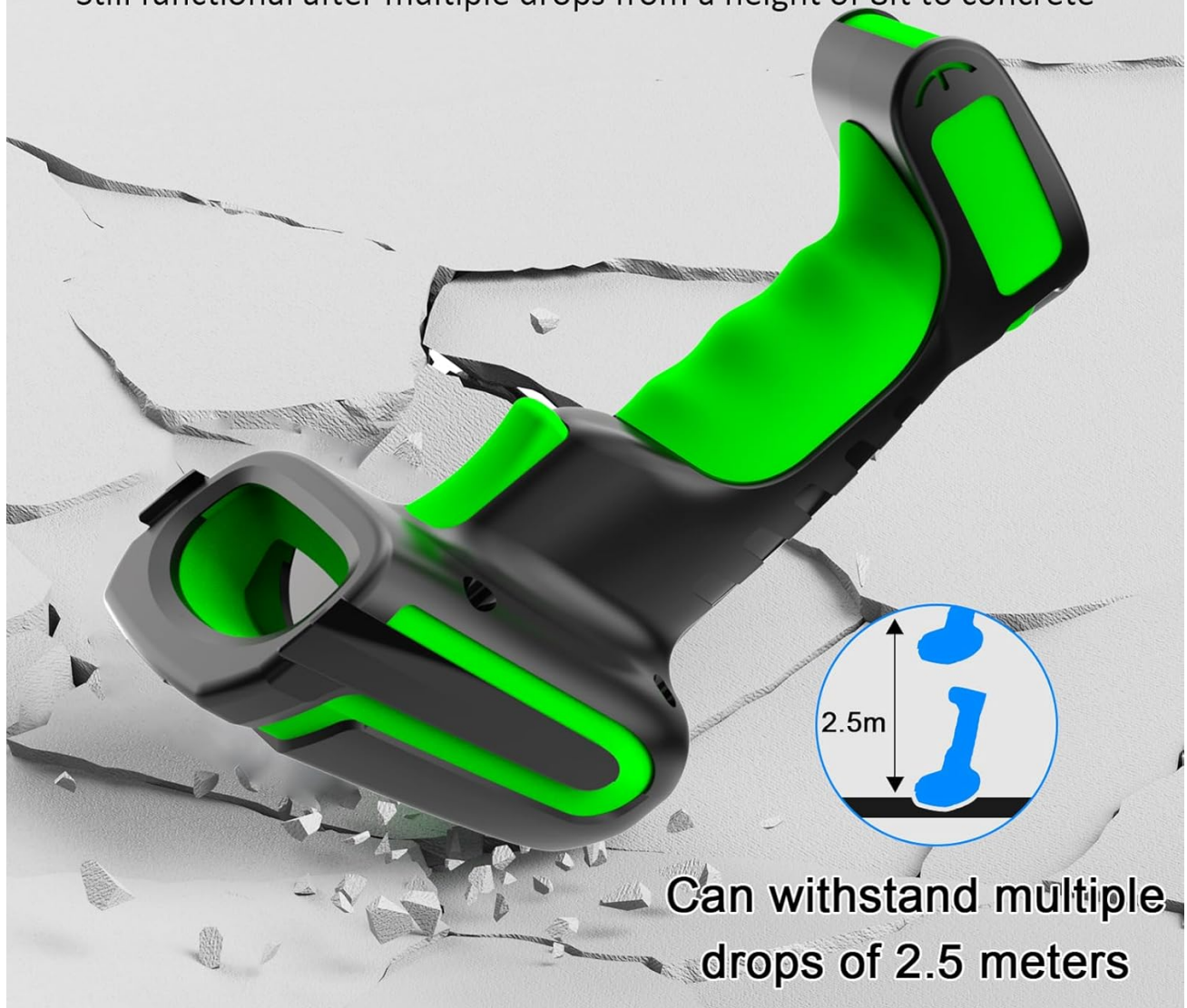| ❶ Time	❷ Connection status	❸ Connection mode
❹ Electricity level	❺ Store	❻ Total

Figure 3.1: Close-up view of the scanner's display screen.

Anti-shock Design

Still functional after multiple drops from a height of 8ft to concrete

2.5m

Can withstand multiple drops of 2.5 meters

Figure 3.2: Explanation of display screen elements: 1. Time, 2. Connection status, 3. Connection mode, 4. Electricity level, 5. Store (scanned items in storage), 6. Total (total scanned items).

Storage vs. Normal Mode:

A toggle switch allows you to select between two operational modes:

- **Storage Mode:** When set to 'Storage', the scanner saves scanned barcodes internally. This is useful when working away from a computer. Data can be uploaded later. The scanner can store up to 10,000 codes.
- **Normal Mode:** When set to 'Normal', scanned barcodes are transmitted directly to the connected computer or device in real-time.
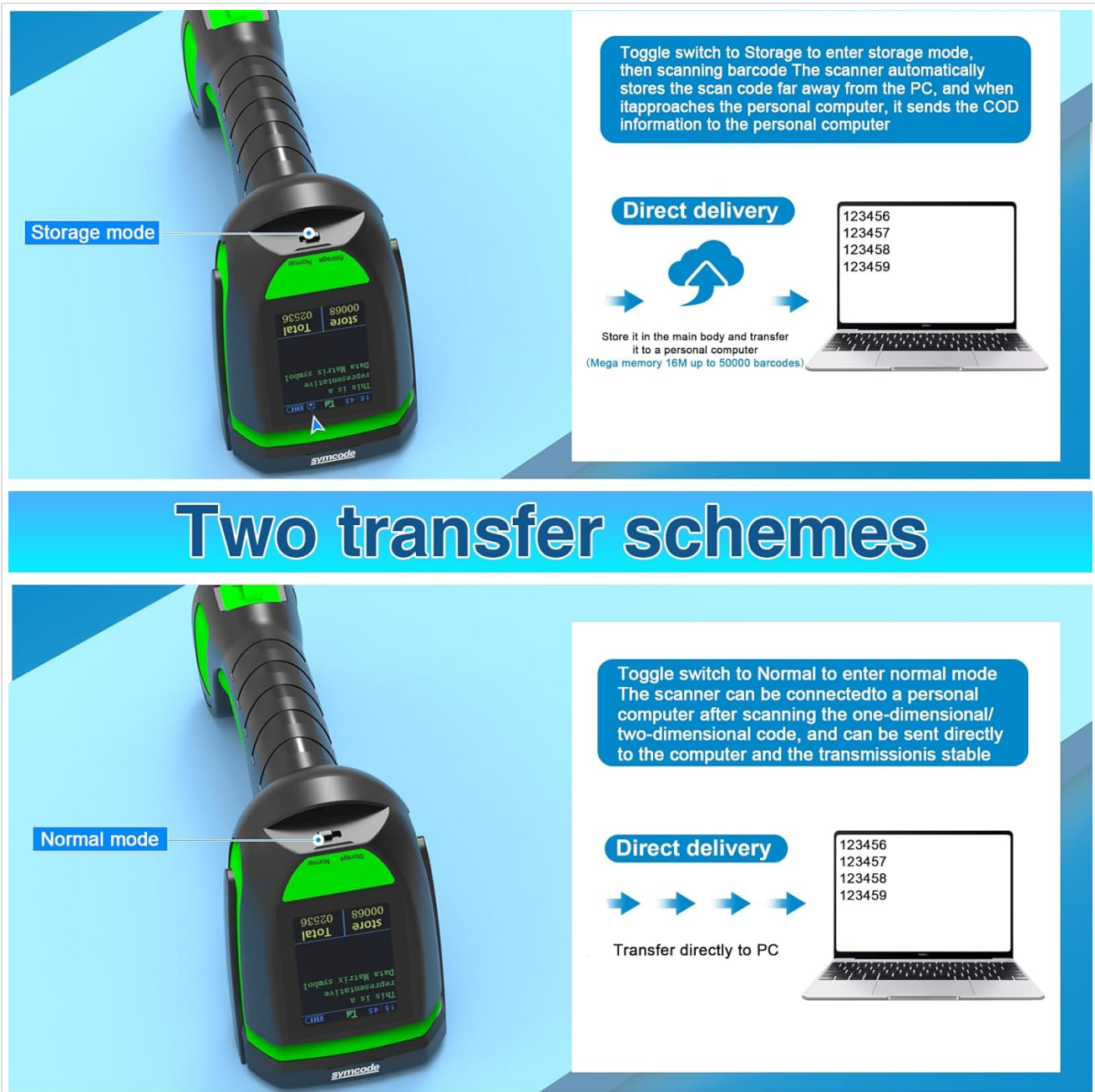
Figure 3.3: Illustration of Storage mode (offline saving) and Normal mode (direct transfer).

Supported Barcode Types:

The scanner supports a wide range of 1D and 2D barcode symbologies, including:

- **1D:** UPC/EAN, UPC/EAN with Supplemental, UCC/EAN 128, Code 39, Code 39 Full ASCII, Trioptic Code 39, Code 128 Full ASCII, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Code 93, MSI, Code 11, RSS variants, Chinese 2 of 5.
- **2D:** PDF417, QR Code, Data Matrix.

Figure 3.4: The scanner's super decoding ability for 1D and 2D barcodes.

Configuration Options:

The barcode reader offers over 180 configuration options. These allow you to customize the scanning output, such as adding prefixes or suffixes to scanned data, deleting starting or ending characters, or even adding keyboard keys/combinations to the scanning operation. Refer to the detailed configuration guide (if provided separately) for advanced settings.

4. MAINTENANCE

Cleaning:

To clean the scanner, use a soft, damp cloth. Do not use abrasive cleaners or solvents, as these can damage the device. Ensure the scanner is powered off before cleaning.

Battery Care:

The scanner is equipped with a 2600 mAh high-capacity rechargeable Lithium Polymer battery. To prolong battery life:

- Avoid fully discharging the battery frequently.
- Store the scanner in a cool, dry place when not in use for extended periods.
- Charge the battery regularly, even if not in constant use.

1.77 Inch TFT colorful screen

Can display the current scanning barcode, code type, the amount of scans, wireless signal status information

① Time ② Connection status ③ Connection mode

④ Electricity level ⑤ Store ⑥ Total

Figure 4.1: Battery specifications: 2600mAh capacity, 4 hours charging time, 30 hours scanning time.

Durability:

The Symcode MJ-2023 is designed with an anti-shock construction, allowing it to withstand multiple drops from a height of 8 feet (2.5 meters) onto concrete surfaces, ensuring reliability in demanding environments.

Figure 4.2: Anti-shock design demonstration.

5. TROUBLESHOOTING

Common Issues and Solutions:

- **Scanner not powering on:** Ensure the battery is charged. Place the scanner on the charging cradle or connect via USB cable.
- **Scanner not connecting to device:**
  - For 433MHz wireless: Ensure the charging cradle is properly connected to your computer and the scanner is within range.
  - For Bluetooth: Ensure Bluetooth is enabled on your device and the scanner is in pairing mode. Re-pair if necessary.
  - For USB wired: Ensure the USB cable is securely connected to both the scanner and your computer.
- **Scanner not reading barcodes:**
  - Ensure the barcode is clean and not excessively damaged.

- Check if the barcode type is supported by the scanner.
- Adjust the distance and angle of the scanner to the barcode.
- Verify the scanner is in the correct operating mode (Normal or Storage).

- **Scanned data is incorrect or incomplete:** Check the scanner's configuration settings (e.g., prefix/suffix, data formatting). Reset to factory defaults if necessary (refer to the detailed configuration guide).

6. SPECIFICATIONS

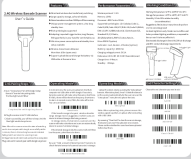| Feature	Specification
Model Number	MJ-2023
Input Voltage	DC5V±0.25v
Current (Work)	25 mA
Current (Instantaneous)	95 mA
Decoding Speed	100 times / sec
Wireless Range (433MHz)	Up to 600m (1968ft) unobstructed, 200m (656ft) with obstacles
Wireless Range (Bluetooth)	Up to 15m (49ft)
Battery Type	Lithium Polymer
Battery Capacity	2600 mAh
Charging Time	2.5 Hours
Battery Life	30 Hours
Display Screen	1.9 inch TFT Color LCD
Supported OS	Windows, Mac OS, iOS, Android, Linux
Dimensions (Package)	9.65 x 4.96 x 4.06 inches
Item Weight	1.43 pounds

7. WARRANTY INFORMATION

The Symcode MJ-2023 Barcode Scanner is covered by the manufacturer's standard warranty. Please refer to the warranty card included in your product packaging or contact Symcode customer support for specific details regarding warranty terms and conditions.

8. SUPPORT

For technical assistance, troubleshooting beyond this manual, or general inquiries, please contact Symcode customer support. Contact information can typically be found on the Symcode official website or on the product packaging.

Related Documents - MJ-2023

	[2.4G Wireless Barcode Scanner User's Guide	Symcode](#) Comprehensive user's guide for the Symcode 2.4G Wireless Barcode Scanner, detailing features, performance parameters, operating modes, setup options, and specifications.
TFT Screen Intellectual Wireless Barcode Scanner User's manual BROCHURE	[TFT Screen Intellectual Wireless Barcode Scanner User Manual](#) User manual for the TFT Screen Intellectual Wireless Barcode Scanner, detailing its features, applications, and operating instructions. Learn about its triple-mode connectivity, large storage capacity, and ergonomic design.
1D Barcode Scanner User Manual Barcode Scanner Quick Set-up V2.0	[1D Barcode Scanner User Manual V2.0](#) This user manual provides comprehensive instructions for the 1D Barcode Scanner, version 2.0. It covers setup, installation, scanning modes, configuration options, and technical specifications. Learn how to efficiently use the scanner in various commercial and industrial applications.
1D Barcode Scanner Setting Manual	[1D Barcode Scanner Setting Manual](#) This manual provides comprehensive instructions for setting up and operating the 1D Barcode Scanner. Learn about system settings, communication configurations, reading modes, data editing, barcode parameter settings, and serial communication instructions.
Bluetooth/2.4G Wireless Barcode Scanner User's manual BROCHURE	[Bluetooth/2.4G Wireless Barcode Scanner User Manual](#) Comprehensive user manual for the Bluetooth/2.4G Wireless Barcode Scanner, covering features, setup procedures, operating modes, troubleshooting, and indicator explanations.

2D Barcode Scanner
User Manual

BROCHURE

[Symcode MJ-340 2D Barcode Scanner User Manual](#)

Comprehensive user manual for the Symcode MJ-340 2D Barcode Scanner, covering setup, performance specifications, communication modes, and configuration options.