

## Tera HW0010 2D Ring

# Tera Pro Extreme Performance Wireless Ring Barcode Scanner User Manual

Model: HW0010 2D Ring

## 1. PRODUCT OVERVIEW

The Tera Pro Extreme Performance 2D Ring Barcode Scanner is a compact, wearable device designed for efficient and flexible barcode scanning. Its innovative ring design allows for hands-free operation, making it ideal for various applications including retail, warehousing, and logistics. This scanner supports multiple connection modes and is capable of reading a wide range of 1D and 2D barcodes.



Figure 1: Tera Pro Ring Barcode Scanner highlighting its design principles.

### Key Features:

- **Wearable Ring Design:** Allows for comfortable, hands-free operation and 330° rotation for optimal scanning angles.
- **Multiple Connection Modes:** Supports Bluetooth, 2.4G wireless, and USB wired connections for versatile compatibility.
- **Broad Barcode Compatibility:** Decodes most 1D, 2D, and QR codes from paper, labels, and digital screens, including damaged or fuzzy barcodes.
- **Vibration Alert:** Provides tactile feedback for successful scans, useful in noisy or quiet environments.
- **Two Upload Modes:** Instant upload for real-time data transfer and storage mode for up to 50,000 barcodes.

## 2. SETUP GUIDE

## 2.1 Package Contents

Before starting, ensure all items are present in the package:

- Tera Pro Ring Barcode Scanner x1
- USB Cable x1
- 2.4G Wireless Dongle x1
- User Manual x1 (This document and the included PDF)

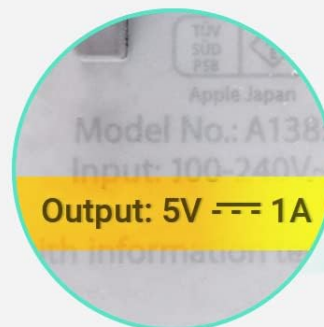
## 2.2 Charging the Scanner

To ensure optimal performance, fully charge the scanner before first use. Use the provided USB cable for charging.

- Connect the USB cable to the scanner and a compatible power source.
- The recommended charging voltage/current is **5V/1A**. The maximum charging voltage/current is **5V/1.2A**.
- **Important:** Do not use quick charge adapters or USB Power Delivery (USB PD) standard power adapters and data cables to charge this product. It is recommended to use the original USB cable included in the package.

Recommended charging  
voltage/current: **5V/1A**

Maximum charging  
voltage/current: **5V/1.2A**



Please do not use the USB  
PD power adapter and  
cable to charge.



Figure 2: Charging recommendations for the scanner.

## 2.3 Connection Modes

The scanner offers three versatile connection options:



Figure 3: Overview of the three connection modes.

### 1. Bluetooth Connection:

Ideal for connecting to Bluetooth-enabled devices such as smartphones, tablets, and laptops. Supports Bluetooth HID, SPP, and BLE protocols.

- Ensure the scanner is powered on.
- Activate Bluetooth on your host device (e.g., phone, tablet, computer).
- Scan the Bluetooth pairing barcode (refer to the full user manual PDF for specific pairing barcodes).
- Select "Tera Barcode Scanner" or similar from your device's Bluetooth settings to pair.

### 2. 2.4G Wireless Connection:

Provides a stable wireless connection via the included USB dongle, suitable for PCs and laptops without built-in Bluetooth.



- Insert the 2.4G wireless dongle into an available USB port on your computer.
- The scanner should automatically connect to the dongle. If not, scan the 2.4G pairing barcode (refer to the full user manual PDF).

### 3. USB Wired Connection:

A direct and reliable connection using the USB cable, offering plug-and-play functionality.

- Connect the scanner to your computer using the provided USB cable.
- The scanner will function as a USB HID keyboard device, and no drivers are typically required.

The scanner is compatible with Windows XP/7/8/10, Linux, iOS, Android, and Mac OS systems.



Figure 4: Compatible devices and operating systems.

## 3. OPERATING INSTRUCTIONS

### 3.1 Wearing the Scanner

The scanner is designed to be worn on your finger for maximum convenience and efficiency.

- Slide the scanner onto your index finger, ensuring the scanning window faces away from your palm.
- Adjust the strap for a secure yet comfortable fit.
- The scanner can rotate 330° on your finger, allowing you to adjust the scanning angle as needed for different barcode orientations.



Figure 5: Proper way to wear the ring scanner.



Figure 6: The 330° rotation feature for flexible scanning.

## 3.2 Scanning Barcodes

To scan a barcode:

1. Point the scanning window towards the barcode.
2. Press the scan button (typically located on the side or top of the scanner).
3. A successful scan will be indicated by a beep (if enabled) and/or a vibration.

The scanner supports a wide variety of 1D and 2D barcode symbologies, including but not limited to:

- **1D Barcodes:** EAN, UPC, Code 39, Code 128, Industrial 25, etc.
- **2D Barcodes:** QR Code, DataMatrix, Aztec, Maxicode, PDF417, etc.

It can scan barcodes from various surfaces, including paper, labels, and digital screens. It is also capable of reading some special barcodes like colorful, fuzzy, or damaged ones.



# 1D 2D QR Code Readable



Aztec Code



QR Code



Data Matrix



PDF417



Mirco PDF417



Figure 7: Examples of readable 1D and 2D barcode types.



Figure 8: Scannable environments for different scanning technologies.

## 3.3 Data Upload Modes

The scanner supports two primary data upload modes:

- **Instant Upload Mode:** Data is transmitted to your connected device immediately after each successful scan. This is the default mode and is suitable for real-time inventory management or POS systems.

- **Storage Mode:** Barcodes are stored in the scanner's built-in memory (up to 50,000 barcodes). This mode is useful when working out of range of your host device. Data can be uploaded in bulk later by scanning a specific command barcode (refer to the full user manual PDF for details).



Figure 9: Data upload modes.

### 3.4 Vibration Alert

The scanner features a vibration alert function. This can be particularly useful in environments where audible beeps are undesirable or difficult to hear. You can configure the scanner to vibrate upon a successful scan. Refer to the full user manual PDF for instructions on enabling or disabling the vibration and sound alerts.

## 4. MAINTENANCE

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### 4.1 General Care and Cleaning

- Keep the scanner clean and free from dust and debris. Use a soft, dry cloth to wipe the exterior.
- For the scanning window, use a lens cleaning cloth or a soft, lint-free cloth lightly dampened with water or a mild, non-abrasive cleaner. Avoid harsh chemicals.
- Do not immerse the scanner in water or expose it to excessive moisture.
- Store the scanner in a cool, dry place when not in use.

### 4.2 Battery Care

- To prolong battery life, avoid fully discharging the battery frequently.
- Recharge the scanner when the battery indicator shows low power.
- If the scanner will not be used for an extended period, charge it to about 50% before storing and recharge every few months to prevent deep discharge.
- Always use the provided USB cable and adhere to the recommended charging voltage/current (5V/1A).

## 5. TROUBLESHOOTING

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This section addresses common issues you might encounter. For more detailed troubleshooting steps and advanced configurations, please refer to the comprehensive User Manual PDF provided with your product.

### 5.1 Scanner Not Responding / Not Powering On

- Ensure the scanner is fully charged. Connect it to a power source and allow it to charge for at least 30 minutes.
- Press and hold the power button for a few seconds to ensure it's attempting to power on.
- If charging lights do not appear, try a different USB cable or power adapter (within specified voltage/current).



5.2 Unable to Scan Barcodes

- Check if the scanner is powered on and connected to your device.
- Ensure the barcode is clean, clear, and not excessively damaged.
- Adjust the distance and angle between the scanner and the barcode. Try scanning from different distances (typically 2-16 inches).
- Verify the barcode symbology is supported by the scanner.
- Clean the scanning window if it appears dirty or smudged.
- If scanning from a screen, ensure the screen brightness is sufficient and there's no glare.

5.3 Connection Issues (Bluetooth/2.4G Wireless)

- **Bluetooth:** Ensure Bluetooth is enabled on your host device. Forget the scanner from your device's Bluetooth list and attempt to re-pair. Make sure the scanner is in Bluetooth pairing mode.
- **2.4G Wireless:** Ensure the USB dongle is securely inserted into a working USB port. Try a different USB port. Re-pair the scanner with the dongle by scanning the appropriate pairing barcode (found in the full user manual PDF).
- Move closer to the host device to rule out range issues.
- Try connecting via USB wired mode to confirm the scanner's basic functionality.

5.4 Incorrect Data Output

- Ensure the correct keyboard layout is selected on your host device (e.g., US keyboard layout).
- If you are experiencing extra characters or missing digits, you may need to configure the scanner's data formatting settings. Refer to the full user manual PDF for programming barcodes related to prefix/suffix, adding/hiding digits, etc.
- Confirm the scanner is in the desired upload mode (Instant vs. Storage).

6. SPECIFICATIONS

Feature	Detail
Product Dimensions	5 x 4.2 x 1.7 inches
Item Weight	4.2 ounces
ASIN	B08GWSL4Y5
Date First Available	August 28, 2020
Manufacturer	Tera
Country of Origin	China
Compatible Devices	Tablet, Smartphone, PC, Laptop, POS
Power Source	Battery Powered
Connectivity Technology	Bluetooth, 2.4G Wireless, USB Cable
Operating Voltage	5 Volts

7. WARRANTY AND SUPPORT

Tera products are designed and manufactured to high-quality standards. For detailed warranty information and terms, please refer to the official User Manual PDF or contact Tera customer support.

### 7.1 Official User Manual

A comprehensive user manual in PDF format is available for download. This manual contains detailed instructions, advanced configuration options, and extensive troubleshooting guides.

[Download Full User Manual  
\(PDF\)](#)

### 7.2 Customer Support

For any questions, technical assistance, or support inquiries, please visit the official Tera website or contact their customer service department. Contact information can typically be found in the full user manual or on the product packaging.

Tera is an international brand specializing in barcode scanners, with research centers in Berlin and Munich, and a U.S.-based company. They are committed to providing quality products and support.