KOAMTAC KDC280CJPH

KOAMTAC KDC280CJPH 2D Imager Data Collector User Manual

Model: KDC280CJPH

1. Introduction

This manual provides instructions for the safe and efficient use of your KOAMTAC KDC280CJPH 2D Imager Data Collector. Please read this manual thoroughly before operating the device and keep it for future reference.
The KDC280CJPH is a compact and powerful 2D barcode scanner and data collector, designed for various applications requiring efficient data capture. It features Bluetooth v4.1 BLE connectivity, supporting both SPP and HID profiles, and is compatible with iOS devices.

2. Safety Information

- Do not expose the device to extreme temperatures, direct sunlight, or high humidity.
- Avoid dropping the device or subjecting it to severe impacts, although it is rated for 1.5m drops.
- Do not attempt to disassemble or modify the device. This will void the warranty.
- Use only approved charging cables and adapters.
- Keep the device away from water and other liquids. The IP65 rating provides protection against dust and splashes, but not immersion.
- Dispose of batteries and the device according to local regulations.

3. Package Contents

Verify that all items are present in your package:

- KDC280CJPH 2D Imager Data Collector
- Communication Dongle (KBLED41)
- Single Charging Base
- Neck Strap

- Pairing Sheet
- Charging Cable (Micro USB)
- Communication Cable (Micro USB)
- AC Adapter

Optional accessories (sold separately): 4-slot charging base, finger trigger glove, ring scanner, custom front panel colors/logo printing.

4. Device Overview

The KDC280CJPH is designed for ergonomic handling and ease of use. Below are key components and their functions.

Figure 1: KDC280CJPH Device Front View. This image shows the front of the KDC280CJPH data collector, highlighting its display screen and control buttons. The screen displays menu options such as "KDC Mode", "Data Display", "Barcode Settings", and "Code Options". Below the screen, there are three circular buttons: a central selection button and two directional buttons. The device also features "KOAMTAC" branding and a "BLE" indicator.

Figure 2: KDC280CJPH in Charging Base. This image displays the KDC280CJPH data collector securely docked in its black charging base. The device is white with a black screen, showing the "KOAMTAC" logo. The charging base also features the "KOAMTAC KDC" logo on its front.

Key Components:

- **Display Screen:** Shows operational status, menu options, and scanned data.
- **Scan Button:** Initiates barcode scanning.
- **Navigation Buttons:** Used for menu navigation and selection.
- **Micro USB Port:** For charging and wired data communication.
- **Imager Window:** The area through which barcodes are scanned.

5. Setup

5.1 Charging the Device

1. Connect the charging cable to the Micro USB port on the KDC280CJPH.
2. Connect the other end of the charging cable to the AC adapter, then plug the AC adapter into a power outlet. Alternatively, connect the charging cable to a computer's USB port.
3. The device will begin charging. A full charge typically takes approximately 3-4 hours.

For convenience, you can also place the KDC280CJPH into the single charging base (included) or the optional 4-slot charging base for charging.

5.2 Initial Power On

Press and hold the power button (usually located on the side or top) for a few seconds until the display screen illuminates.

5.3 Using the Communication Dongle

The KDC280CJPH can be used with the included communication dongle (KBLED41) for easy pairing with a host device.

Figure 3: Communication Dongle in Use. This image illustrates the communication dongle (KBLED41) being inserted into a USB port of a laptop. The dongle has a QR code printed on it, indicating its pairing function. The accompanying text states that inserting the dongle automatically completes pairing, making the device ready for immediate use.

1. Insert the KBLED41 communication dongle into an available USB port on your computer or host device.
2. The KDC280CJPH will automatically detect and pair with the dongle, establishing a connection.
3. Once paired, the device is ready for data transmission.

6. Operation

6.1 Bluetooth Pairing

The KDC280CJPH supports Bluetooth v4.1+EDR with SPP (Serial Port Profile) and HID (Human Interface Device) profiles, allowing connection to various devices including iOS.

1. Ensure Bluetooth is enabled on your host device (smartphone, tablet, computer).
2. On the KDC280CJPH, navigate to the Bluetooth pairing menu using the navigation buttons.
3. Select the desired Bluetooth profile (SPP or HID) if prompted.
4. On your host device, search for available Bluetooth devices and select "KDC280CJPH" from the list.
5. Follow any on-screen prompts to complete the pairing process. You may need to enter a PIN, which is usually "0000" or "1234".
6. Once paired, the KDC280CJPH will indicate a successful connection on its display.

Note: Your connecting device must be Bluetooth v4.1 BLE compatible to connect with the KDC280CJPH.

6.2 Barcode Scanning

The KDC280CJPH can read a wide array of 1D and 2D barcodes, OCR fonts, and postal codes.

- **To Scan:** Point the imager window at the barcode and press the scan button. A successful scan will typically be indicated by a beep and/or a green LED light.
- **Optimal Scanning Distance:** The reading distance for Code39 is 4-246mm. Adjust the distance for other barcode types as needed.
- **Supported Symbologies:**
    - **1D:** EAN, UPC, Code 11, Code 39, Code 93, Code 128, Codabar/NW-7, Interleaved 2 of 5, GS1-128(EAN 128), GS1 DataBar(RSS), IATA, Industrial 2 of 5, ISBN-ISSN-ISMN, Matix 2 of 5, MSI/Plessy, S-Code, Telepen, Tri-Optic, UK/Plessy.
    - **2D:** Aztec Code, Aztec Runes, Codablock F, Composite Codes, Data Matrix, Maxi Code, Chinese Sensible, Micro PDF, PDF417, QR Code, Micro QR Code.
    - **OCR:** OCR-A, OCR-B (ISBN codes).
    - **Postal Codes:** Various international postal codes.

6.3 Data Collection and Storage

The device has 8MB of user data area, capable of storing over 400,000 UPC codes. Scanned data can be stored internally and then transferred to a host device.

- **Store Mode:** Data is saved to the device's internal memory.
- **Transfer Mode:** Data is immediately transmitted to the connected host device.
- **Timestamping:** The built-in Quartz RTC provides timestamps for collected data.

6.4 KTSync Software and SDK

KOAMTAC provides free software and SDKs to enhance the functionality of your KDC280CJPH.

- **KTSync Software:** Available for download, KTSync allows for KDC device settings configuration, data

synchronization, and matching functions.

- **SDKs:** Software Development Kits are available for Android, iOS, and Windows platforms, enabling custom application development and integration with the KDC280CJPH.

7. Maintenance

7.1 Cleaning

- Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Ensure the imager window is clean and free of dust or smudges for optimal scanning performance.

7.2 Battery Care

- To prolong battery life, avoid fully discharging the battery frequently.
- If storing the device for an extended period, charge the battery to approximately 50% and store it in a cool, dry place.

7.3 Storage Conditions

Store the device within the specified temperature range of -20°C to 60°C and humidity of 5% to 95% (non-condensing).

8. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Battery is depleted.	Charge the device using the provided charging cable and AC adapter.
Cannot connect via Bluetooth.	Bluetooth is not enabled on host device; host device is not BLE v4.1 compatible; device is out of range.	Ensure Bluetooth is on. Verify host device compatibility. Move KDC280CJPH closer to the host device. Re-attempt pairing.
Barcodes are not scanning.	Barcode is damaged or poorly printed; imager window is dirty; incorrect scanning distance.	Try scanning a different barcode. Clean the imager window. Adjust the distance between the device and the barcode.
Data is not transmitting to host.	Device is in store mode; connection is lost; incorrect application settings.	Switch the device to transfer mode. Re-establish Bluetooth connection. Check KTSync or custom application settings.

9. Specifications

Feature	Detail
Model Number	KDC280CJPH
Operating System	Dedicated OS
CPU	ARM7, 32-bit

Feature	Detail
Memory	RAM: 64KB, Flash ROM: 256KB (Data Area), 8MB (User Data Area, stores over 400,000 UPC codes)
Scanner Type	2D Imager, 640x480 CMOS, 100fps
Reading Distance	4-246mm (Code39)
Real-time Clock	Quartz RTC for timestamp
Interface	Micro USB
Bluetooth Communication	Bluetooth v4.1+EDR, SPP/HID
Dimensions (W x L x H)	40 x 82 x 18 mm
Weight	57.5 g
Battery	Lithium-Ion (650mAh)
Operating Temperature	-20°C to 50°C
Storage Temperature	-20°C to 60°C
Humidity	5% to 95% (non-condensing)
Dust/Splash Protection	IP65 compliant
Drop Specification	1.5m drop resistance
Regulatory Compliance	UL 60950-1; EN/IEC 60950-1; EN/IEC 60825-1, EMI/RFI; R&TTE, FCC, KC, TELEC, RoHS
Safety Standards	IEC 62471:2006

10. Warranty & Support

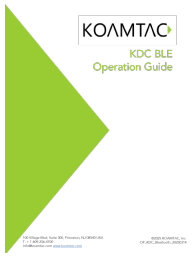
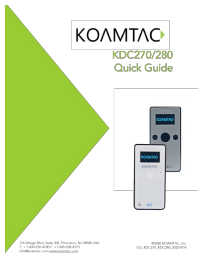
10.1 Warranty Information

The KOAMTAC KDC280CJPH comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects but excludes damage caused by misuse, accidents, unauthorized modifications, or normal wear and tear. Cables are not covered under this warranty.
Please retain your proof of purchase for warranty claims.

10.2 Technical Support

For technical assistance, troubleshooting, or inquiries regarding your KDC280CJPH, please refer to the official KOAMTAC website or contact their customer support.
Additional resources, including the KTSync software and SDKs for various platforms (Android, iOS, Windows), are available for download from the KOAMTAC support portal.

Related Documents - KDC280CJPH

	KOAMTAC KDC280 Mini Guide: Bluetooth Barcode Scanner Concise guide to the KOAMTAC KDC280 Bluetooth Low Energy (BLE) barcode scanner, covering setup, operation, pairing, and accessories.
	KOAMTAC KDC BLE Operation Guide: Connecting Scanners via Bluetooth Learn how to connect KOAMTAC KDC BLE scanners to Android, iOS, and Windows devices. This guide covers BLE profiles (SPP, HID), pairing procedures, and using the KTSync application for seamless Bluetooth connectivity.
	KOAMTAC KDC270/280 Quick Guide - Setup and Pairing This quick guide provides essential information for setting up and using KOAMTAC KDC270 and KDC280 Bluetooth barcode scanners. It covers initial setup, Bluetooth pairing procedures for various profiles (HID, SPP, BLE), usage modes including Keyboard Wedge and KTSync on Android and iOS, product specifications, and integration with Samsung Gear S3 devices.
	KOAMTAC KDC470 & KDC475 Series Mini Guide: Barcode Scanner Operation & Features Concise guide to the KOAMTAC KDC470 and KDC475 series Bluetooth barcode scanners. Learn about setup, operation, pairing, specifications, and accessories for efficient data collection.
	KOAMTAC KDC185 Quick Guide: Bluetooth Barcode Scanner Setup and Features A comprehensive quick guide for the KOAMTAC KDC185 Bluetooth barcode scanner, covering setup, pairing, usage, specifications, and the social distancing feature.
	KOAMTAC KDC280 BLE Scanning Package Mini Guide: Setup and Operation A concise guide to setting up and using the KOAMTAC KDC280 BLE Scanning Package, covering unboxing, power, basic scanning, and computer pairing. Includes information on KTSync and KOAMTACON software.