

Powering On/Off

Power On

Press and hold the SCAN and DOWN buttons for 3 seconds.

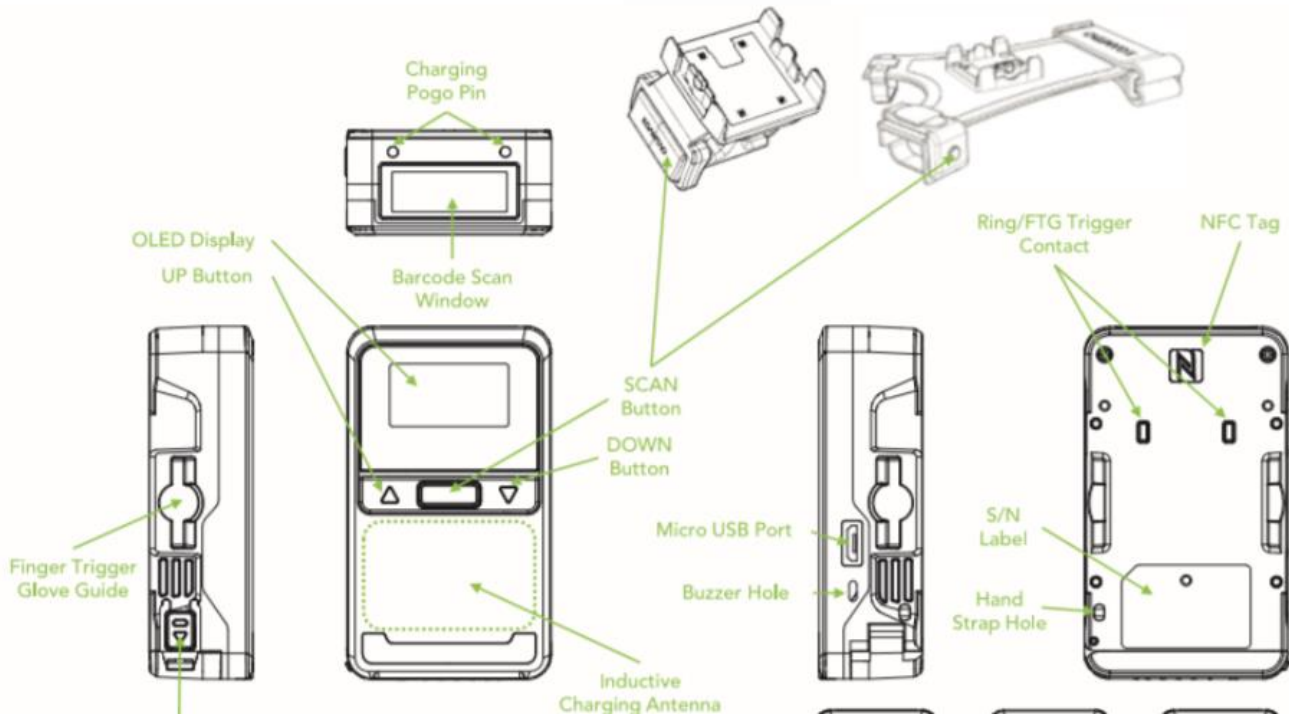


Power Off

Press and hold the SCAN and DOWN buttons for 3 seconds again.

* The SCAN buttons on the KDC180 or Ring Trigger may be used for powering on/off.

KDC180 Diagram



Specs

Functionality

Memory Flash ROM: 256KB
Program, 256KB User Data
Memory RAM: 64KB
Can store up to 13,000 barcodes (EAN-13)

Wedging & Synchronization

Store to file or transfer to app
Keyboard wedge function
Add-on prefixes and suffixes
Barcode option selection

Scan Range (20mil Code39)

KDC180H: 1.73" to 31.5"
(44 mm to 800 mm)

Interfaces

Bluetooth Low Energy,
HID/SPP/Open
USB to Serial (Micro USB port)

User Environment

IP Rating: IP65
Drop Spec: 6' (1.8 m)
Operating: -4°F to 122°F
(-20°C to 50°C)
Storage: -4°F to 140°F
(-20°C to 60°C)
Humidity: 5% to 95%
(non-condensing)

Supporting OS

Android, iOS, Mac OS X,
Tizen, Windows, Xamarin,
Cordova

KOAMTAC

KDC180

User Manual



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Bluetooth Profiles Explained

HID

Allows one-way Bluetooth communication with an Android or iOS host device. The KDC only transmits data to the host device.

SPP

Allows two-way Bluetooth communication. The KDC transmits data to host device and the host can transmit data back to the KDC.

HID Windows

Allows one-way Bluetooth communication with Windows host device. The KDC only transmits data to the host device.

OPEN

A Bluetooth Low Energy standard mode called "guest mode" which does not need to be paired. It supports bi-directional communication.

HID inputs data directly into an application. SPP requires KOAMTAC KTSync® app or integration of KOAMTAC SDK to input data into an application.

Pairing & Connecting

1. Navigate to the Bluetooth setting on the host PC, Mac, Smartphone, or Tablet.
2. Ensure that Bluetooth is enabled on the host device and searching for devices.
3. Using the KDC, scan the pairing barcode that corresponds to your desired Bluetooth profile. If you are unsure which Bluetooth profile is right for you, please refer to previous panel.
4. Check the list of available Bluetooth devices on your host device. In iOS, the application will need to search devices.
5. From the list, select the KDC180 listed by serial number in brackets that matches the serial number found on the back side of the KDC180.
6. In HID Mode, KDC180 is ready to use.
7. To complete connection in SPP Mode, launch KTSync or your application and select KDC180 to connect.

Pairing Barcodes



HID



HID Windows



SPP

If you desire to connect via Bluetooth Low Energy (BLE) OPEN profile, please refer to the instructions in the next section.

Connecting via BLE OPEN Profile

An application can connect to KDC180 without pairing in OPEN profile. The connection procedure below utilizes the KOAMTAC KTSync Application.

1. Ensure that the KDC is powered on.
2. Ensure that Bluetooth is enabled on your smartphone or tablet. Although the KDC180 may appear as an available Bluetooth device on your smartphone or tablet, **do not** select the KDC180 in this menu.
3. Using the KDC, scan the OPEN mode barcode below:



OPEN

Connecting via BLE OPEN Profile

4. Open KTSync on your smartphone or tablet.
5. In the KTSync app, tap the Connect () icon at the bottom left of the app.
6. In KTSync, tap "Start BLE Scanning" in the top right.
7. In KTSync, check the list of found devices.
8. In KTSync, tap the KDC180 listed by serial number in brackets followed by [BLE] that matches the serial number found on the back side of the KDC180. The format will look like this, KDC180[xxxxxx] [BLE], where xxxxxx is the serial number.
9. The KDC180 will beep upon connection and display "Bluetooth Connected" on its screen.

Pairing via NFC (Android Only)

This feature applies only to Android host devices and is available for HID or SPP pairing profiles only.

1. Navigate to the NFC setting on the host device and ensure that Bluetooth is both enabled and searching for devices.
2. Make sure NFC pairing is enabled on the KDC by navigating to KDC MENU > BLE Config > NFC Pairing > Enabled > Save & Exit
3. Select the pairing profile on the KDC by navigating to KDC MENU > BT Config > Connect Device > Select HID or SPP > Save & Exit

OR use the below pairing barcodes:



HID (Android Only)

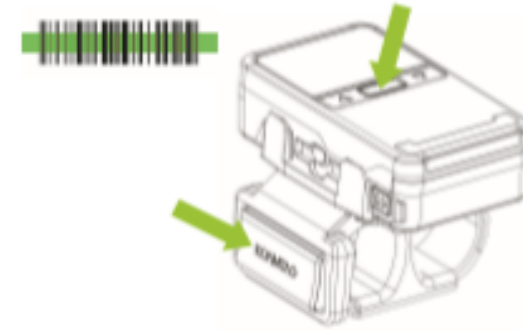


SPP (Android Only)

4. Approach the NFC area on the back of the host device with the KDC to complete pairing.

How to Read Barcodes

1. Aim the KDC directly at the barcode and press the SCAN button on the KDC or on the Ring Trigger, ensuring the beam covers the barcode horizontally.



2. A successful scan (A) will sound 1 beep, show 5 green LEDs, and display the scanned info on the screen. An unsuccessful scan (B) will sound 2 beeps, show 5 red LEDs, and display "Read Failed" on the screen.



LED Indicator Status

The KDC180 is equipped with a set of LED indicators that provide operational feedback & can be programmed via SDK.

Charging:



Green: Charging Complete



Orange: Charging

* Lights 1 through 5 illuminate based on battery level.

Bluetooth:



Green: Connected



Red: Disconnected



Blinking Orange: HID Pairing



Blinking Red: SPP Pairing

Read Indicators:



Green: Successful Read



Red: Failed Read

* Lights 1 through 5 illuminate based on battery level.

Using Keyboard Wedge

Keyboard wedge allows you to use your KDC as a keyboard. The HID profile works as keyboard wedge by default. When using SPP or MFi, KTSync provides a keyboard wedge function when KTSync keyboard is enabled. Please refer to the KDC Reference Manual for detailed instructions to enable KTSync keyboard.

1. Ensure that the KDC is connected to the host using the HID profile or the KDC is connected via KTSync keyboard using SPP/MFi profiles.
2. Open any application on the host device that contains a text field you want to populate.
3. Tap the text field in the application.
4. Scan any barcode with the KDC.
5. The barcode data will then populate in the text field.

KTSync & SDK

KTSync® is a program which communicates with KOAMTAC's KDC via Bluetooth. It enables users to read and store data. KTSync is compatible with iOS, Android, Windows, and Mac. It also supports wedging and downloading data from the KDC.

For more information about KTSync, please visit:
www.koamtac.com/support/downloads/applications

The Software Development Kit (SDK) is the perfect solution for creating a custom application to collect data utilizing your KDC. KOAMTAC's SDK covers all major development platforms: Android, iOS, Mac OS X, Tizen, Windows, Xamarin, and Cordova. Developers may take advantage of the complimentary SDK and enjoy the full benefits of the KOAMTAC Developer Program.

For more information regarding the KOAMTAC Developer Program or to request the latest SDKs, visit:
www.koamtac.com/support/downloads/sdk
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FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.