

# KOAMTAC ▶

## KDC470 & KDC475 Quick Guide



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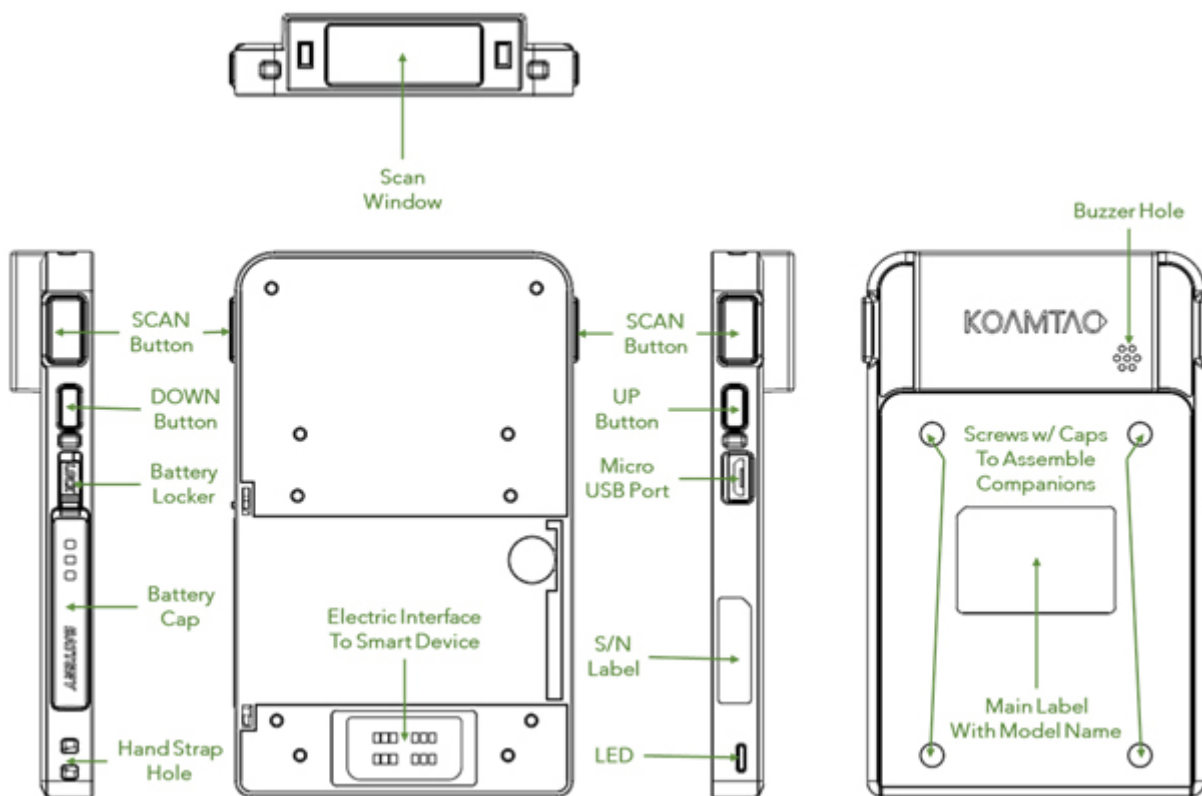
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## 1. Product Introduction

The KDC470 Bluetooth barcode scanner is available with 1D Laser, 1D CCD, or 2D Imager scan engines.

The KDC475 Bluetooth barcode scanner is available with an angled 1D Laser or 2D Imager scan engines.

### 1.1 KDC470/475 Diagram



*\*KDC475 is identical with the exception of an angled scan window*

### 1.2 How to turn on and off

Refer to the figure in section 1.1 to locate the SCAN and DOWN buttons.

- Press SCAN and DOWN buttons simultaneously for 5 seconds.
- The KDC will beep when it is turned ON.

*\* 2017/2018/early 2019 versions of KDC470 turn on upon pressing scan button.*

## 2. Bluetooth Pairing

Connecting your KDC using Bluetooth is made easy with the below pairing barcodes. If you are unsure which profile is right for you, please visit [www.koamtac.com](http://www.koamtac.com) for more information.

### 2.1 Bluetooth Profiles Explained

- a. **HID Profile:** Allows one-way Bluetooth communication with an Android or iOS host device. The KDC only transmits data to the host device.
- b. **SPP Profile:** Allows two-way Bluetooth communication. The KDC transmits data to the host device and the host device can transmit data back to the KDC.
- c. **HID Windows Profile:** Allows one-way Bluetooth communication with Windows host device. The KDC only transmits data to the host device.

**Note:** HID inputs data directly into an application. SPP requires the KOAMTAC SDK to input data into an application. To gain access to the SDK, please complete the form here: <https://www.koamtac.com/sdk/>

### 2.2 Pairing a KDC470/475 to your smart device



Android, Mac, Windows: HID Normal



iOS: HID iOS






SPP & MFi

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 the previous panel.
4. Check the list of available Bluetooth devices on your host device.
5. From the list, select KDC470/475 listed by serial number in brackets that matches the serial number found on the back side of the KDC470/475.
6. In HID mode, KDC470/475 is now ready to use.
7. To complete connection in SPP/MFi mode, launch KTSync or your application and select KDC470/475.

\* The KDC470/475 will beep when successfully connected.

## 2.3 Bluetooth Pairing a KDC470-BLE/475-BLE to your smart device with special barcodes

Bluetooth Profile & Pairing	
#1. HID-BLE & Pairing (Android, iOS, Mac)	
#2. HID-Windows & Pairing (Windows)	
#3. SPP-BLE & Pairing (Android, iOS, Mac, Windows)	

- a. Navigate to the Bluetooth setting on the host device and ensure that Bluetooth is both enabled and searching for devices.
- b. Using the KDC, scan the pairing barcode above that corresponds to your desired Bluetooth profile. If you are unsure which Bluetooth profile is right for you, please refer to [Chapter section 2.1](#).

- If you use an Android, iOS, or Mac device and desire an HID connection, then scan barcode #1 above.
  - If you use a Windows device and desire an HID connection, then scan barcode #2 above.
  - If you desire an SPP connection for any device, then scan barcode #3 above.
- c. In HID or HID Windows Profile, check the list of available Bluetooth devices on your host device. From the list, select the KDC470-BLE/475-BLE listed by serial number in brackets that matches the serial number found on the back side of the KDC470-BLE/475-BLE. KDC470-BLE/475-BLE will beep upon connection and display “Bluetooth Connected” on its screen. Now it is ready to use.
- d. In SPP Profile for non-iOS, check the list of available Bluetooth devices on your host device. From the list, select the KDC470-BLE/475-BLE listed by serial number in brackets that matches the serial number found on the back side of the KDC470-BLE/475-BLE. KDC470-BLE/475-BLE will beep upon connection and display “Bluetooth Connected” on its screen, but you should launch KTSync or your application and select KDC470-BLE/475-BLE within the application to complete the connection. Now it is ready to use.

In SPP Profile for iOS, the KDC is NOT listed on your host device, so you should launch KTSync or your application and select the KDC470-BLE/475-BLE listed by serial number in brackets that matches the serial number found on the back side of the KDC470-BLE/475-BLE. KDC470-BLE/475-BLE will beep upon connection and display “Bluetooth Connected” on its screen. Now it is ready to use.

## 3. Usage

### 3.1 Using Keyboard Wedge (HID Keyboard)

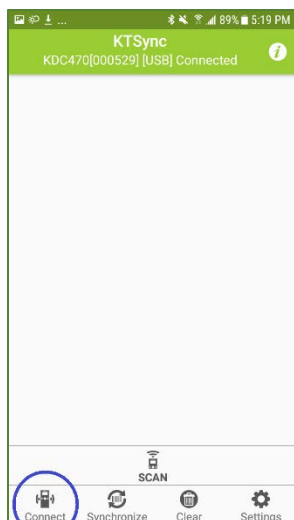
This option is only available using Bluetooth connection with HID profile.

Once the KDC is paired with the host, open any application with a text field and tap on the text field. Scan any barcode and it will populate in the text field.

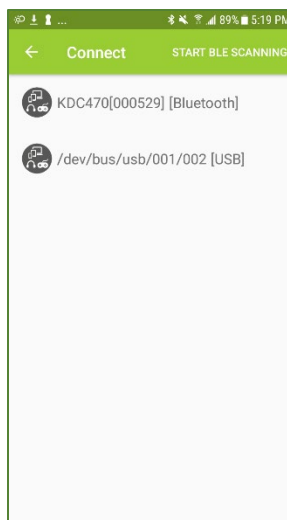
### 3.2 Using KTSync – Android/iOS

You can use KTSync to utilize your KDC alone or with a native application. This is only available using USB OTG (Android), Serial (iOS), or Bluetooth connection with SPP or MFi.

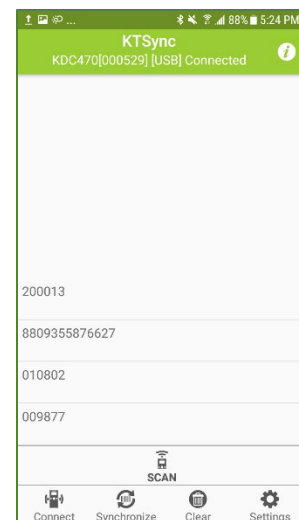
- Download and install KTSync from the [Google Play Store](#) or the [Apple App Store](#).
- Open KTSync and tap on the “Connect” option on the bottom left to view a list of available devices. (Fig. 1)
- From the device list, select your KDC – ensuring that the serial number displayed in brackets matches the serial number on the back of your KDC. (Fig. 2)
- Upon successful connection, KTSync will display “Connected” next to the name of your KDC at the top of the application. (Fig. 3)
- To test your connection, scan any barcode. If the connection is successful, the barcode data will display on the screen. (Fig. 3)



< Fig. 1 >



< Fig. 2 >



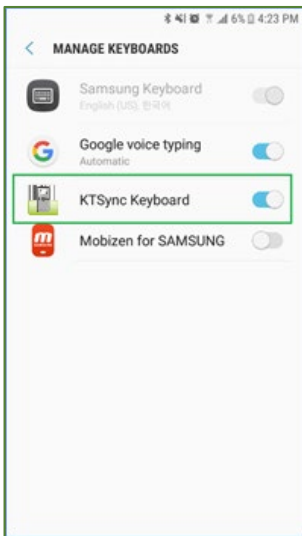
< Fig. 3 >

### 3.3 Using KTSync Keyboard – Android

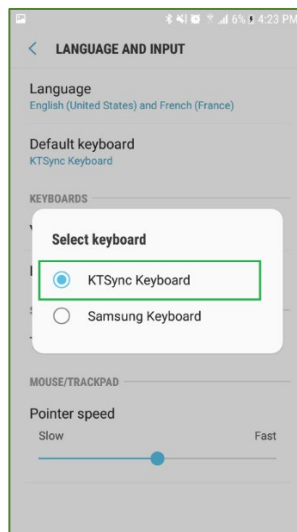
Once your KDC is connected to KTSync, you can use your KDC as a keyboard.

- While KTSync is running in the background, navigate to Settings > Language & Input > Virtual Keyboard > Manage keyboards.
- Tap on “KTSync Keyboard” to enable it.
- Change “KTSync Keyboard” to the default keyboard. (Fig. 4)

To switch back to the previous keyboard, simply change the default keyboard again. Or, when a text field is selected swipe down from the top of the screen to bring up the notification panel. Select ‘choose input method’ and you can select the default keyboard from here. (Fig. 5)



< Fig. 4 >



< Fig. 5 >



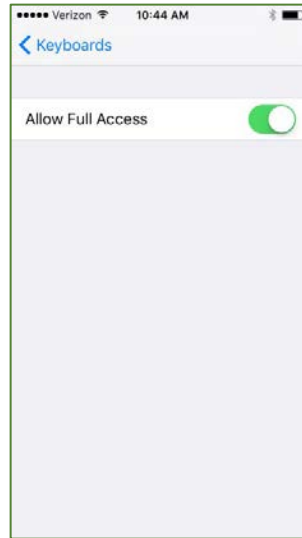
## 3.4 Using KTSync Keyboard – iOS

Once your KDC is connected to KTSync, you can use your KDC as a keyboard.

- Navigate to the iPhone/iPad/iPod Settings > General > Keyboard > Keyboards > Add New Keyboard... > Select the KTSync keyboard to be added. (Fig. 6)
- Select the KTSync Keyboard and toggle the switch to Allow Full Access. (Fig. 7)

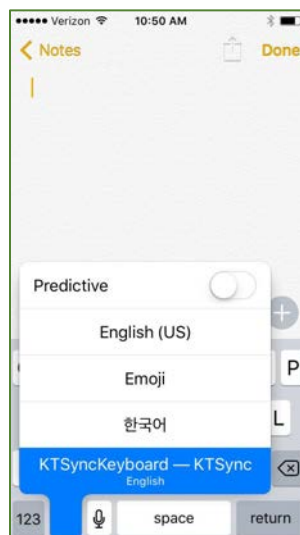


< Fig. 6 >



< Fig. 7 >

- Open the application you want to scan into and tap on the screen, so the on-screen keyboard appears.
- Press and hold the globe icon located to the left of the spacebar.
- Select the KTSync Keyboard and begin scanning. (Fig. 8)



< Fig. 8 >

Note: The KDC must be connected to KTSync & the KTSync keyboard must be selected for this to work.

## 3.5 Using other developed applications with SDK – Android/iOS

A Software Development Kit (SDK) for Android and iOS is available to all KOAMTAC customers to ensure smooth development of applications that work seamlessly with a KDC scanner. It's easy to request the SDK from the KOAMTAC website:

- a) On any web browser, open [www.koamtac.com](http://www.koamtac.com)
- b) Navigate to SUPPORT > Downloads > [SDK](#)
- c) Complete the form and submit it.

After submission, a KOAMTAC representative will reach out regarding next steps for completing the SDK Agreement.

The SDK package will have libraries, documents, a sample application, and its source code.

**SDK Request Form**

Fields marked with an \* are required

First Name \*

Last Name \*

Company \*

Email \*

Phone \*

Project/Application Description \*

Submit

### 4. Product Specifications

Physical	Design	Standard SmartSled
	Size	<b>KDC470:</b> 2.56" x 4.13" x 0.62" (65 mm x 105 mm x 15.8 mm)  <b>KDC475:</b> 2.56" x 4.13" x 0.94" (65 mm x 105 mm x 24 mm)
	Weight w/ battery	<b>KDC470:</b> 3.07 oz (87g) <b>KDC475:</b> 3.1 oz (88 g)
Functionality	Supporting OS	Android / iOS / Mac OS X / Windows
	CPU	ARM7, 32 bits
	Keys	2 SCAN(READ) Keys, UP Key, Down Key
	Buzzer	Yes
	LED Indicator	1 Tri-color LED (Red / Amber / Green)
	USB Port	1 Micro USB Port
Memory	RAM	SDRAM 64KB
	ROM	Internal Flash ROM 256KB External Flash ROM 8MB
	Barcode/RFID Storage	409,600 Barcodes (EAN-13) or 409,600 RFID tags (in case of 12 bytes of EPC Data)
Power	Battery (Standard)	1130 mAh Lithium-Ion
	Battery Pack	Field Replaceable Hard Pack
	Extended Battery	2,000 mAh (Optional)
	Charging Solution	USB Port, Charging Cradle (POGO, Optional)
	Simultaneous Charging (KDC & Host)	Yes
	Charging Time (KDC)	4 Hours
Communication	Bluetooth	V2.1+EDR, Class2, HID/SPP/MFi (Classic Models) Or, BLE4.1 HID/SPP (BLE Models)
	USB	USB HID, USB Serial (Android with OTG cable / Windows)
	Serial	Serial (iOS)
Barcode Reader	1D Laser	Yes (KDC470L / KDC475S)
	1D CCD	Yes (KDC470D)
	2D Imager	Yes (KDC470C / KDC475H)
	# of scans (1 sec interval)	Laser > 60,000 CCD > 50,000 Imager > 25,000

See Reference Manual for more detailed information.

Visit [store.koamtac.com](http://store.koamtac.com) to purchase additional products and accessories.

	# of scans (10 sec interval)	Laser > 20,000 CCD > 15,000 Imager > 10,000
	Scan Range (10mil Code39)	Laser (L): 1.97" to 7.48" (50 to 190 mm) Laser(S,10mil Code128): 1.2" to 19.0" (30 to 483 mm) CCD (D): 2.17" to 11.81" (55 to 300 mm) Imager (C): 1.81" to 9.68" (46 to 246 mm) Imager (H): 1.1" to 13.3" (28 to 338 mm)
	Screen Reading	Yes (KDC470D, KDC470C, KDC475H)
	Postal Codes / OCR Passport	KDC470C: Yes / MRZ Supported KDC475H: Yes / No
Companions	RFID (HF Reader)	Optional
	RFID (UHF Reader)	Optional (0.5W, 1.0W)
	Magnetic Strip Reader	Optional
	Chip-and-PIN (EMV)	Optional
	Extended Battery Pack (2,000 mAh)	Optional
	Pistol Grip	Optional
Environment	Drop Spec	5 ft (1.5 m)
	Tumble (Height: 0.5m)	500 cycles (1000 drops)
	IP Rating	IP65
	Operating Temp.	-4 °F ~ +122 °F (-20 °C ~ +50 °C)
	Storage Temp.	-4 °F ~ +140 °F (-20 °C ~ +60 °C)
	Humidity Spec	5% ~ 95% (non-condensing)
Regulatory Conformance	Laser Safety	IEC60825/CDRH Class II
	LED Safety	IEC62471:2006
	Regulatory	RED, R&TTE, FCC, KC, TELEC, VCCI, SRRC, RoHS Compliant
Accessories	Hand Strap	Yes
	USB Cable	Yes (Micro USB)
	1-slot Charging Cradle	Yes
	4-slot Charging Cradle	Yes
	Supporting Case (Integrated Custom Case)	Galaxy XCover4 / Tab Active 2, Apple iPod Touch 5/6G/ iPhone 7/8 Plus
	Supporting Case (Universal Case)	All Cases