Basic Set-Up

1. Powering On

To confirm that the UHF Reader is installed correctly, power on your SmartSled with the UHF Reader attached.

- **KDC1000/1100** – Powers on automatically when the phone is inserted and powered on. *For iPhone 13/14 models, press both SCAN buttons for 3 seconds to power on.*
- **KDC480/485** – Press the SCAN and DOWN buttons for 3 seconds.
- **SKX Series** – Powers on automatically when the phone is inserted and powered on.

2. Boot & Detection Beeps

If installed correctly, the KDC SmartSled will emit on boot-up:
- One beep at power on
- One beep after boot-up
- One (or two) quick beep(s) indicating that the UHF Reader is detected and ready for use
* *SKX SmartSled does not emit detection beeps and is ready immediately.*

If you do not hear the final one/two quick beep(s), the UHF Reader may not be installed properly. Please verify the installation.

Connectivity

Your SmartSled connects to a host device via USB, Serial, or Bluetooth depending on the model. Connection types determine whether communication is one-way (device → host) or two-way (device ↔ host).

HID

One-way communication (HID / HID Windows / USB HID)
The device transmits data to the host device only. Data inputs directly into applications.

SPP

Two-way communication (USB Serial / Bluetooth SPP / Serial)
The device transmits data to the host, and the host application can transmit data or control back to the device. Two-way connections may require KTSync or a custom application using the KOAMTAC SDK.

For model-specific connection and pairing details, refer to your device's Mini Guide:

- **KDC1000/1100** – USB, Serial, Bluetooth
- **KDC480/485** – Bluetooth HID/SPP/HID Windows; USB with OUA; Serial with iPod touch case
- **SKX Series** – USB HID, USB Serial

Usage Warnings

To ensure safe operation and optimal UHF tag reading while keeping human exposure to RF energy within FCC and European Union guidelines, always follow the instructions and precautions below:

- Carefully read the Quick Guide and Reference Guide before using the 1W UHF Reader Companion.

- Only professional users who fully understand the reader should operate this device.

- Maintain at least 8 inches (about 20 cm) between the reader and your body when reading UHF RFID tags.

- Always point the UHF antenna toward the tags; do not direct it toward your body when reading UHF tags.

- Exit UHF tag read mode and return to Barcode read mode when finished reading UHF tags.

- Do not wear the UHF reader when it is not in use.

Entering UHF Mode (KDC1000/1100/SKX)

You can use the same SCAN button or pistol-grip trigger to read barcodes or UHF tags.

The device uses Barcode Mode by default (or after factory reset).

To toggle between modes:
- Press the SCAN buttons in the following sequence within 3 seconds:
- Left → Left → Right → Right → Left → Right, or
- Change the mode through KTSync or an application using the SDK.

Mode confirmation beeps:
- Entering UHF Mode: 2 beeps
- Entering Barcode Mode: 1 beep

LEFT RIGHT

*KDC1000 shown for illustration purposes. SKX uses the same button logic.

Additional Companions

- HF Reader
- 0.5W UHF Reader
- Pistol Grip (opt. 6000mAh battery)
- 4000mAh Extended Battery
- mPOS
- MSRIC

Separate models available for KDC and SKX SmartSled platforms.

Charging Cradles

- 1/NB/5-Slot Charging Cradle for KDC480 w. OUA/GUA & Pistol/1W
- 1/NB/5-Slot Charging Cradle for KDC480 w. Pistol/1W
- 1/NB/5-Slot Charging Cradle for KDC1000 w. Pistol/1W
- 1/NB/5-Slot Charging Cradle for SKX SmartSled w. Pistol/1W
- 2/10-Slot Charging Cradle for Pistol Grip 6000mAh Battery

KOAMTAC

Entering UHF Mode (KDC480/485)

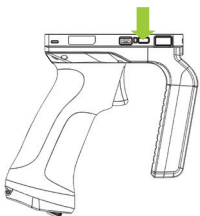You can use the same SCAN button or pistol-grip trigger to read barcodes or UHF tags.

The device uses Barcode Mode by default (or after factory reset).

To toggle between modes:
- Press and hold the UP button for 3 seconds, or
- Change the mode through the application using the SDK.

Mode confirmation beeps:
- Entering UHF Mode: 2 beeps
- Entering Barcode Mode: 1 beep

KOAMTAC

1W UHF Reader Companion
Mini Guide

For KDC1000/1100, KDC480/485, and SKX SmartSled.

For details on warranty, certifications, and legal compliance, please refer to koamtac.com and the Reference Manual.

Reading Barcodes & UHF Tags

Only one type of data at a time based on the active scan mode.

- When in Barcode Mode, the device will read only barcodes.
- When in UHF Mode, the device will read only UHF RFID tags.

To perform a scan, point the device toward the barcode or tag you want to read and press the SCAN button or pull the trigger.

A single beep indicates a successful read; multiple beeps indicate the read was unsuccessful.

KDC SmartSled

SKX SmartSled
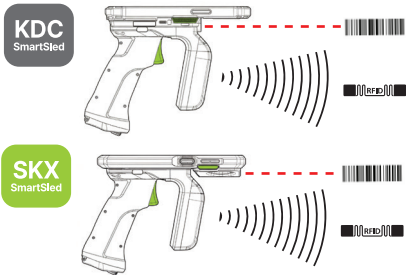
Using Trigger Mode

In Trigger Mode, the 1W UHF Reader can scan both barcodes and UHF tags using the built-in trigger, without switching between Barcode and UHF modes.

- Pull the trigger once to read UHF RFID tags.
- Quickly pull the trigger twice to scan barcodes.

Use the barcodes below to enable or disable Trigger Mode.

Enable Trigger Mode

Disable Trigger Mode

Changing the UHF Tag Read Mode

When the device is in UHF Mode, you can switch between three UHF read modes: **Single**, **Multiple**, and **Active**.

- These modes determine how many tags are read when the scan button or trigger is used.
- Modes cycle in the following order:
  Active (default) → Single → Multiple → Active.
- Each mode is confirmed by a different number of short beeps.

For **KDC480/485** models, press and hold the DOWN button for 2 seconds to change UHF read modes.

For **all other SmartSled scanners**, change modes through KTSync or by scanning the special mode barcodes provided in this Guide, using the Trigger Mode defined in the previous section.

1. UHF Active Read Mode

- The default mode. Continuously reads multiple tags while the SCAN button/trigger is held (up to 10 minutes). To disable this time limit, refer to the Quick Guide for your device.
- 3 short beeps when switching into this mode.

Active Read Mode (Enable)

Active Read Mode (Disable)

In Active Mode, holding the SCAN or Trigger button for over 10 minutes automatically switches the device to Barcode Mode to prevent battery drain. This feature can be disabled.

2. UHF Single Read Mode

- Reads one tag each time the SCAN button/trigger is pressed.
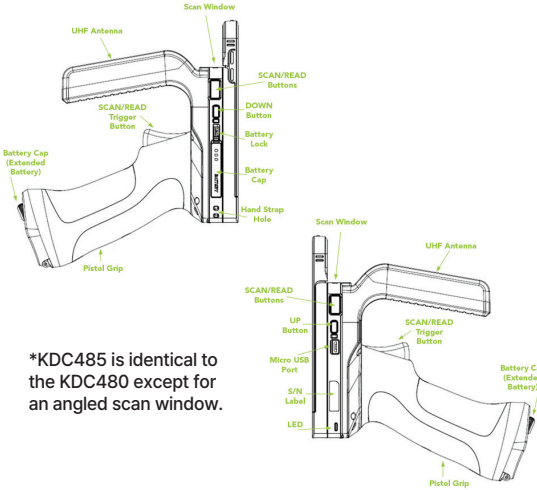- 1 short beep when switching into this mode.

Single Read Mode

3. UHF Multiple Read Mode

- Reads multiple tags simultaneously for a set duration (default 10 seconds)when the SCAN button/trigger is pressed.
- 2 short beeps when switching into this mode.
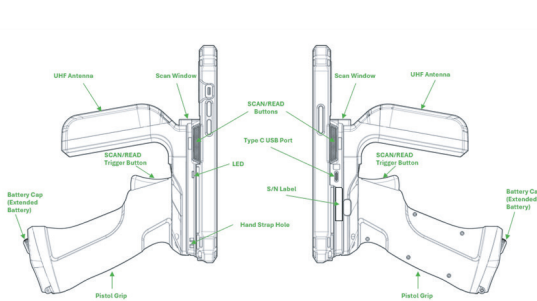- Adjust duration in Settings → Reading Timeout.

Multiple Read Mode

KTSync & SDK

KTSync® communicates with KOAMTAC devices via USB, Serial, or Bluetooth. It supports data collection, wedging, and file download, and is compatible with iOS, Android, Windows, and Mac.

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

The **Software Development Kit** (SDK) enables custom app development across Android, iOS, Windows, Web, Xamarin, Cordova, React Native, and Flutter.

For information regarding the KOAMTAC Developer Program or to request the latest SDKs, visit:
www.koamtac.com/support/downloads/sdk
or e-mail sdk@koamtac.com.

The **KDCUHF** app connects to UHF equipped SmartSled scanners via iOS or Android, enabling UHF reading, performance testing, and device configuration. Users can switch between Barcode and UHF modes, change tag reading modes, adjust power, customize tag parameters, set timeouts, and modify data types and region. Available on Google Play and the Apple App Store for demo and SDK development purposes.

1W UHF Reader for KDC480/485

*KDC485 is identical to the KDC480 except for an angled scan window.

1W UHF Reader for KDC1000/1100

1W UHF Reader for SKX SmartSled