baracoda Traceability

Data Capture
for Workforce
in Motion

orKan ‘RFID-HF’ terminal

User Guide

Bluetooth

Revision History

Changes to the original manual are listed below.

Document	Date	Author	Description
1.0	11th April. 2012	AP/TF	Initial
1.1	23rd April 2012	TF/AFR	Add 'XIRING – ingenico Healthcare/eID"
1.2	26th April 2012	TF	FCC id completed for FCC submission
1.3	22nd May 2012	TF	FCC paragraph modified following FCC request

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II. Introduction

The orKan RFID-HF (BOK-TG) is a contact RFID Reader/Encoder HF 13,56Mhz.

It is easy to use - just press the trigger button in order to switch ON the terminal. Please use the side buttons to change the current application and the trigger button to select the application you want to use. To return to the main menu press the two side buttons at the same time and select MAIN MENU using the trigger button. The colour of the LEDs indicates the device status. A beep indicates that the terminal has connected to the remote host or that a piece of data has been captured successfully. Acknowledgement of a completed scan is configurable by the user.
Captured data (RFID-HF tag data…) read by orKan is transmitted in real time to the remote host using Bluetooth wireless technology. It can also be stored in the terminal's flash memory and later uploaded to a remote host using Bluetooth wireless technology. You can download software updates as well as additional documentation from http://www.baracoda.com after registration.

III. Product presentation

The orKan has two (2) LEDs, three (3) trigger buttons and one (1) OLED screen. They provide the Bluetooth connection status and the reading status. The right-hand side LED is the Bluetooth connection LED (BCL) and the left-hand size LED is the reading status LED (RSL).

1) *Front*

The function of the BCL is to give:

- the Bluetooth connection status of the terminal (connected or not connected).
- the operating mode of the terminal (Real Time mode, Batch mode).

The function of the RSL is to give:

- the information whether or not a piece of data has been captured.
- the battery level status. If the battery level is too low, you will need to recharge the battery immediately.

2) *Side*

On the right-hand side of the terminal you will find a micro USB socket. On the opposite side one can find the lanyard used to get hold of the terminal more easily.

3) *Top & Bottom*

You will find the scan engine of the terminal in the top part. At the bottom the cradle connector is installed.

4) *Back*

The label on the back side of the orKan terminal provides the following information:

- the terminal model
- its Bluetooth MAC address
- its serial number

IV. Installing / replacing the protective boot

To put the protective boot on the terminal:

- put the string lanyard in its place

- put the terminal in the protective from bottom up as shown on the picture below

To remove the protective boot, please push the top part of the terminal.

V. Installing / replacing the battery

Please use only Baracoda-approved rechargeable batteries. The use of any other batteries may damage the terminal and void the warranty.

To insert batteries into the orKan:

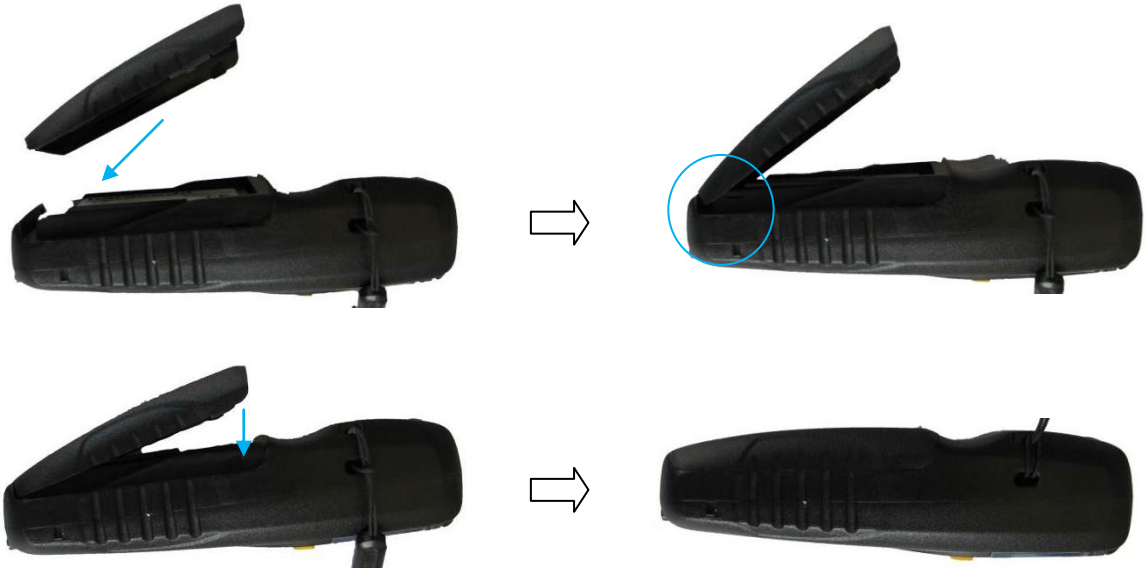
- use a coin to unlock and remove the battery cover at the back of the orKan
- turn the lock underneath the terminal to a vertical position (upwards).

Close

Open

Put the Baracoda battery in its location. Please pay attention to well position the battery connector.

Slide the cover from the bottom up and lock it into place.



Caution: There is a risk of explosion if the battery is replaced by an incorrect battery type. Dispose of used batteries according to the instructions.

VI. How to recharge the orKan terminal ?

The internal battery can be recharged by using the included AC adapter or a charging cradle (optional). The adapter rating is 5V, 1,3A.

When the terminal is charging, the RSL led (left) is red (solid). When the terminal is fully charged, the RSL led (left) is green (solid).
A full recharge (from completely drained batteries) takes approximately six (6) hours.

Make sure that the temperature is between **0°C and 35°C** to recharge the battery.

When the original batteries wear out, please contact your Baracoda reseller for replacements.

Note: When you insert the orKan in a charging cradle, the terminal will:

- emit a beep
- and automatically switch ON (if it was OFF) followed by displaying the dedicated '*frozen display*' (cf below)

Whenever an orKan terminal is put in the cradle, the right-hand side LED of the cradle will be green.
The left-hand side LED of the cradle will be switched on if a battery is put in the cradle (behind the terminal). If the battery is charging, the LED color will be red. As soon as it has been fully charged, the left-hand side LED will be green.

Note: the right-hand side LED of the cradle will always be green if a terminal is put in the cradle (whether its battery is charging or fully charged).

VII. Switching the terminal ON/OFF

1) *How to switch ON ?*

In order to switch the terminal on, please press the middle trigger button. When you press this button, the 2 LEDs will first blink in orange and right afterwards they will blink in green (boot). Once the orKan has been switched on, the right-hand LED will be blinking in green.

Now you are in the main menu.

2) *How to switch OFF ?*

To switch the terminal OFF, please go to the “OFF” application and press the middle trigger button to validate.

Nota : The terminal will switch itself OFF after a period of inactivity.
The default shutdown delay is ten (10) minutes if the terminal is not connected via Bluetooth and twenty (20) minutes if the device is connected via Bluetooth. Whenever the user presses the middle trigger button the counter will be restarted. These default values can be modified by the end user.

VIII. GUI interface

1) LEDs

BCL LED:

Single blinks (e.g. *pause*pause*…)	The terminal is ready to be connected (Bluetooth)
Double fast blinks (e.g. **pause**pause**…)	The terminal is connected (Bluetooth)
The LED color is green	The terminal is in Real Time mode
The LED color is orange	The terminal is in Batch mode

RSL LED:

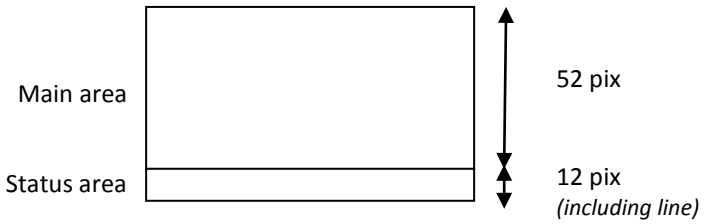
One single long blink (green color)	The terminal has just captured data
Orange (solid)	The battery level is low (<5%)
Red (solid)	The terminal is charging (battery not full)
Green (solid)	The terminal is fully charged

Special cases:

Following sequence on both LEDS : Orange (solid) / Green (solid) / Orange (solid)	At the terminal start, that means the launch of parts : Bootloader / Kernel / Application

2) Display

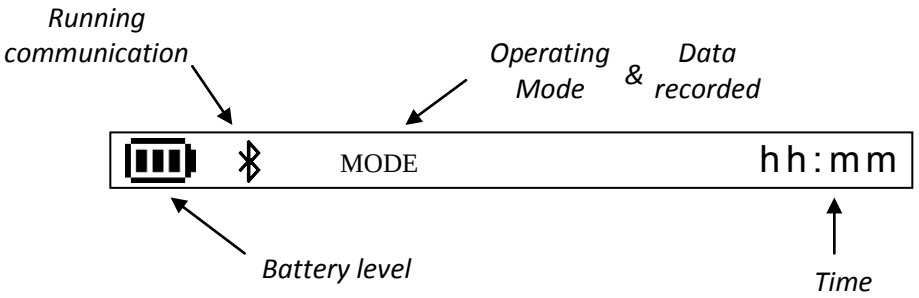
The user interface fixed structure is this one :



- ✓ ***Main area***
  This area allows the display of information. Everything that appears in this area is defined by the application

✓ ***Status area***

This area is always visible by the user. It displays basics information



➢ *Battery level*

An icon representing the battery level is shown. Several states can be displayed:

: If Vbat ≥ 70%, this icon is displayed.

: If 70%> Vbat ≥ 40% ; this icon is displayed.

: If 40%> Vbat ≥ 10% ; this icon is displayed.

: If 10%> Vbat ≥ Vlow (ie : 5%), this icon is displayed.

: If Vlow > Vbat ; this icon is flicking

During battery recharge this icon will be displayed.

➢ *Running communication*

: a Bluetooth connection is established.

CDL : connection via the cradle

Note : (ᛒ) means that orKan is discoverable via Bluetooth

➢ *Operating mode*

RT: Real time mode (Raw)

NL: Real time mode with No Data Loss mode

BA: Batch mode

✓ <u>*No Batch data stored*</u>: all the operating mode logos (below) are written with **white font on black background.**

✓ <u>*Batch data stored*</u>: all the operating mode logos (below) are written with **black font on white background.**

➢ *Time*

HH:MM: in 24-hour mode with HH: hours and MM : minutes

3) *'Frozen display'*

In some cases, the terminal has to be focused on one (1) specific action. In other words, to guarantee a good product behavior, the user mustn't stop/disturb the current running action. In such a case, capturing data (writing/reading of RFID tags…) is forbidden; no user application is running…

During this running specific action, the following screen is displayed:

[action 1] [action 2] BT name: xxx BDA: xx.xx .xx.xx.xx.xx S/N : xxxxxxx Batt. level : xxx%

- 'Action' (two actions can be displayed at the same time – not more):
  - [Charging]: Battery recharge
    No application with data capture can occur during this operation. However, communication with a host (to configure, transfer of recorded data, etc.) is possible.
  - [Uploading]: transmission to the host recorded data
  - [Upgrading]: Upgrade the orKan terminal
- 'BT name': Bluetooth Name
- 'BDA': Bluetooth Device Address
- 'S/N': product serial number
- 'Batt. level': percentage of the remaining battery level

IX. Connecting your orKan terminal

There are two (2) different ways to create a connection from the host to the orKan terminal by Bluetooth:

1) *Slave mode (default)*

The host (PC, Baracoda Desktop Manager, …) creates the connection to the terminal. In this case, the remote host is the master Bluetooth node and the orKan terminal is the slave node.

The terminal can be configured to reconnect automatically with the Baracoda Desktop Manager software.

2) *Master mode*

The terminal is creating itself a connection to the recorded Host Bluetooth address. This connection attempt is set after a scan of barcode. The configuration of Host address (on which the scanner will set up a connection to) can be done:

- Via Baracoda Desktop Manager software (not yet available).
- Via scan of barcodes.

All usage modes (Real Time, No Data Loss, Batch) are obviously available.

X. Configuring your orKan terminal

There are two (2) ways to configure your orKan terminal:

- when connected to a PC, the Baracoda Desktop Manager software can be used for multiple setting changes.

Nota : obviously, this device cannot be configured by configuration barcodes (ie : programming Guide)

1) *Reset to default settings*

To reset the orKan terminal to default settings, the user can use the Baracoda Desktop Manager.

2) *Bluetooth Security Settings*

Every Bluetooth connection is secured with a PIN code authentication. You can configure security (enable/disable/change PIN code) with the Baracoda Desktop Manager software (Bluetooth tab in the Device Settings module) or with the Programming Guide.
Bluetooth security is enabled by default and the default PIN code is **0000 (zero zero zero zero)**.

3) *RFID-HF protocol Settings*

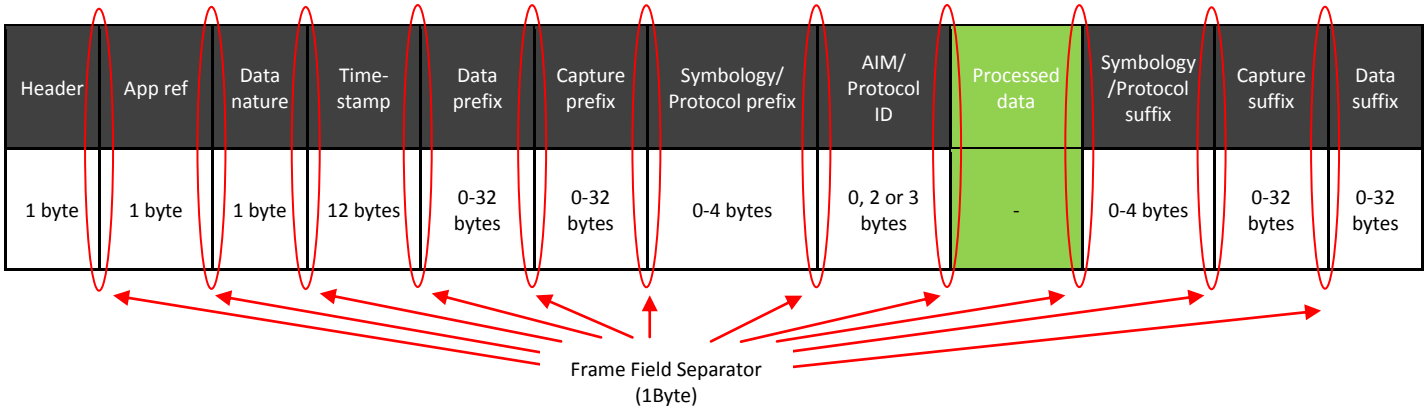
You can enable/disable/modify any type of RFID HF protocol with both the Baracoda Desktop Manager software.

Here is the list of RFID-HF protocols supported by orKan dual (CPU v0.4.01.48 – RFID v1.63[10])

RFID Protocols supported			
Protocols	*Examples*	Read Tag Id	Read / Write data memory
ISO/IEC 14443- A	Mifare 'classic' 1K / 4K	Yes	Yes
	Mifare Ultralight	Yes	Yes
	Mifare DESFire (unsecured)	Yes	No
	Mifare Pro, ProX, SmartMX	Yes	No
ISO/IEC 14443- B	Atmel Crypto RF	Yes	Yes
ASK CTS256B & CTS512B		Yes	No
S.T. MicroElectronics SR		Yes	No
Inside Contactless PicoTag		Yes	No
NXP ICODE-1		Yes	No
ISO /IEC 15693-3	KSW VarioSens®	Yes	No
ISO /IEC 15693	NXP ICODE SLI	Yes	Yes
	S.T. MicroElectronics LRI64	Yes	Yes
	TI Tag-it HF	Yes	Yes

4) *Data format*

The general format of data sent by the orKan terminal to the remote host is shown on the following table:



where:

a. *Baracoda Header*

It is a proprietary data encapsulation header. The user will need to activate the Baracoda header in 2 cases:

- to be able to receive data in the Baracoda Desktop Manager.
- to use the "No data loss" mode (and application acknowledgement).

You can configure the Baracoda header with the Baracoda Desktop Manager software (on the General tab of the Device Settings module). The Baracoda header is enabled by default.

b. *Application Reference*

This data corresponds to the identifier of the currently active application. This option is disabled by default.

c. *Data Nature*

This byte can be used to identify the nature of received data (RFID Tag ID, RFID memory data). The data nature byte is not active by default.

d. *TimeStamp*

Timestamp can be configured (enable/disable, synchronize the orKan real time clock with the PC) with the Baracoda Desktop Manager.
Timestamp format is the following: YYMMDDhhmmss, where
YY: YEAR MM: MONTH DD: DAY hh: Hours mm: Minutes ss: Seconds

e. *Data Prefix / Suffix*

A prefix and/or suffix can be added to every piece of data sent to the host device.
You can configure the data prefix/suffix via the Baracoda Desktop Manager software or with the Programming Guide. By default there is no data prefix or suffix set on the orKan terminal.

f. *Capture Prefix/Suffix*

A capture prefix and/or suffix can be added to every piece of data sent to the host device.

You can configure the capture prefix/suffix via the Baracoda Desktop Manager software or with the Programming Guide. By default there is no data prefix or suffix set on the orKan terminal.

g. *RFID HF protocol Prefix/Suffix*

A prefix and/or suffix can be added to a specific symbology/RFID protocol sent to the host device. When such a prefix/suffix is set it will be prepended/appended to every read piece of data (ie : RFID tag ID) of the corresponding symbology/RFID protocol. You can configure RFID protocol prefixes/suffixes with the Baracoda Desktop Manager software.

No RFID protocol prefix/suffix is set by default on the orKan terminal.

h. *Protocol ID*

RFID-HF protocol Identifier

The reader can transmit a maximum of 3 (three) digit RFID-HF Protocol Identifier codes for different types of RFID-HF protocols.

If the option is selected, the RFID Protocol Identifier is added at the beginning of the data frame.

You can activate RFID-HF Protocol Identifier through Baracoda Desktop Manager software .

The RFID Protocol Identifier is disabled in default settings.

List of RFID Protocol Identifier codes can be found in the following table:

Identifier	Associated RFID protocol
[A]	ISO/IEC 14443-A (or NXP Mifare)
[B]	ISO/IEC 14443-B
[C]	ISO/IEC 15693 (e.g. TI Tag-it or NXP ICODE-SLI)
[D]	NXP ICODE-1
[E]	Inside Contactless PicoTAG
[F]	S.T. MicroElectronics SR
[G]	ASK CTS256B/CTS512B
[H]	Calypso (Innovatron protocol)
[I]	EPC HF Version 2
[Z]	Unknown

i. *Frame Field Separator*

It is possible to set and activate a 1-byte frame field separator that will be inserted between every field. You can activate the frame field separator via the Baracoda Desktop manager software or with the Programming Guide.

The Frame field separator is disabled by default.

5) Beeps, Vibrator and LEDs

You can enable/disable beeps / Vibrator / LED blinks using either the Baracoda Desktop Manager software or the Programming Guide.

6) Power Management

Several parameters can be tuned to optimize the battery autonomy (“Sniff period”, “Shutdown timer”, etc…)
The orKan terminal Bluetooth power is set at 20dBm (Bluetooth Class 1) by default.
The Baracoda Desktop Manager software can be used to modify the parameters having an impact on the battery autonomy.

7) Low Battery

An alternation of red and green blinking on the two (2) LEDs indicates that the battery level is low. Recharge the battery immediately. If you continue using the terminal, it will work until a triple beep occurs: at that moment the terminal will shut down and you will be forced to charge the terminal.

XI. How to capture data ?

1) *orKan positionning to capture RFID HF tag*

In order to switch ON the orKan terminal, please press the middle trigger button.
Position the terminal on the RFID HF tag.
Nota : Tag HF reading distance : contact

Concerning the capture of RFID-HF, the terminal is able to

- read & treat TagID as a barcode. In other words, press on the trigger ; the terminal will emit a beep when the Tag ID (UID) is read.
- read or write the unsecure RFID Tag memory in being Bluetooth connected to a host which is managing these actions via Baracoda Desktop Manager or BaracodaManager (ie: Windows Mobile, Android, BlackBerry…) software(s) or SDK(s)

Correct

Correct

Correct

Not Correct

2) Different usage modes

There are two (2) main operating modes in which the orKan terminal can be used:

- **real time mode** (with or without No Data Loss mode). When the terminal is in this mode, it will try to transfer all captured data (ie: RFID-HF tag ID) to the terminal at once.
- **batch mode** (off-line). When the terminal is in this mode, it will save captured data (ie : RFID-HF tag ID) in its memory until it receives an upload command (via the Baracoda Desktop Manager).

a. Real Time mode

In real time mode, the running *application data result* (such as captured data decoded & processed) is transmitted to the remote host without any delay. If the terminal is not connected, the data is lost (status of the RSL LED: red flash).

b. Real Time mode – with No Data Loss option

If the *No Data Loss* option is activated and the orKan terminal is not connected or out of Bluetooth range, the terminal will store all *application data results* in memory. When a Bluetooth connection is (re)established to the remote host, stored data are automatically uploaded.

Every piece of data sent to the host must be acknowledged. If the host fails to send an acknowledgement, the terminal will continue to transmit the data until the host does send an acknowledgement.

This acknowledgment is disabled by default. It is strongly recommended to set the *No Data Loss* mode to ON; this configuration option can be set with the Baracoda Desktop Manager software or with the Programming Guide.

Additionally, when the *No Data Loss* mode is active it allows the end user to set audio acknowledgment indicating that the captured data has been successfully transmitted to the host.

c. Batch mode

Captured data is always stored on the orKan terminal. Once the batch mode has been selected, the BCL led (right) starts flashing in orange color. In batch mode, the terminal stores *application data result* into its non-volatile memory for later transmission to the host.

To upload data from the orKan terminal, connect it to the host computer via Bluetooth. The Baracoda Desktop Manager software can be used to configure the location where the uploaded data is sent once they have been extracted from the terminal.

Once connected, the terminal will wait for the appropriate command in order to start uploading the data. This command can be received from:

- the Baracoda Desktop Manager: the user has to click on the “Upload” button.

Be aware that there are two (2) ways to upload data stored in batch mode with the Baracoda Desktop Manager:

- to a .txt file (default option). The Baracoda Desktop Manager gives you a possibility to modify the name of the file in which you may want to save the data.
- to an application window: In this case always double-check that the cursor in your text window is active before starting the upload procedure. Otherwise you will loose all the data saved on your orKan terminal.

3) *Different Reading modes*

The orKan terminal has four (4) reading modes. These modes can be set through either the Baracoda Desktop Manager software or the Programming Guide.

a. *Trigger mode (default setting)*
Simply press the middle trigger button when you want to capture data.

b. *AutoScan mode*
This mode enables to scan continuously; in Autoscan mode the scan beam is continuously on. This mode allows a very fast reading, but battery consumption is high.

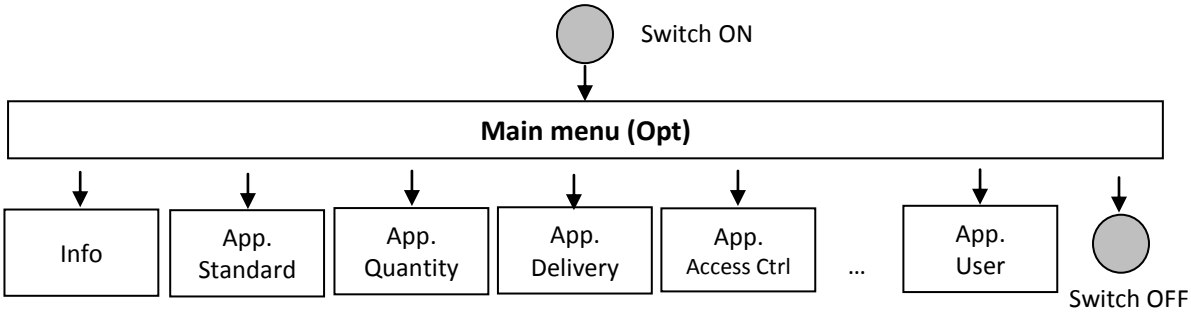
c. *Manual AutoScan mode*
When this capture mode is selected, pressing the trigger will switch ON the beam continuously (like in Autoscan). The beam will stay in this mode until the trigger is pressed again.

Note: in the case where the trigger is not pressed the second time (to stop the Manual Autoscan) the beam will stay on until the shutdown timer expires. When the terminal is switched ON, pressing the trigger will switch the beam on continuously.

XII. orKan embedded application(s)

1) *Global structure*

The orKan can embed several applications. All of them are accessible via the '*Main Menu*' which is a list of icons (horizontal).
To navigate in '*Main Menu*', please press on the left or right button.



a. *How to go into an application?*

In '*Main Menu*', select the application icon.
To launch the selected application, press the middle button (trigger)

b. *How to quit a running application*

To quit a running application, please press both (the left and right) buttons at **the same time**.

An '*Idle Menu*' is displayed. Navigate in it with left or right button and select '*Main Menu*' by pressing the trigger button:

c. *Terminal info*

By pressing the "INFO' icon available on the '*Main Menu*', the user will have access to main information of the terminal :

- BT.name: xxxx.
  By default, 'xxxx' is "BOK_bbbb" with 'bbbb', the value of last 4 digits of BDA
- FW pack: v.x.x.xx.xx
- RFID Fw : vx.xx.xx
- Batt level: xx %
- BDA: XX:XX:XX:XX:XX:XX (Bluetooth Device Address)

2) *Application: Introduction*

All embedded applications in the orKan terminal can be defined by the following list of requirements (that they have to to comply with during its creation):

- *Scenario & action(s)*: a user application is an execution of action(s) sequence ; in other word, it is a *scenario*.
- *Scenario start & end*: a scenario starts with a data capture and ends by the processed data being sent (*in Real Time mode*: sent to the configured host; *in Batch mode:* sent to flash memory)
- There is only one active scenario at a time.
- *Application Field Separator*: an action can produce a result. Each result is concatenated to the captured data. Each concatenated part is separated by a delimiter defined by the customer (Application Field separator).
- *To quit the user application:* (scenario's loop (from end to beginning)), the left&right buttons have to be pressed together; next select the "Main Menu" option.

Of course scenarios (that is a sequence list of actions) can be defined by the customer (with the help of the Baracoda Desktop Manager software). This can be done by either modifying the existing scenarios or adding new ones (depending of the license rights).

An *User application* is defined by several parameters. The most common ones are:

App. Name	Name given by the customer when using it (will be displayed in Main Menu)
App. Welcome message	Text displayed when the user enters the application
App. description	Text used by the host to describe the purpose of the application
App. Version	String containing the application revision number
App. GUID	String containing the unique identifier of the application
Icon ID	Index of the Icon that will be displayed in Main Menu
App.Field separator	Character dedicated to action result delimitation
App.Options	Field dedicated to scenario customization
Actions count	Count of all the actions contained in the scenario
Actions list	

3) *Pre-loaded applications*

By default, the orKan terminal embeds four (4) pre-loaded applications that can be modified and removed… by using the 'orKan apps' module of the Baracoda Desktop Manager (depending of the license rights).

a. *Standard*

This application causes the orKan to display all captured data.

Application Field Separator: n/a
Scenario / List of called actions:

a) Display *Welcome Message*: "Press trigger to read data"
   Note: only displayed at the application start.
b) Capture Data
c) Display Data

b. *Quantity*

This application adds a digital number information to every captured piece of data.
It could be a number associated to the quantity of the product; this number could also have another meaning, depending on the final application (for example shoes value for a shoe reseller).

Application Field Separator: (space)
Scenario / List of called actions:

a) Display *Welcome Message*: "Press trigger to read data and add quantity"
   Note: only displayed at the application start.
b) Capture Data
c) Display Data
d) Set number:
   - Action.Name: 'Quantity: '
   - Min: 0
   - Max: 99 999
   - Default value: 1
   - Step: +1
   - Long press on button effect:
     i. Step multiplication value: +5
     ii. After: 200ms (of button press)

c. *Delivery*

This application is the same as Quantity, but allows adding a new data selected by the user from a local list of choices.
In the pre-loaded version, the possible list of choices is associated to the final application of delivery.

Application Field Separator: (space)
Scenario / List of called actions:

a) Display *Welcome Message*: “Press trigger to read data, add quantity and select status”
   Note: only displayed at the application start.
b) Capture Data
c) Set Number:
   a. Action.Name: ‘Quantity: ‘
   b. Min: 0
   c. Max: 99 999
   d. Default value: 1
   e. Step: +1
   f. Long press on button effect:
      i. Step multiplicator value: +5
      ii. After: 200ms (of button press)
d) Set Status:
   a. Action.Name: ‘STATUS: ‘
   b. Param_01: ‘Picked-Up’
   c. Param_02: ‘Delivered’
   d. Param_03: ‘Partial-Delivery’
   e. Param_04: ‘Refused-Damaged’
   f. Param_05: ‘Customer-Out’
   g. Param_06: ‘Missing-Packages’
   h. Param_07: ‘Wrong-Address’
   i. Param_08: ‘Incomplete-Address’
   j. Param_09: ‘Address-Not-Accessible’
   k. Param_10: ‘Nobody’

d. Access Control

This application compares captured data to a list / database loaded on the terminal. The orKan displays and sends pre-defined data in function of the result of this comparison.

Application Field Separator: n/a
Scenario / List of called actions:

a) Display *Welcome Message*: “Scan to check if data is present in your local database”
   Note: only displayed at the application start.
b) Capture Data
c) Display Data
d) Comparison
e) Display Result

search result	Display data	Sent data
found	OK ;-)	'1'
not found	NOK ;-(	'0'

The embedded list corresponds to barcodes printed on Baracoda Test card and Baracoda Calendar. The list value is :

- BARACODA
- 12345678901234
- Baracoda Scanners
- Data capture for workforce in motion
- Baracoda-Data Capture for Workforce in Motion
- 1234567890128
- Baracoda
- DEMO
- BARACODY5VNK83LZEKX8KEO54a6V4B4K0JRMXAG49BN65HDTKj
- Baracoda - Data Capture for Workforce in Motion

XIII. Connectivity Solution available for orKan

Several connectivity solutions are proposed by Baracoda to connect the orKan terminal.

1) *Software solutions (for end-user)*

Baracoda provides three (3) different software packages to manage the Baracoda Bluetooth devices:

a. *K-Emul*

K-Emul lets you insert application data result value in the selected field of the active application. It also allows adding a prefix and a suffix to the captured data.

b. *BaracodaManager (for mobile host devices)*

BaracodaManager is a light application that lets you receive application data result value in the active application (*) thanks to the provided keyboard emulation feature. You can also modify some configuration options (depending on the platform).
(*): BlackBerry, Android, Windows Mobile…
Note: full SDK is available to get more features / integrate the orKan terminal to the end-user application.

c. *Baracoda Desktop Manager (for windows PC)*

The **Baracoda Desktop Manager for PC** software allows the user to easily operate their Baracoda RFID-HF reader(s), including:

- automatic connection of the RFID reader(s) that the user wants to use
- inserting scanned RFID tag IDs to a selected field in the client application (KEmul module) or displaying it (Terminal module)
- setting a RFID reader(s) parameters (Device Settings module)
- Uploading data saved in a reader(s) memory
- Upgrading RFID reader's firmware
- Managing, creating and modifying orKan applications

If your Bluetooth stack software is not compatible, you can test your terminal with Hyperterminal or Kemul. Refer to Communication Protocol documentation. (Download on www.baracoda.com)

2) *Baracoda Software Development Kit (for developers & integrators)*

The Baracoda SDKs are created for developers who want to integrate the RFID collection functions into their own programs, thus enabling end-users to run a single software application. This eliminates the need to run the Baracoda Manager software in addition to a third-party application.

Baracoda Dekstop Manager uses libraries that provide an abstraction layer allowing developers to integrate Baracoda products into their own application very rapidly. Moreover, these libraries will deal with all the low-level routines, timeouts, connections and configuration management.

These libraries are available to developers for free (www.baracoda.com for more information)

XIV. Safety / Regulatory

1) FCC

Product FCC Id: QSHAIOKTH

Interference statement:
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, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Modification statement:
The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Baracoda Wireless Technology, may void the user's authority to operate the equipment.

Wireless notice
This product emits radio frequency energy, but the radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact with the antenna during normal operation is minimized. The system antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2) EU

This equipment is intended to be commercialised in all the countries of the European Union and there is no commercialisation or operational restrictions in any of the countries.
Hereby, Baracoda Wireless Technology declares that this Bluetooth barcode/RFID-HF terminal is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity is in progress.
European countries, where this equipment can be used are : Austria (AT) - Belgium (BE) - Bulgaria (BG) - Switzerland/Liechtenstein (CH) - Cyprus (CY) - Czech Republic (CZ) - Germany (DE) – Denmark (DK) - Estonia (EE) - Finland (FI) - France (FR) - Greece (GR) - Hungary (HU) - Ireland (IE) - Iceland (IS) - Lithuania (LT) – Luxembourg (LU) - Latvia (LV) - Malta (MT) - Netherlands (NL) - Norway (NO) - Portugal (PT) - Romania (RO) - Sweden (SE) - Slovenia (SI) – Slovak Republic (SK) - United Kingdom (UK)-Italy (IT)-Poland (PO)-Spain (SP).

XV. Limited Warranty

Manufacturer warrants that the product will be free of defects in material and workmanship for one (1) year from the date of shipment. Manufacturer will, at its option, either repair, replace or refund the purchase price paid by buyer for the defective products.
Such repair, replacement or refund shall be buyer's sole remedy in the event of Manufacturer's breach of this limited warranty. Repaired or replaced parts or product may include new, reconditioned or remanufactured parts and equipment at Manufacturer's option. All costs associated with shipment to Manufacturer for warranty service, including but not limited to freight, duties, insurance and customs fees are buyer's responsibility. Manufacturer will pay the freight costs (duties, insurance, customs and any other fees are buyer's responsibility) associated with the return shipment to buyer. The method of shipment will be at Manufacturer's discretion. Repair or replacement of any parts or equipment does not extend the period of warranty provided for herein. THIS LIMITED WARRANTY IS MANUFACTURER'S ONLY WARRANTY. MANUFACTURER DOES NOT GIVE WARRANTIES OF MERCHANTABILITY OR WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. To take advantage of this warranty, buyer should contact the seller not the Manufacturer. The warranty set forth herein does not cover and Manufacturer will have no obligations hereunder if any non-conformance is caused in whole or in part by; accident, transportation, neglect, misuse, alteration, modification, or enhancement of the products or incorporation, interfacing, attachment of any feature, program, or device to the Products by a person or entity other than Manufacturer, failure to provide a suitable installation environment, use of the products for other than the specific purpose for which the products are designed or any use of the product not in accordance with the User Guide or other misuse or abuse of the product. The warranty does not cover problems linked to batteries.