

KOAMTAC

KBM-XP67

XPAND 1D LASER BARCODE SCANNER

USER GUIDE

SONIM XP6 & XP7

English

**sonim**[®]
BUILT FOR LIFE™

Copyright, License & Warranty ----- 3

Copyright© 2016 KOAMTAC, Inc.
Copyright© 2016 Sonim Technologies, Inc.

Safety Guidelines----- 4

Child Safety
Personal Medical Devices
Disposal of Old Electrical Equipment
WARNING
CAUTION

Getting Started----- 5

What is in the Box?
KBM-XP67 Barcode Scanner Components

Installation----- 6

Installing the KOAMTAC KBM-XP67 Barcode Scanner
XPand Barcode Scanner Application
Downloading
About the User Guide

Scanning----- 8

Initiating the Scan
Changing Continuous Scan Options
Sonim Protect
Notification Bar

Application Settings----- 10

Customizing XPand Barcode Scanner
Managing Default Alert Tone Settings
Managing Default Vibration Alert Settings
KBM-XP67 Barcode Scanner Disconnection
Auto Start
Floating Widget
Advanced Settings
Data Transmission
Power Management
KOAMTAC Contact Information
SONIM Contact Information

Special Barcodes (KBM-XP67)----- 15

Set Symbolologies
Barcode Options
Delete Last Scanned Barcode
Scan Options
Scan Timeout
Minimum Barcode Length
Security Level
Data Process - Wedge/Store & Enter Key
Data Process - Data Edit
Data Process - Data Format & Handshake
Data Process - Termination Character & Duplicate
Check
System
Sleep Timeout
ETC
Function
Numbers
Lower Case Alphabets
Upper Case Alphabets
Control Character
Symbol Character
Barcode String Construction Guidelines

Copyright® 2016 KOAMTAC, Inc.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, without permission in writing from KOAMTAC®, Inc. The material in this manual is subject to change without notice. KOAMTAC reserves the right to make changes to any product to improve reliability, function, or design. KOAMTAC does not assume any product liability arising out of, or in connection with, the application or use of any product, circuit, or application described herein. Follow all warnings and instructions marked on manual and units. Use only the power source specified in this manual or marked on the units.

Certain KOAMTAC products may be covered by the following patent numbers:

- **US patents numbers 7769917, 7954710, 8126399, 8295368, 8346979, 8347366, 8371506, 8483614, 8832323;**
- **Korea patents numbers 10-1383407, 10-1354252;**
- **UK patent numbers GB2492615, GB2514746;**
- **Korea publication 1020120128598;**

KDC®, KoamTac®, KTSync®, KoamTacON® and SmartSled® are registered trademarks and property of KOAMTAC, Inc.

Copyright® 2016 Sonim Technologies, Inc.

SONIM and the Sonim logo are trademarks of Sonim Technologies, Inc. Other company and product names may be trademarks or registered trade-marks of the respective owners with whom they are associated.

© 2016 KOAMTAC, Inc. and Sonim Technologies, Inc.
All rights reserved.

Child Safety

Keep out of reach of children. Do not allow children to play with mobile phones or accessories as there is potential to harm themselves and/or others. Mobile phones and accessories may contain small parts which are a potential choking hazard. Improper use of mobile phones and accessories may lead to the damage.

Personal Medical Devices

Mobile phone and related accessory may affect the operation of cardiac pacemakers and other implanted medical equipment. Avoid placing the mobile phone over the pacemaker, for example in your breast pocket. When using the mobile phone, place it at the ear opposite to the pacemaker. If a minimum distance of 15 cm (6 inches) is kept between the mobile phone and the pacemaker, the risk of interference is limited. If you suspect that interference is taking place, immediately turn off your mobile phone. Contact your cardiologist for more information. For other medical devices, consult your physician and the manufacturer of the device. Comply with instructions to switch off the device or deactivate the RF transmitter when required, especially when posted in hospitals and airplanes. Equipment used in these places may be sensitive to radio waves emitted from the device and adversely affect their operation. Take precaution when using the mobile phone in restricted areas, such as gas stations and/or other areas containing flammable atmospheres or in close proximity to electro-explosive device.

Disposal of Old Electrical Equipment



The symbol of the crossed-out wheeled bin indicates that this product, and any enhancements marked with this symbol, cannot be disposed of as unsorted waste and must be taken to a separate collection at their end-of-life.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO ANY TYPE OF MOISTURE. DO NOT LOOK DIRECTLY INTO LASER OR POINT THE LASER INTO ANOTHER PERSON'S EYES. EXPOSURE TO THE BEAM MAY CAUSE EYE DAMAGE.

CAUTION



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

What is in the Box?

The following items are included in the box:

- KOAMTAC KBM-XP67 1D Laser Barcode Scanner
- Assembly for BarBridge for XP6 (BarBridge for XP6 + Screws 2ea)
- Assembly for BarBridge for XP7 (BarBridge for XP7 + Screws 2ea)
- User Guide
- Quick Manual

KBM-XP67 Barcode Scanner Components

Front View



Rear View



* XPand Interface Connector is covered with a cap. Remove the cap prior to installing the KBM-XP67 to the phone.

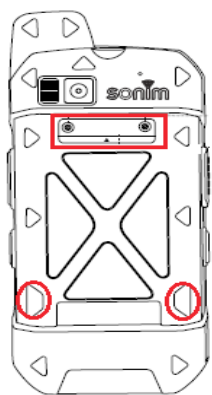
Installing the KOAMTAC KBM-XP67 Barcode Scanner

Follow the instructions for installing the **KBM-XP67 Barcode Scanner** on the compatible XP6 or XP7 phone.

1. Unscrew the top two screws with the multi-tool screwdriver provided in the box with your Sonim XP6 or XP7 mobile phone (sold separately).

Remove the black insert plate.

Remove the two rubber covers on the back of the phone.



2. Using the multi-tool screwdriver, attach the **KBM-XP67 Barcode Scanner** to the back of phone with Screws A.



3. Using the multi-tool screwdriver, attach the bridge for the XP6 or XP7 to the back of the phone with Screws B.



The BarBridge for the XP7 is wider than the BarBridge for the XP6.



Ensure to install the KBM-XP67 securely for waterproofing.



XPand Barcode Scanner Application

Sonim XPand® Barcode Scanner Application is compatible with **KOAMTAC KBM-XP67 Barcode Scanner**, which connects both hardware and software to Sonim's XPand interface on the XP6 and XP7 phones.

Downloading

1. Go to **Google Play Store®** and download **Sonim XPand Barcode Scanner Application** on XP7 phone.

Short link to download from Play Store:


<https://play.google.com/store/apps/details?id=com.sonim.xpandscanner>

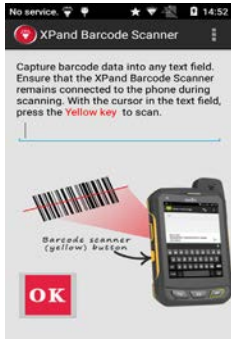
2. **XPand Barcode Scanner Application** icon () is displayed in application list on the phone.

About the User Guide

This user guide provides instructions and screenshots for the **KBM-XP67 Barcode Scanner** when used with the **XP7** phone. Most instructions apply to **KBM-XP67 Barcode Scanner** when used with the **XP6** phone, as well, except the path to access the **Settings** or **Options** menu on the **XP6** is different from the **XP7**. To access the **Settings Option** on the **XP6**, select **Options (RSK)** on the **XPand Barcode Scanner Application** main screen.

Initiating the Scan

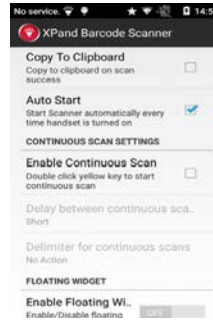
From the application menu on the phone, select **XPand Scanner** icon () and the application start screen will appear:



1. While scanning, point the scanner laser light directly at the intended barcode to be read.
2. The yellow button (short press) may also initiate a scan.
3. Double press yellow key to initiate continuous scanning.
4. After a barcode is scanned, the barcode data is captured in the phone text field, in text format.

Changing Continuous Scan Options

1. To access **Settings**, select **Options** () on the **XPand Barcode Scanner Application** main screen. Select **Settings > Continuous Scan Settings**.



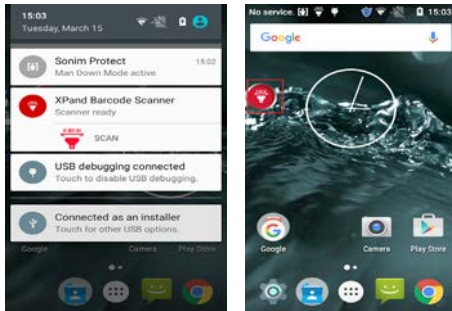
- **Enable Continuous Scan:** When this option is checked, double press the yellow button to initiate continuous scan mode.
- **Delay between Continuous Scans:** This is the time delay between each scan in **Continuous Scan** mode. Select from the following delay options: Short, Medium, Long, Extra Long, or Continuous.
- **Delimiter for Continuous Scans:** After a barcode is scanned in **Continuous Scan** mode, the barcode will be separated by a delimiter. Select from the following delimiter options: No Action (none), Semicolon, Comma, Space, or New Line.

Sonim Protect

When the **Sonim Protect** application is installed on a device, the yellow key will not initiate a barcode scan. Instead there will be a floating widget to initiate the scan.

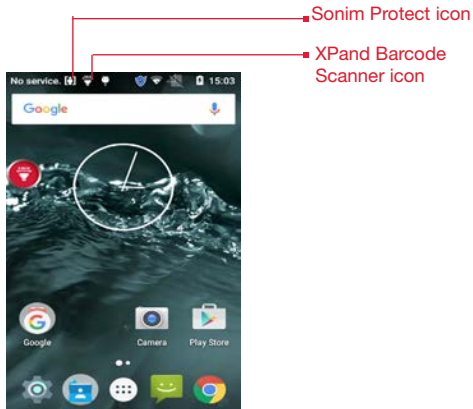
The **floating widget** () is displayed on the screen as shown below.

Scanning may also be initiated through **Scan** button present in the notification bar when **Sonim Protect** is installed.



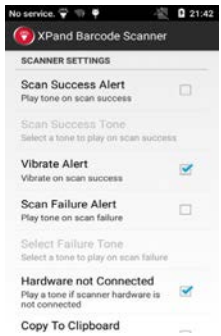
Notification Bar

On the notification bar, the **Sonim Protect** icon () and the **XPand Barcode Scanner** icon () are displayed.



Customizing XPand Barcode Scanner

To access **Settings**, select **Options** (☰) on the **XPand Barcode Scanner Application** main screen. Select **Settings > Scanner Settings**.



Managing Default Alert Tone Settings

- **Changing Default Alert Tone (Success):** When this option is checked, a notification tone will play after a successful scan.
- **Changing Default Alert Tone (Unsuccessful):** When this option is checked, a notification tone will play after an unsuccessful scan.

Managing Default Vibration Alert Settings

- **Changing Default Vibrate Alert (Success):** When this option is checked, the phone will vibrate after a successful scan.
- **Changing Default Vibrate Alert (Unsuccessful):** Select the notification tone played for an unsuccessful scan. Select the tone and press **OK**.

KBM-XP67 Barcode Scanner Disconnection

If a scan is initiated while the **KBM-XP67** Barcode Scanner is not connected to the phone, an unsuccessful scan alert tone will be played.

Copy to Clipboard

When this option is checked, all successful scan data is copied to the clipboard.

Auto Start

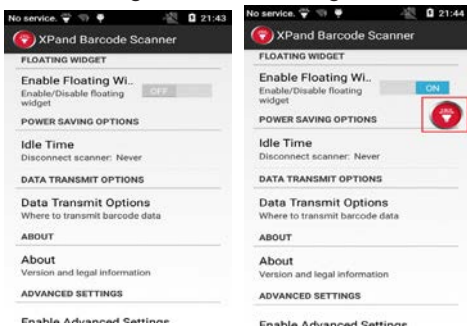
When this option is checked, the application will automatically start when the device is turned **ON**.

Floating Widget

The **Floating widget** will appear at the top of the phone screen. It acts as an alternative **yellow key**, initiating a single or continuous scan.

1. To access **Settings**, select **Options** (☰) on the **XPand Barcode Scanner Application** main screen.

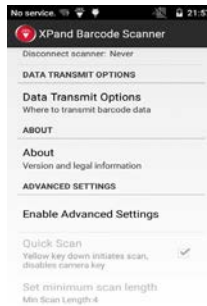
Select **Settings > Scanner Settings**.



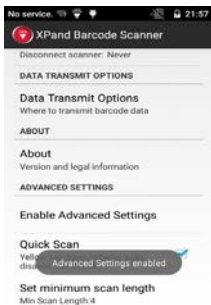
- **Enable Floating Widget:** When set to **ON**, the widget is displayed on the phone screen. The **Floating Widget** is an alternative to the phone yellow button.

Advanced Settings

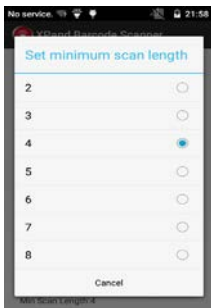
To access **Advanced Settings**, select **Options** (☰) on the **XPand Barcode Scanner Application** main screen. Select **Settings > Advanced Settings**.



Press yellow key downwards to initiate the scanning process. The **Quick Scan** is checked and the **Advanced Settings** is enabled. During this time, camera key is disabled.

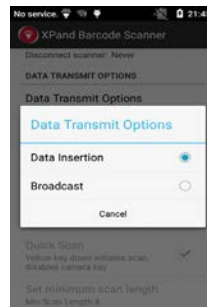
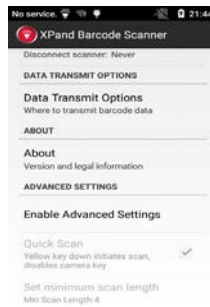


By default, the minimum scan length is set to 4.



Data Transmission

To access **Settings**, select **Options** (☰) on the **XPand Barcode Scanner Application** main screen. Select **Settings > Data Transmit Options**.



The following 2 options are provided in the **Settings**:

- **Data Insertion:** When this option is selected, scanned barcode data is displayed on the screen.
- **Broadcast:** When this option is selected, the scanned barcode data is transmitted as a message. This option works with specific applications only.

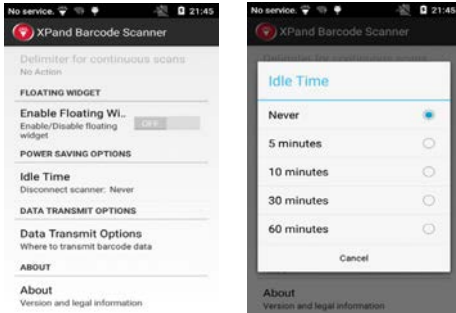


Broadcast option works with registered applications only.

Power Management

1. To access **Settings**, select **Options** (⋮) on the **KBM-XP67 Barcode Scanner Application** main screen.

Select **Settings > Scanner Settings**.



Idle Time: When an **Idle Time** is selected, the XPand Barcode Scanner will shutdown when unused for the amount of **Idle Time** selected. The Idle Time options are: Never, 5, 10, 30, and 60 minutes.



KBM-XP67 Barcode Scanner impacts the phone standby time.

KOAMTAC Contact Information

CORPORATE HEADQUARTERS

116 Village Blvd, Suite 305

Princeton, NJ 08540, USA

Phone: 609-256-4700, Fax: 609-228-4373

Email: support@koamtac.com

For more information, visit www.koamtac.com

SONIM Contact Information

CORPORATE HEADQUARTERS

1825 S.Grant Street Suite 200

San Mateo, CA 94402, USA

Phone: 650-378-8100, Fax: 650-378-8109

Email: support@sonimtech.com













For more information, visit www.sonimtech.com

You can configure KBM-XP67 by scanning the special barcodes listed below under the respective categories.

Set Symbolologies





<p>Enable EAN13</p>  <p>2000001</p>	<p>Disable EAN13</p>  <p>2100001</p>
<p>Enable EAN8</p>  <p>2000002</p>	<p>Disable EAN8</p>  <p>2100002</p>
<p>Enable UPCA</p>  <p>2000004</p>	<p>Disable UPCA</p>  <p>2100004</p>
<p>Enable UPCE</p>  <p>2000008</p>	<p>Disable UPCE</p>  <p>2100008</p>
<p>Enable Code39</p>  <p>2000010</p>	<p>Disable Code39</p>  <p>2100010</p>










<p>Enable ITF14</p>  <p>2000020</p>	<p>Disable ITF14</p>  <p>2100020</p>
<p>Enable Code128</p>  <p>2000040</p>	<p>Disable Code128</p>  <p>2100040</p>
<p>Enable I2 of 5</p>  <p>2000080</p>	<p>Disable I2 of 5</p>  <p>2100080</p>
<p>Enable Codabar</p>  <p>2000100</p>	<p>Disable Codabar</p>  <p>2100100</p>
<p>Enable GS1-128</p>  <p>2000200</p>	<p>Disable GS1-128</p>  <p>2100200</p>
<p>Enable Code93</p>  <p>2000400</p>	<p>Disable Code93</p>  <p>2100400</p>

Enable Code35  2000800	Disable Code35  2100800
Enable Bookland EAN  2001000	Disable Bookland EAN  2101000
Enable EAN13 with Addon  2004000	Disable EAN13 with Addon  2102000
Enable EAN8 with Addon  2004000	Disable EAN8 with Addon  2104000
Enable UPCA with Addon  2008000	Disable UPCA with Addon  2108000
Enable UPCE with Addon  2010000	Disable UPCE with Addon  2110000






Enable GS1 Omni  2020000	Disable GS1 Omni  2120000
Enable GS1 Limited  2040000	Disable GS1 Limited  2140000
Enable GS1 Expanded  2080000	Disable GS1 Expanded  2180000

Barcode Options


Codabar - transmit start/stop  300000001	Codabar - do NOT transmit start/stop  310000001
Convert UPCE to UPCA  300000200	Do NOT convert UPCE to UPCA  310000200

Convert EAN8 to EAN13  300000400	Do NOT Convert EAN8 to EAN13  310000800
Convert UPCE to EAN13  300000800	Do NOT convert UPCE to EAN13  310000800
Return Check Digit  300000100	Do NOT Return Check Digit  310000100
Verify Check Digit  300000200	Do NOT Verify Check Digit  310000200
Convert UPCA to EAN13  300080000	Do NOT Convert UPCA to EAN13  310080000











Verify check digit for I2of5  300040000	Do NOT verify check digit for I2of5  3100400000
Verify check digit for Code39  300080000	Do NOT verify check digit for Code39  3100800000
Return check digit for I2of5  300400000	Do NOT return check digit for I2of5  3104000000
Return check digit for Code39  300800000	Do NOT return check digit for Code39  3108000000
Return check digit for UPCE  301000000	Do NOT return check digit for UPCE  3110000000

Return check digit for UPCA  302000000	Do NOT return check digit for UPCA  311000000
Return check digit for EAN8  304000000	Do NOT return check digit for EAN8  314000000
Return check digit for EAN13  308000000	Do NOT return check digit for EAN13  318000000

Delete Last Scanned Barcode

Delete Last Scanned Barcode  80001

Scan Options

Wide Scan Angle  3000004000	Narrow Scan Angle  3100004000
Normal Filter Mode  3100008000	High Filter Mode  3000008000
Enable Auto Trigger  5A001	Disable Auto Trigger  5A010
Reread Delay = Continuous  5B000	Reread Delay = Short  5B001
Reread Delay = Medium  5B002	Reread Delay = Long  5B003

Reread Delay = Extra Long  5B004	
---	--

Scan Timeout

Scan Timeout = 500msec  101F4	Scan Timeout = 1sec  103E8
Scan Timeout = 2sec  107D0	Scan Timeout = 3sec  10BB8
Scan Timeout = 4sec  10FA0	Scan Timeout = 5sec  11388
Scan Timeout = 6sec  11770	Scan Timeout = 7sec  11B58

Scan Timeout = 8sec  11F40	Scan Timeout = 9sec  12328
Scan Timeout = 10sec  12710	

Minimum Barcode Length

Minimum Length = 2  002	Minimum Length = 3  003
Minimum Length = 4  004	Minimum Length = 5  005

<p>Minimum Length = 6</p>  <p>006</p>	<p>Minimum Length = 7</p>  <p>007</p>	<p>Minimum Length = 16</p>  <p>010</p>	<p>Minimum Length = 17</p>  <p>011</p>
<p>Minimum Length = 8</p>  <p>008</p>	<p>Minimum Length = 9</p>  <p>009</p>	<p>Minimum Length = 18</p>  <p>012</p>	<p>Minimum Length = 19</p>  <p>013</p>
<p>Minimum Length = 10</p>  <p>00A</p>	<p>Minimum Length = 11</p>  <p>00B</p>	<p>Minimum Length = 20</p>  <p>014</p>	<p>Minimum Length = 21</p>  <p>015</p>
<p>Minimum Length = 12</p>  <p>00C</p>	<p>Minimum Length = 13</p>  <p>00D</p>	<p>Minimum Length = 22</p>  <p>016</p>	<p>Minimum Length = 23</p>  <p>017</p>
<p>Minimum Length = 14</p>  <p>00E</p>	<p>Minimum Length = 15</p>  <p>00F</p>	<p>Minimum Length = 24</p>  <p>018</p>	<p>Minimum Length = 25</p>  <p>019</p>

Minimum Length = 26  01A	Minimum Length = 27  01B
Minimum Length = 28  01C	Minimum Length = 29  01D
Minimum Length = 30  01E	Minimum Length = 31  01F
Minimum Length = 32  020	Minimum Length = 33  021
Minimum Length = 34  022	Minimum Length = 35  023

Minimum Length = 36  024	
--	--

Security Level

Security level = 1  41	Security level = 2  42
Security level = 3  43	Security level = 4  44

Data Process - Wedge/Store & Enter Key

Wedge Only  82000	Wedge & Store Always  82001
---	---

<p>Store Only</p>  <p>82002</p>	
--	--

<p>AIM ID In Suffix</p>  <p>8B002</p>	
---	--

Data Process - Data Edit

<p>Start Prefix Enter</p>  <p>83000</p>	<p>Start Suffix Enter</p>  <p>83001</p>
<p>Finish Prefix/Suffix Enter</p>  <p>83002</p>	<p>Cancel Prefix/Suffix Enter</p>  <p>83003</p>
<p>Delete Prefix</p>  <p>83004</p>	<p>Delete Suffix</p>  <p>83005</p>
<p>AIM ID None</p>  <p>8B000</p>	<p>AIM ID In Prefix</p>  <p>8B001</p>

Data Process - Data Format & Handshake

<p>Data format = Barcode only</p>  <p>84001</p>	<p>Data format = Packet data</p>  <p>84010</p>
---	--


Data Process - Termination Character & Duplicate Check

<p>Termination Character = None</p>  <p>88000</p>	<p>Termination Character = CR</p>  <p>88001</p>
<p>Termination Character = LF</p>  <p>88002</p>	<p>Termination Character = CR+LF</p>  <p>88003</p>

Termination Character = Tab  88004	
Enable Duplicate Check  89001	Disable Duplicate Check  89010

System

Erase Memory  50003	
Enable Auto Erase  5F001	Disable Auto Erase  5F010

Factory Default  57001	KDC Reset  A0000
--	--

Sleep Timeout

Sleep Timeout = Disable  51000	Sleep Timeout = 1sec  51001
Sleep Timeout = 2sec  51002	Sleep Timeout = 3sec  51003
Sleep Timeout = 4sec  51004	Sleep Timeout = 5sec  51005

<p>Sleep Timeout = 10sec</p>  <p>5100A</p>	<p>Sleep Timeout = 20sec</p>  <p>51014</p>
<p>Sleep Timeout = 30sec</p>  <p>5101E</p>	<p>Sleep Timeout = 1min</p>  <p>5103C</p>
<p>Sleep Timeout = 2min</p>  <p>51078</p>	<p>Sleep Timeout = 5min</p>  <p>5112C</p>
<p>Sleep Timeout = 10min</p>  <p>51258</p>	

ETC

<p>Enable Reverse Direction</p>  <p>300000002</p>	<p>Disable Reverse Direction</p>  <p>310000002</p>
<p>Enable Verify check digit</p>  <p>300200000</p>	<p>Disable Verify check digit</p>  <p>310200000</p>
<p>Enable Return check digit</p>  <p>300100000</p>	<p>Disable Return check digit</p>  <p>310100000</p>

Function

<p>F1</p>  <p>7001</p>	<p>F2</p>  <p>7002</p>
--	--

F3  7003	F4  7004
F5  7005	F6  7006
F7  7007	F8  7008
F9  7009	F10  700A
F11  700B	F12  700C

Numbers

0  7130	1  7131
2  7132	3  7133
4  7134	5  7135
6  7136	7  7137

8  7138	9  7139
--	---

Lower Case Alphabets

a  7161	b  7162
c  7163	d  7164
e  7165	f  7166

g  7167	h  7168
i  7169	j  716A
k  716B	l  716C
m  716D	n  716E
o  716E	p  7170

q  7171	r  7172
s  7173	t  7174
u  7175	v  7176
w  7177	x  7178
y  7179	z  717A

Upper Case Alphabets

A  7141	B  7142
C  7143	D  7144
E  7145	F  7146
G  7147	H  7148

I  7149	J  714A
K  714B	L  714C
M  714D	N  714E
O  714F	P  7150
Q  7151	R  7152

S  7153	T  7154
U  7155	V  7156
W  7157	X  7158
Y  7159	Z  715A

Control Character

BS  7108	TAB  7109
LF  710A	VT  710B
CR  710D	ESC  711B
Space  7120	DEL  717F

Shift + Tab



Symbol Character



€  7127	( 7128	;  713B	<  713C
)  7129	*  712A	=  713D	>  713E
+  712B	,  712A	?  713F	@  7140
-  712D	.  712E	[ 715B	\  715C
/  712F	:  713A]  715D	^  715E

{  717B	  717C
}  717D	~  717E
Start String  7201	Stop String  7210

Barcode String Construction Guidelines

- You can compose a string of maximum 16 characters.
- The string should be composed by scanning the “Start-String”, number/alphabet/special characters, and “Stop-String” special barcodes.
- The **KBM-XP67** will abort string composition if the user do not scan “Stop-String” in one minute after scanning Start-String and number/alphabet/special characters.