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# JANAM

*XG3 User Manual*



*Technology at Work<sup>®</sup>.*

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## Introduction

The XG3 is Janam's next-generation, gun-shaped, rugged mobile computer designed to excel in the most challenging environments. Eliminating the weight and bulk associated with competitive devices, Janam's XG3 is the lightest industrial-grade mobile computer in its class.

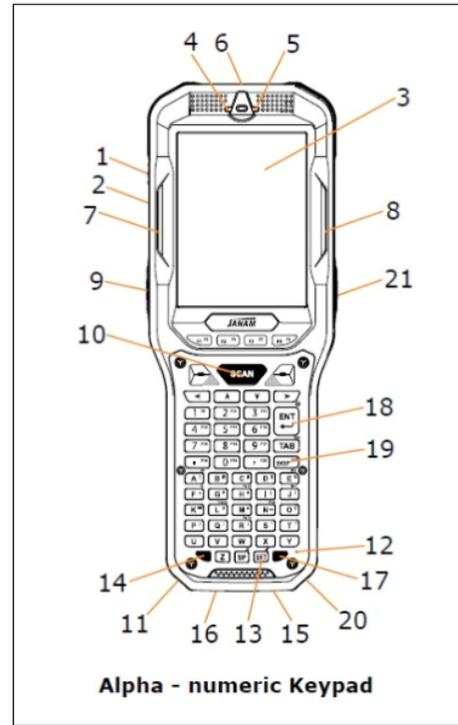
Built to withstand the rigors of all-day, every-day use in manufacturing facilities, distribution centers, plant floors, loading docks, ports and other demanding workspaces, the XG3 pairs breakthrough ergonomic design with the latest technological advancements, enabling mobile workers to increase productivity and improve operational efficiencies. With its pistol grip optimized for user comfort and a choice between Honeywell's Adaptus® imaging technology and Motorola's SE965 extended-range 1D laser scan engine, the XG3 is optimized for scan-intensive, extended shift use. Features include a 3.5-inch color display with hardened glass, ARM Cortex-A8 CPU @1GHz and choice of keypads to provide the performance, power efficiency and flexibility that enterprise and government customers require. The XG3 also delivers exceptional battery life with a standard 5200mAh hot-swappable Li-ion battery.

Janam's XG3 rugged mobile computer is sealed to IP65 standards and survives repeated 6' drops to concrete. It's technology at work.

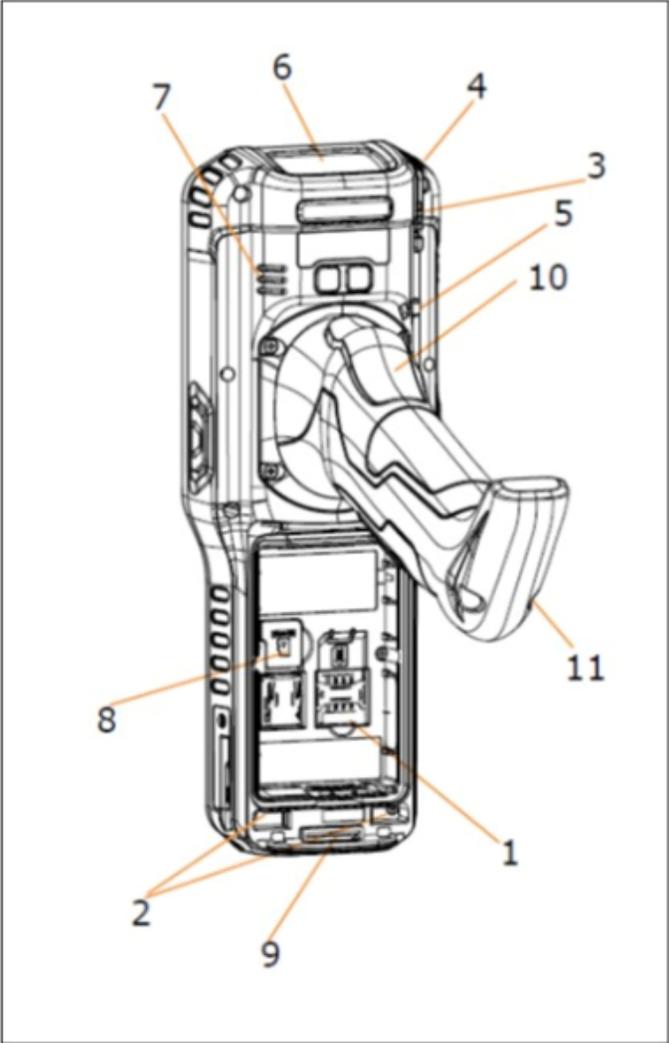
### ***Key Features***

- Lightest industrial-grade mobile computer in its class
- Largest standard battery capacity in the industry
- Multiple 6' drops to concrete
- Sealed to IP65 standards
- High-performance barcode scanning
- Microsoft WEH 6.5 OS
- ARM Cortex-A8 CPU @1GHz
- Brilliant 3.5" VGA display
- Storage memory expansion capability
- 802.11a/b/g/n Wifi and Bluetooth

## Hardware Overview



- 
- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Power Button</li> <li>2. Headset with Microphone</li> <li>3. LCD</li> <li>4. Indicator LED</li> <li>5. Notification LED</li> <li>6. Scan Window</li> <li>7. Left Scan LED</li> <li>8. Right Scan LED</li> <li>9. Left Trigger</li> <li>10. Scan Trigger</li> <li>11. Left Bottom Scan LED</li> </ol> | <ol style="list-style-type: none"> <li>12. Microphone</li> <li>13. Shift Key</li> <li>14. Yellow Function Key</li> <li>15. DC Jack</li> <li>16. Connector</li> <li>17. Blue Function Key</li> <li>18. Enter Key</li> <li>19. Back Space Key</li> <li>20. Right Bottom Scan LED</li> <li>21. Right Trigger</li> </ol> |
|--|--|



- 
- 1. Battery
  - 2. Battery Lock Switch
  - 3. Stylus Slot
  - 4. Stylus
  - 5. Lanyard Connector
  - 6. Scan Window
  - 7. Speaker
  - 8. microSD Card Cover/Slot
  - 9. Handstrap Bar
  - 10. Scan Trigger
  - 11. Handstrap Hole

## Getting Started

### *Unpack Your XG3 Device*

Make sure you have the following:

- Janam XG3 Series mobile computer
- Handstrap
- Stylus
- Documentation (Quick Start Guide, License Agreement and Regulatory Guide)
- Charging accessory (one or more of the following power/connection kits ordered/packaged separately):
  - Janam AC/DC wall mount adapter with barrel connector
  - Janam mobile communication cable with AC adapter (CAB-J-003U)
  - Janam 1-Slot or 4-Slot Cradle with AC adapter

### *Recommended Host Computer Requirements*

- Windows-compatible host computer
- Microsoft® Windows® 8, Windows 7, Windows XP or Windows 2000 operating system
- 100 MB of available hard disk space
- One available serial or USB port

### *Janam XG3 SDK*

The Janam XG3 Software Development Kit enables programmers to develop applications for Janam XG Series rugged mobile computers running the Microsoft Windows Embedded Handheld operating system. It contains details and instructions for developing applications that access the Janam XG3 libraries, including scanning, imaging and hardware utilities.

The development kit, which can be downloaded from Janam's Product Zone site (login required), is designed for use with Microsoft Windows Embedded Handheld and Visual Studio 2005/2008 development environment.

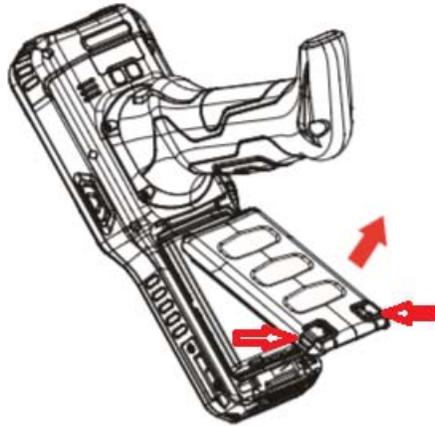
### *Update Your Desktop PC Software*

Confirm that the host computer has the latest version of Microsoft ActiveSync (version 4.5 or higher) or Windows Mobile Device Center (version 6.1 or higher) software intended for use with the host computer's operating system, e.g. Windows Vista, XP or 2000. For additional ActiveSync information and downloads, please visit the Microsoft website at <http://www.microsoft.com>.

## Install the Battery

The XG3 mobile computer is shipped with the battery packaged separate from the unit. Follow the steps below to install the battery.

1. Remove the battery compartment door by moving the battery door's metal locks to the up position. With the locks in the up position, pull door away from device housing. Insert the battery with the batteries flat surface facing down.
2. Replace the battery door by inserting battery door tabs into guides near the handle, then press down on the battery door locks.



**NOTE:** The battery door must be installed in order to power the device on.

**WARNING:** Use only Janam approved Li - Ion battery packs. Unauthorized batteries may result in damage not covered by the warranty.

## Changing the Main Battery Pack

Before removing a battery pack, press the Power key to put the terminal in Suspend Mode so that operations are suspended before removing the main power source. Always put the terminal in Suspend Mode prior to changing the battery.

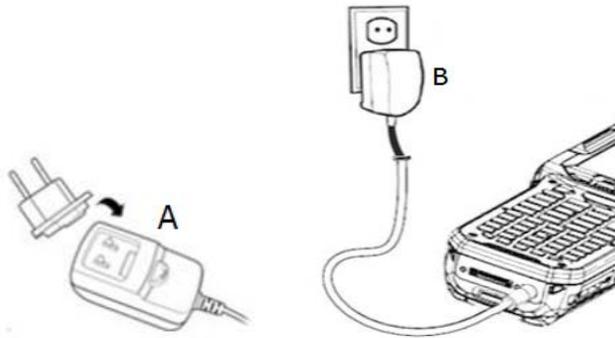
**NOTE:** The battery door must be installed prior to booting the unit.

## Charge the Batteries

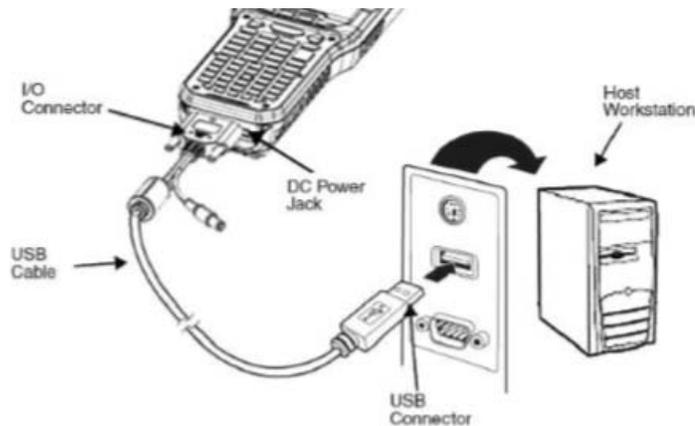
The XG3 ships with only the main battery pack significantly charged. Charge the main battery pack with the XG3 charging cable for a minimum of 4 or 6 hours before initial use.

Charging with DC Adaptor

- a. Attach the appropriate plug adapter to the plug of the power cable.
- b. Insert the plug into the appropriate power source. Plug the XG3 power cable into the DC Jack at the bottom of the unit.



### Charging with I/O connector



## Charging Time

The 5200mAh Li-ion battery pack requires six hours to charge to full capacity.

**⚠ WARNING:** Use only Janam-approved peripherals, power cables, and power adapters. Unauthorized peripherals, cables, or power adapters may cause batteries to explode or damage your device.

*DO NOT attempt to charge damp/wet Mobile Computers or batteries. All components must be dry before connecting to an external power source.*

**📌 NOTE:** If you remove the battery pack, you have 30 minutes of backup power.

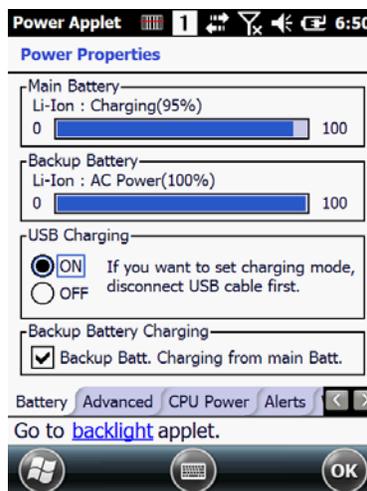
## Managing Main Battery Power

Data and files saved on the Mobile Computer may be stored in RAM memory; therefore, maintain a continuous power supply to the terminal to help prevent data loss. When you remove a battery pack, insert another charged battery pack in the Mobile Computer. If the main battery pack is low, insert the terminal into a charging peripheral to power the terminal and begin recharging the battery.

**NOTE:** If the main battery is low and the terminal is in Suspend Mode, pressing the **Power** button does **not** wake the MOBILE COMPUTER; you must replace the discharged battery with a fully charged battery or apply AC power to the terminal.

## Checking Battery Power

Tap the battery icon to open the Power Properties. The Battery tab opens displaying the charge status of the main and backup battery.



**NOTE:** You can also check battery power by tapping **Start > Settings > System > Power**.

## LED Indicators

LED Color	Meaning
Red	Lights when main battery is charging. Blinks, when the battery is very low (<10%), Lights when the battery is low (<20%),

<b>Green</b>	Lights, when the PDA resets Lights when main battery charging has completed.
<b>Blue</b>	Lights when PDA wakes up
<b>Red</b>	Lights when PDA suspends

### ***Guidelines for Battery Pack Use and Disposal***

The following are general guidelines for the safe use and disposal of batteries:

- Store the terminal and the spare batteries between 20 to 30 °C (68 to 86 °F) in order to maintain optimal battery performance.
- Standard batteries must be charged at a temperature ranging from 0 to 45 °C (32 to 113 °F)
- The XG3 gets warm during charging. This is normal and does not mean a malfunction.
- To achieve the best battery life, turn off the radios not in use.
- Annual replacement of rechargeable battery pack avoids possible risks or abnormalities and ensures maximum performance.



**WARNING:** *DO NOT attempt to charge damp/wet Mobile Computers or batteries. All components must be dry before connecting to an external power source.*



**WARNING:** *Never throw a used battery in the trash. It contains heavy metals and should be recycled according to local guidelines.*



**WARNING:** *Installing, charging and/or any other action should be done by authorized personnel and following this manual.*

*The battery pack may get hot, explode, ignite, and/or cause serious injury if exposed to abusive conditions.*

*If the battery pack is replaced with an improper type, there is risk of explosion.*

*Do not place the battery pack in or near a fire or heat; do not place the battery pack in direct sunlight, or use or store the battery pack inside unventilated areas in hot weather; do not place the battery pack in microwave ovens, dryer, high pressure containers, on induction cookware or similar device. Doing so may cause the battery pack to generate heat, explode or ignite. Using the battery pack in this manner may also result in a loss of performance and a shortened life expectancy.*

*Use only a Janam approved power supply. The use of an alternative power supply will void the product warranty, may cause product damage and may cause heat, explode or ignite.*

*The area in which the units are charged should be clear of debris and combustible materials or chemicals.*

 **WARNING:**

*Do not short-circuit the battery pack contacts connecting the positive terminal and negative terminal. This might happen, for example, when you carry a spare battery pack in your pocket or purse; accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the contacts of the battery pack (these look like metal strips on the battery pack). Short-circuiting the terminals may damage the battery pack or the connecting object.*

*Do not apply voltages to the battery pack contacts.*

*Do not pierce the battery pack with nails, strike it with a hammer, step on it or otherwise subject it to strong impacts or shocks.*

*Do not disassemble or modify (i.e. bend, crush or deform) the battery pack. The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.*

*In case of leakage of liquid from the battery, avoid contact with liquid the skin or eyes. If the contact occurs, immediately wash the affected area with water and consult a doctor.*

*Do not solder directly onto the battery pack.*

*Do not expose the battery pack to liquids.*

*Do not replace the battery pack when the device is turned on.*

*Do not remove or damage the battery pack's label.*

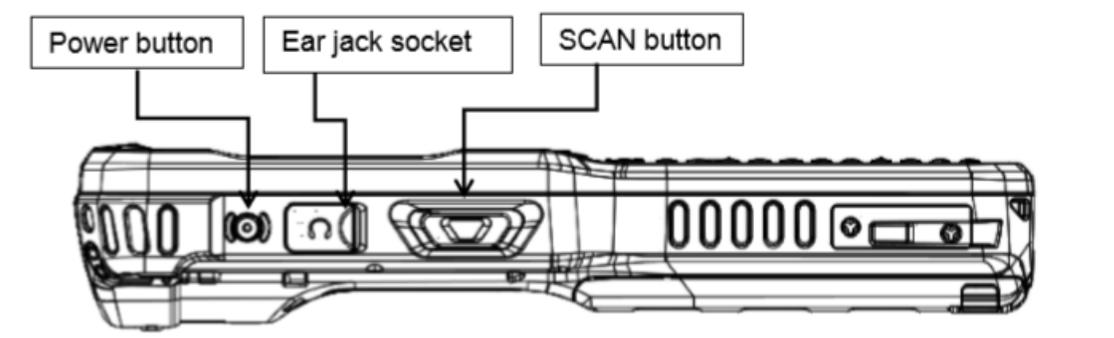
*Do not use the battery pack if it is damaged.*

*Battery pack usage by children should be supervised.*

*Collect and recycle waste batteries separately from the device and comply with European Directive 2006/66/EC, 2011/65/EU, 2012/19/EU and subsequent modifications, US and China regulatory and others laws and regulations about environment.*

### Turn the XG3 Device On

**With a fully charged battery installed**, press and release the **Power** button on the left side above the speaker jack. Pressing the power button again will suspend the XG3 device's operation. Holding the power button for an extended time will invoke the boot option screen.



See **Chapter 4** for additional information about reset functions.

#### **ⓘ IMPORTANT NOTE!**

*Always use the supplied stylus for tapping or making strokes on the screen. DO NOT use a pen, pencil or any other object on the touch screen.*

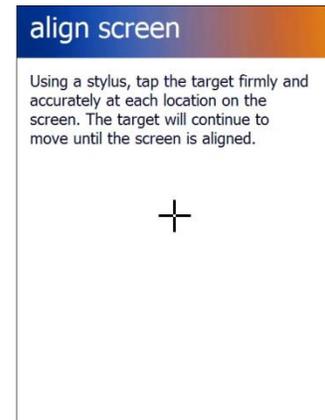
## Screen Alignment

Initial startup of the XG3 device and/or after a *clean boot*, the device will launch the on-screen **align screen** instructions. Aligning the screen calibrates the device's internal circuitry with its touch-sensitive screen, optimizing stylus-to-screen detection.

### To align the screen:

1. **Tap** the screen when automatically instructed to do so during initial setup or after a *clean boot*.
2. Follow the on-screen instructions, tapping the screen where indicated by the crosshair symbol. Follow the on-screen instructions. Continue to tap each changing crosshair position with the stylus until the screen exits the align screen function and returns automatically to the **Screen Orientation** screen.

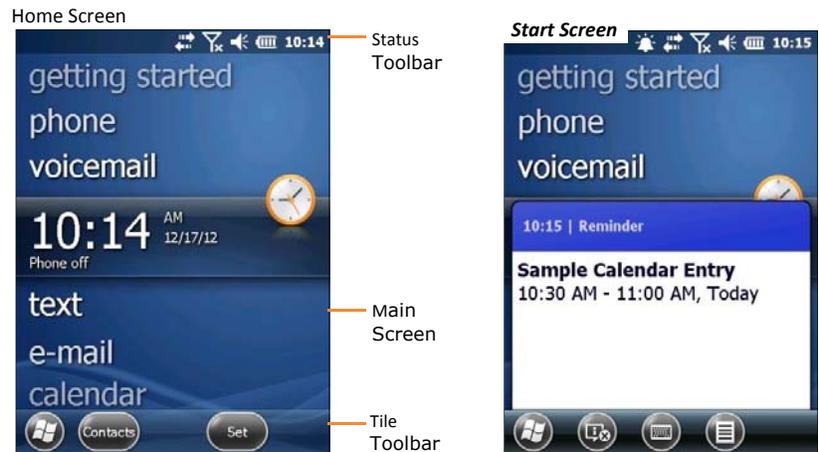
If, during use, there is a noticeable decrease in stylus response accuracy, the unit may be easily recalibrated from the Start > Settings > System > Screen Icon.



## Startup Screen

The XG3 mobile computer displays the **Home** screen at startup, providing quick access to key functions, device setup tools and easy navigation to additional functions and applications.

When enabled, calendar reminders will be displayed on the **Home** screen at startup.

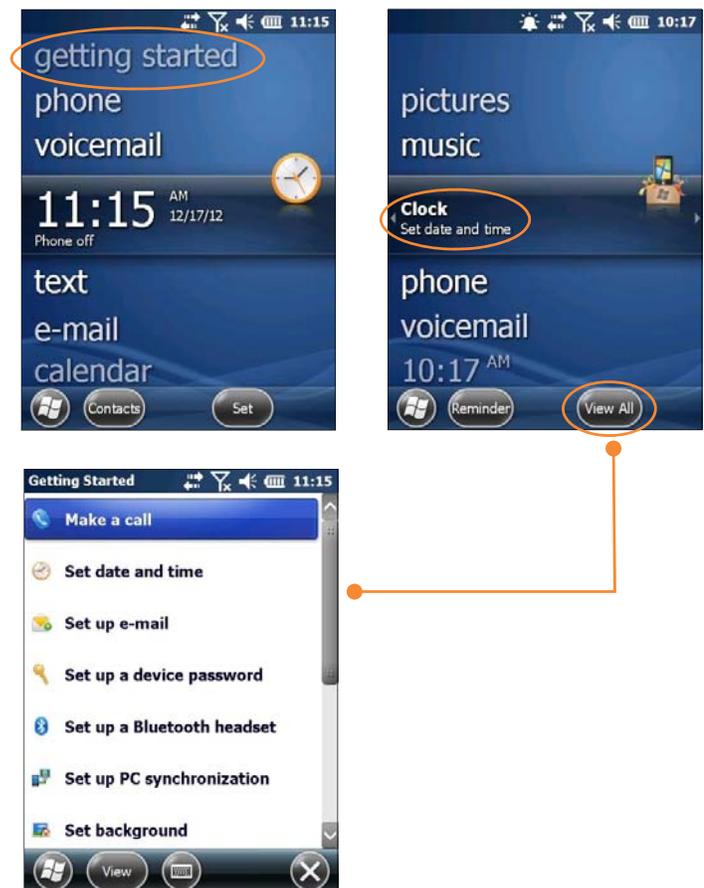


## Getting Started

Begin by tapping **getting started** which will present the **Clock** menu. From the **Clock** menu you can take the minimally required action of setting the **date and time** or tap **View All** to review all **Getting Started** options, including:

- Make a call
- Set date and time
- Set up a device password
- Set up a Bluetooth headset
- Setup PC synchronization
- Set background
- Set ring tone
- Transfer music
- Online Help & how-to
- Add/remove **Getting Started**

Once these XG3 device options are set as desired, the **Add/remove Getting Started** function allows the removal of the **Getting Started** tab from the home screen menu.



## Fundamental Navigation

### Basics

- Tap the **Windows** icon from the **Home** screen to access the **Start** screen of the **Windows Embedded Handheld Desktop**.
- Tap the **Home** icon on the **Windows Embedded Handheld Desktop** to access the **Home** screen.
- Tapping the **Windows** icon from the **Windows Embedded Handheld Desktop** provides alternative access to the **Getting Started** menu.



Windows Icon

### **i** IMPORTANT NOTE!

*Always use the supplied stylus for tapping or making strokes on the screen. DO NOT use a pen, pencil or any other object on the touch screen.*

## Key Status Icons and Controls



### Indicator Icons

The command bar, located at the top of the display, provides access to many system functions and programs. The left and right arrows are used to scroll through additional icons.



Icons	Meaning
	Open the start menu
	Access the Wireless Manager
	Open the Scanner option menu
	Indicates the Keypad value
	Shows phone signal mode
	Shows the volume
	Indicates the Battery Control Panel (CPL)
	Indicates Clock & Alarm CPL
	Zoom in/out
	Access the Bluetooth radio

## Indicator Icons (Cont)



Icon	Meaning
	Indicates AC connection mode
	Indicates WAN (Phone) connection mode
	Indicates Sound connection mode
	Indicates LAN / Bluetooth mode
	Indicates Keypad mode

## XG3 Device Battery Charging and Power Alert Information

Battery Charging and Power Alert Information		
Question	Battery / Power Supply	Alert Threshold / Charge Time
When will Low Battery Warnings first appear? (Without external power source connected)	Main Battery:  Backup Battery:	"Main Battery Low" appears with approx. 20% of battery power remaining. "Main Battery Very Low" appears with approx. 10% of battery power remaining.  "Backup Battery Very Low" appears with approx. 20% of backup battery power remaining.
How often will the Low Battery Warning reappear when first alert is dismissed by the user?	Main Battery:	One additional warning "Main Battery Very Low" appears before a critically low condition forces suspension of XG3 device operation.
At what Main Battery capacity will the XG3 device force itself to suspend?	Main Battery:	A critically low condition forces suspension of XG3 device operation when battery's capacity reaches approx. 5%.
How long does it take to charge the Main Battery?	Cradle Accessories <sup>1</sup> 5200 mAh battery	Approx. 6 hours from a fully discharged state.
How long does it take to charge the Backup Battery?	Backup Battery:	When discharged, the Backup Battery requires approx. 1.5 hours to recharge with (and from) a fully charged Main Battery. An external power source is not required to charge the Backup Battery.
How long will a fully charged Backup Battery supply power to retain user data with the Main Battery discharged or removed?	Backup Battery:	Approx. 30 minutes.



**Note:** All times reflect suspension of terminal operation while charging.

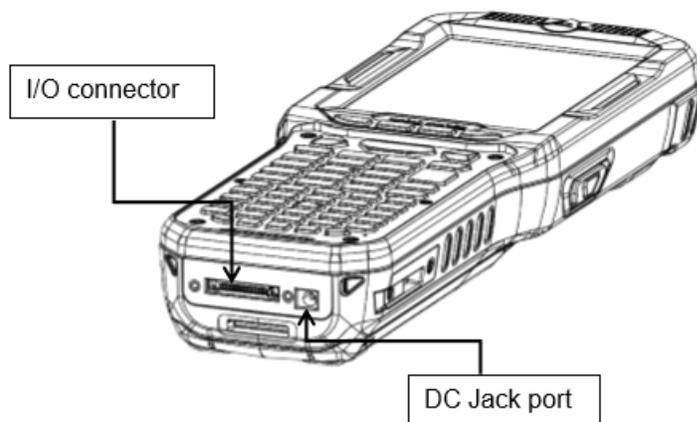
## Setting Up the XG3 Device

### *Locating Key Controls and Components*

#### **XG3 Connector**

The XG3 I/O connector powers the terminal, charges the main battery, and facilitates communication. This connector supports High speed USB 2.0 communication (up to 480 Mbps). Through this connector, you can communicate with a host workstation via Microsoft ActiveSync or Windows Mobile Device Center.

#### Bottom Panel Layout



The I/O connector supports the following signals:

	Pin Description	Direction
1	DC IN +5V	PWR
2	DC IN +5V	PWR
3	TXD (RS-232 )	OUT
4	RTS (RS-232 )	OUT
5	USB Host +5V Enable	OUT
6	USB Host D+	IN/OUT
7	USB Host D-	IN/OUT
8	USB Host Detect#	IN
9	CTS (RS-232 )	IN
10	RXD (RS-232 )	IN
11	GND	
12	GND	
13	CRADLE Detect#	IN
14	USB Client D+	IN/OUT
15	USB Client D-	IN/OUT
16	USB Client +5V	PWR

**NOTE:** Signals referenced are for a DTE device.

### **Keyboard-Controlled Screen Navigation**

The keyboard offers additional navigational controls, including the Screen Scroll Up/Left and Screen Scroll Down/Right buttons.

To scroll up or down, press the **Up** or **Down** arrow button.

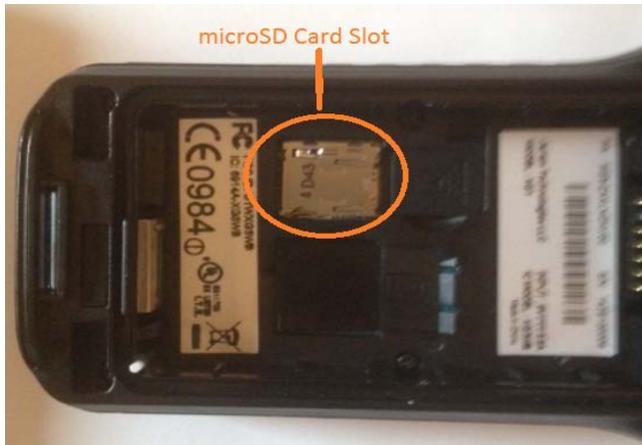
To scroll left or right, press the **Left** or **Right** button.

### microSD Removable Memory

XG3 devices are compatible with microSD memory cards with a capacity of up to (and not more than) 32 GB.

#### microSD Card Slots (located beneath removable battery)

The black rubber flap in front of the microSD card slot has a picture showing orientation for insertion. Peel back the rubber flap and gently insert the card pushing it until it locks in. To remove gently, push it again until it ejects.



#### **i** IMPORTANT NOTE!

*To avoid possible damage to microSD cards or the XG3 device, ESD (electrostatic discharge) precautions are recommended when installing or removing microSD cards. At a minimum before handling, discharge any personal static electric buildup to a point of discharge other than the device.*

## LCD Screen Options and Calibration

### **i** IMPORTANT NOTE!

*Always use the supplied stylus for tapping or making strokes on screen. DO NOT use a pen, pencil or any other object on the touch screen.*

The XG3 device provides a utility that enables users to customize LCD screen orientation and to recalibrate the screen's tapping function accuracy.

#### Accessing the Screen Menu:

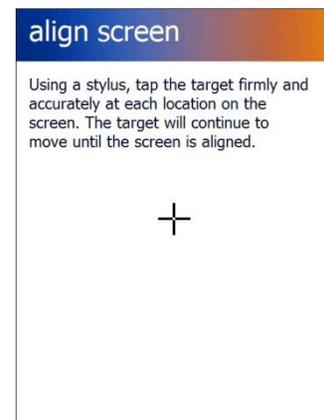
1. From the **Windows Embedded Handheld Start** screen, tap **Settings**.
2. From the **Settings** screen, tap **System**.
3. From the **System** Screen,



scroll down and tap the "Screen" icon.

4. From the "General" tab, select the preferred display orientation (**Portrait** (the default setting), **Landscape** (right-handed) or **Landscape** (left-handed)).

5. If you notice a decrease in accuracy or responsiveness when using the stylus, repeat steps 1 through 3 and tap **Align Screen**. Follow the on-screen instructions. Continue to tap each changing crosshair position with the stylus until the screen exits the align screen function and returns automatically to the **Screen Orientation** screen.



## Setting Basic User Preferences

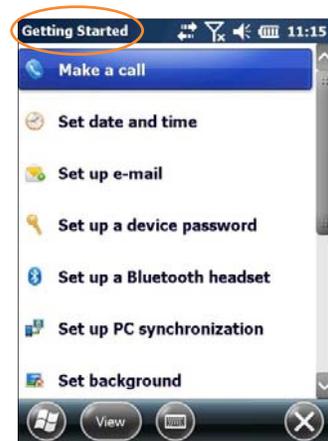
Janam XG3 devices can be customized in many ways to suit task requirements, security and/or individual user preferences. The following is an overview of a selection of key XG3 device settings with instructions on how to make changes. The general navigations and actions used to affect these changes are instructive to other similarly controlled settings.

### Key XG3 Device Option Settings

#### Getting Started

Open the getting started menu:

1. Tap **getting started**.
2. Tap **View All** to access the **Getting Started** menu options.



#### Setting a Background:

1. Tap **Set background** on the **Getting Started** menu screen.
2. Tap the arrow to the right of *Change the background in **Settings** > **Home***.
3. Select a graphic theme or picture as the screen background and tap **OK**.



**Key XG3 Device Option Settings (continued)**

 **Note:** *Picture backgrounds can affect the readability of text within some applications.*

✓ **Tip:** *Tapping the **Getting Started** icon on the Windows Embedded Handheld Start screen is an equally effective means of navigating to the Getting Started menu.*



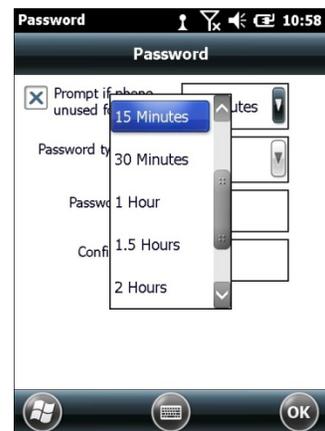
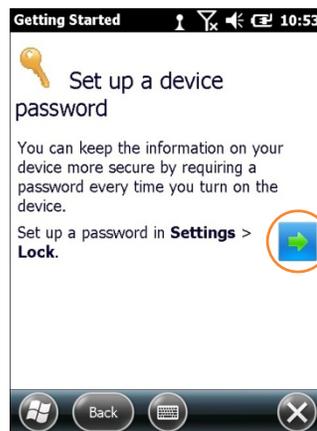
**Device Password**

**Setting up a device password:**

1. Tap **Set up a device password** on the **Getting Started** menu screen.
2. Tap the arrow to the right of **Set up a password in Settings > Lock.**
3. Check the **Prompt if phone (device) unused for** box and select a delay from 0 minutes to 24 hours. Checking this box enables the password setup process to continue.

 **Note:**

- *It is recommended that the "Prompt if device unused" time strike a practical balance between security and convenience.*
- *Selecting a delay of 0 minutes will result in a condition requiring password input every time the device is used.*



**Key XG3 Device Option Settings—Device Password** *(continued)*

4. Tap the **down arrow** in the **Password type** box.
5. From the pull-down menu, select the type of password you would like to use – Simple PIN (Personal Identification Number) or Strong alphanumeric. Enter the password and enter in the same password again for confirmation.

**Simple PIN** passwords contain only numeric characters and must be at least 4 characters in length. Overly simplistic sequences such as “1234”, “1111”, etc. will be rejected as unsafe.

**Strong alphanumeric** passwords must include at least 7 characters, 3 of which must be a combination of UPPERCASE and lowercase letters, numerals or punctuation.

**Examples:**    **Upc4003**    **UPC?4003**

**To remove password protection:**

1. Tap **Start** menu > **Settings** > **Personal** tab > **Lock**.
2. Enter your current password.
3. Un-check the **Prompt if device unused for** check box.
4. Tap **OK**.

**Changing Passwords**

Passwords may be changed by following the same procedure used to set the initial password. However, the process will be interrupted with the password entry screen. Entering the current password will enable continuation of the password change process.

**Screen/Keyboard Locking & Unlocking**

 **Note:** *When the device is locked, neither the on-screen keyboard nor the physical keypad will accept user input, preventing unintentional input. This level of locking does not take the place of the added security of password protection.*

**To lock the device:**

- Tap the Lock (icon) on the Tile Toolbar.

**To unlock the device:**

- Slide the Unlock (bar) left or right.



**Key XG3 Device Option Settings** (continued)

**Regional Settings**

The style in which numbers, currency, dates and times are displayed is controlled by **Regional Settings**. XG3 devices are shipped with regional, language and input settings pre-set to English (United States).

To change **Regional settings**:

1. From the Windows Embedded Handheld desktop Start screen; Tap **Settings** (icon) > **System** > (folder) > **Regional Settings** (icon).



2. Select the desired setting from the **Regional Settings** pull-down menu.

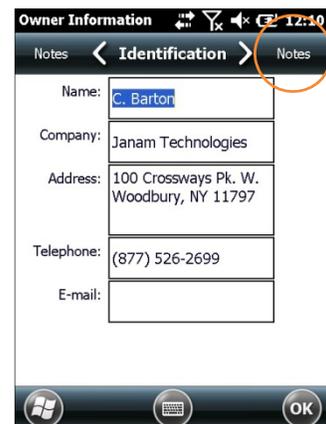


**Key XG3 Device Option Settings** (continued)**Owner Information****Entering owner information:**

1. From the Windows Embedded Handheld **Start** menu, tap **Settings** > **Personal** folder > **Owner Information**.
2. Select the **Identification** tab and enter **Owner Information**.
3. Select the **Notes** tab to enter additional owner information-related text such as "**Reward if Found.**"

**To display owner information:**

From the Windows Embedded Handheld **Start** menu, tap **Settings** > **Personal** folder > **Owner Information**.



**Key XG3 Device Option Settings** (continued)

**Screen Orientation**

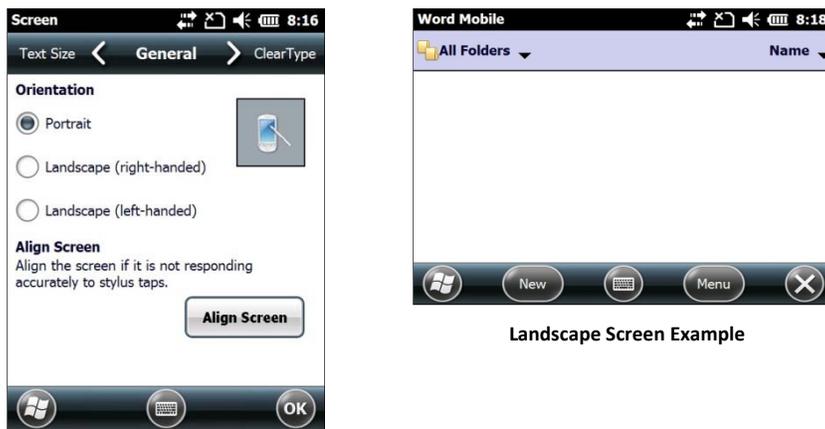
The default **Screen Orientation** is **Portrait**. If preferable, orientation can be changed to **Landscape** (right-handed or left-handed).

**Changing screen orientation:**

1. From the Windows Embedded Handheld Start Screen, Tap **Settings** (icon) > **System** (folder) > **Screen** (icon).



2. Select the preferred screen orientation and tap **OK**.



3. To auto rotate the screen orientation using the XG3 Accelerometer sensor go to **Start > Settings > System > Sensor (Icon) > Accelerometer** (tab). Select the check box for **Auto Display Orientation**.

## Key XG3 Device Option Settings (continued)

### Device Name

The XG3 device name (which may already be assigned) is used to identify the device in the following situations:

- Synchronizing with a PC
- Connecting to a network
- Restoring information from a backup

### Assigning or changing the device name and/or description:

1. From the Start menu tap **Settings** (icon) > **System** (folder) > **About** (icon).



2. Tap the **Device ID** tab.
3. Enter a **Device name**. The Device name cannot exceed 15 characters. It must begin with a letter, consist of letters from A to Z, numbers from 0 to 9 and cannot contain spaces. Use the underscore character to separate words.



4. Enter a **Description**. The Description cannot exceed 50 characters. It must begin with a letter, consist of letters from A to Z, numbers from 0 to 9 and cannot contain spaces. Use the underscore character to separate words.

**IMPORTANT NOTE!**

*To synchronize multiple XG3 devices with the same PC, each device must have a unique name.*



**Key XG3 Device Option Settings** (continued)

**Front Panel Layout**



**To adjust device volume:**

1. Tap the speaker in the title bar then tap the speaker in the horizontal scroll bar.
2. Select speaker ON, OFF or set to Vibrate. Use the slider gauge to raise and lower the volume.



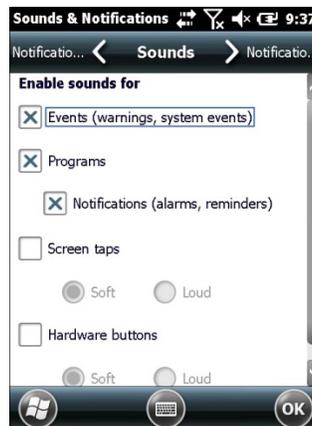
**Key XG3 Device Option Settings** (continued)**Additional Sounds and Notifications**

Additional sound-related settings are available, making it possible to adjust select device functions to suit the user's preference.

1. Tap **Settings > Sounds & Notifications**.



2. From the resulting **Sounds & Notifications <Sounds>** screen, choose device functions by tapping the corresponding checkbox(s).
3. For Screen taps and Hardware buttons, tap the preferred setting (Soft or Loud.)
4. Select the **Notifications** tab to assign notifications to specific events such as Incoming calls and ActiveSync activity.
5. From each **Events** options screen, select the preferred settings.
6. Tap **OK**.



## Battery Power

### Main and backup battery status

1. Tap **Settings** (icon) from the Windows Embedded Handheld **Start** screen.
2. Tap **Power** (icon). Main Battery and Backup Battery status are displayed in bar charts from 0% to 100%.



## Power Management

### Conserving Battery Power

XG3 devices feature multiple power conservation options, some of which employ timers that can be set to strike a balance between user preference and optimal battery life. **On battery power** timers control the selected action only when the device is being operated on battery power. **On external power** timers control the selected action only when the device is being used with an external power supply.

✓ *Tip: Whenever practical, you can conserve battery life by:*

1. *Using the AC adapter to plug the XG3 device into an external power source.*
2. *Manually or auto-suspend device operation as often as is practical*
3. *Reduce the backlight brightness setting*
4. *Turn off any wireless functionality (Wi-Fi, Bluetooth) when not in use*

**Battery Power- Conserving Battery Power** (continued)**Screen Off Function**

To adjust Screen Off function (device suspend mode):

1. Tap **Settings**, **system** on the Windows Embedded Handheld **Start** screen.
2. Tap **Power** on the Windows Embedded Handheld **Settings** desktop.



3. Tap **Advanced** on the **Power**
4. Check **On battery power**.
5. Select the preferred length of inactivity before activation of the screen off power saving function from the **pull-down menu**. Shorter *off* delays will increase battery power conservation.
6. Check **On external power**.
7. Repeat Step 5.
8. Tap **OK**.



**Battery Power- Conserving Battery Power** (continued)**Backlight Off Delay Function**

To adjust backlight off delay function:

1. Tap **Settings** (icon) on the Windows Embedded Handheld **Start** screen.
2. Tap **System** (folder) on the Windows Embedded Handheld **Settings** desktop.
3. Tap **Backlight** (icon) on the Windows Embedded Handheld **System** desktop.



4. Check the "Turn off the backlight if device not used for" box and select the preferred length of inactivity before activation of the screen off power saving function from the pull-down menu. Shorter *off* delays will increase battery power conservation.

**Backlight Brightness Adjustment Function**

To adjust backlight brightness function:

1. Tap **Settings** (icon) on the Windows Embedded Handheld **Start** screen.
2. Tap **System** > **Backlight** (tab)
3. Adjust the brightness level using the sliding bar in 20% increments of
4. The Backlight will be turned off when the **Enable Backlight** check box is disabled



### Keylight *Enable and Duration* Function

To adjust keylight duration function:

1. Tap **Settings** (icon) on the Windows Embedded Handheld **Start** screen.
2. Tap **System** > **Backlight** (tab) > **Keypad backlight**
3. Enable the keylight function by selecting the check box.



### *Disabling Connectivity*

In conditions where it is not necessary to maintain Bluetooth or wireless connectivity, battery power can be conserved and battery life extended by disabling any or all of these connectivity functions.

**To disable connectivity functions:**

1. Tap **Settings** (icon) on the Windows Embedded Handheld **Start** screen.
2. Tap **Connections** (folder) on the Windows Embedded Handheld **Settings** desktop.
3. Tap **Wireless Manager** (icon) on the Windows Embedded Handheld **Connections** desktop.
  - Tap **ALL** to disable Wi-Fi and Bluetooth connectivity for maximum battery power conservation.
  - Alternatively, tap only the connectivity function or functions you prefer to disable.
  - Tapping a connectivity function again will re-enable it.



**Opening Applications**

**To open an application:**

Tap the desired application from the Windows Embedded Handheld desktop.

**Removing Programs** *(applies only to user-installed programs)*

**To remove a program:**

1. From the **Start** screen, tap **Settings** (icon) > **System** (folder) > **Remove Programs** (icon).
2. From the **Remove Programs** screen, select (tap) the program to be removed.
3. Tap the **Remove** button.

**Communication Ports**

The table below identifies the XG3 Comm Ports that are currently allocated. When selecting a Virtual Comm Port, the Comm Ports below will not be available for use if the XG3 is configured with that function.

COM6	Physical COM for Bluetooth	Will be occupied when the Bluetooth function is turned on
COM1	Physical COM for bottom connector	Fully accessible by user application

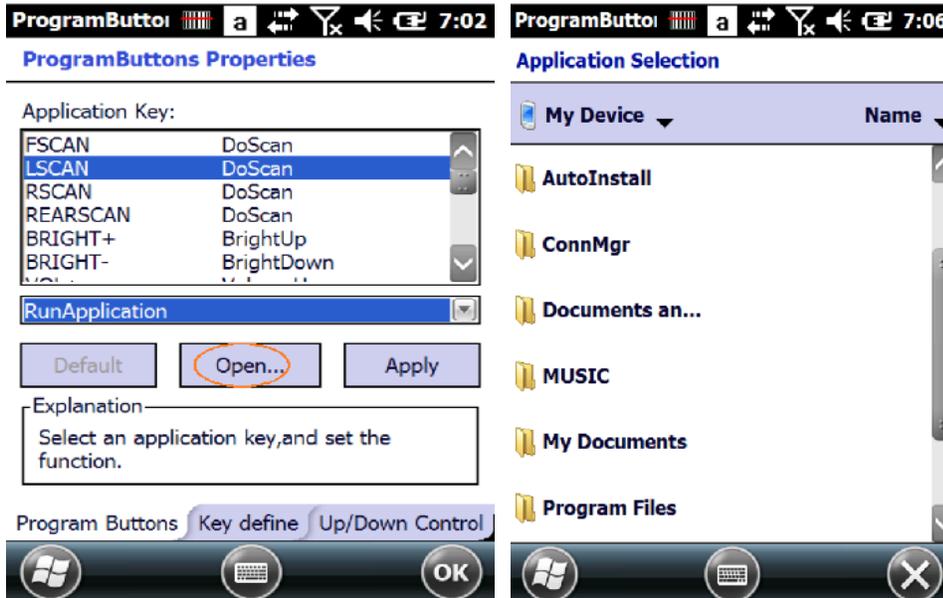
## Program Buttons

### Introduction and setup

Program Buttons allow the custom assignment of programs or actions to the defined keys. In the example shown the Left Scan button is selected to Run an Application



Tap “Open” then browse to the application to be launched by the selected key. Tap OK and “Apply”.



## Resetting the XG3 Device

### Resetting

In addition to On (Resume) and Off (Suspend) functions, XG3 devices provide a range of device reset (boot) procedures whose functions may be called upon when required.

#### **ⓘ IMPORTANT NOTE!**

*Some device reset options irretrievably delete stored user data! Always read and understand the parameters of selected reset procedures before execution.*

### On (Resume) / Off (Suspend) and Reset Functions

#### On (Resume) / Off (Suspend)

To Suspend or Resume the XG3 device operation:

- Press the **Power key** once to suspend operation and press again to resume.

### Reset the XG3

To soft reset (or warm boot):

A soft reset restarts the device and reboots the operating system. Applications and files remain intact. However, any data in RAM that has not been saved could be lost. Make sure to save any open work before executing a soft reset.

To perform a soft reset:

1. Press the Power button and hold for 3 seconds.
2. Choose 'Soft Reset' on the power menu.

**To hard reset (or cold boot):**

A hard reset, resets the hardware and cold starts the operating system. All applications and files remain but any unsaved data in RAM will be lost. Make sure to save all open work before executing a hard reset.

To perform a hard reset:

1. Press the Power button and hold for 3 seconds.
2. Choose 'Hard Reset' on the power menu.

**To master reset (or clean boot):**

A master reset or clean boot returns the XG3 to factory settings, removing ALL applications and data stored on the device. Any files or programs stored in the Application folder or a micro SD card will remain. Be sure that all data is backed up before performing a master reset.

To perform a master reset/clean boot:

1. Perform a 'Hard Reset'
2. The terminal will reboot automatically.
3. As soon as you see COLD BOOT type the code 1277. This will take you to the bootloader menu
4. Type 12 to perform Factory reset.
5. When clean boot is completed, calibrate screen.

## Data Entry

### Entering Information on the XG3 Device

Information can be entered into the Janam XG3 device handheld computer in a variety of ways:

- **Barcode scanning** — Scan barcodes to automatically capture data. See Chapter 6 for information about barcode scanning.
- **Typing** — Use the physical keypad or the on-screen keyboard to input text, numbers and other characters.
- **Drawing and Writing** — Freehand drawing and/or handwriting can be entered using the stylus within the **Notes** application.
- **Audio** — The **Notes** application provides the ability to record voice notes.
- **Photography** — The integrated digital camera provides the ability to capture photographic images. See Chapter 10 for information about the camera function.
- **Synchronizing** — Import or exchange data between a PC and the device using ActiveSync or Windows Mobile Device Center. See Chapter 7 for more on synchronization.

 **Note:** *The Janam XG3 device features an alpha/numeric physical keypad suited for frequent input of alphabetic data or a 10-key numeric. The XG3 also provides an on-screen keyboard for entering alpha, numeric and special character data.*

### Typing

XG3 devices are capable of running a variety of applications, many of which rely upon or require the input of alpha, numeric or special character data. In addition to the alpha/numeric physical keypad, the XG3 devices feature the ability to key in data with the supplied stylus on an integrated **On-Screen Keyboard**.

#### To use the On-Screen Keyboard:

1. Tap the **On-Screen Keyboard** (icon) in the **Tile Toolbar** at the bottom of the screen.
2. Use the supplied stylus to tap keys on the keyboard displayed on the screen.

This function is available only in modes when text entry is possible.



**Entering Information on the XG3 Device—Typing (continued)**

**Changing on-screen keyboards:**

The default on-screen keyboard is a standard lowercase QWERTY keyboard.

- To switch to the **UPPERCASE** (all CAPS) keyboard, tap the **CAP** key above the Shift key.
- To switch to the expanded **Numeric** keyboard, tap the **123** key in the upper left corner.
- To select the **International** keyboard, tap the **áü** key at the lower left of the keyboard.



Lowercase Keyboard



Uppercase Keyboard



Numeric Keyboard



International Keyboard

**Custom Key**

**Programming**

A selection of XG3 device keypad function keys can be reprogrammed as shortcuts to an assortment of actions.

To reprogram function keys:

1. Tap **Settings** from the Windows Embedded Handheld desktop.
2. Tap **Personal** (folder) > **Buttons** (icon).
3. Select the reprogrammable button.
4. Select the action to be assigned to the selected button from the drop-down menu.



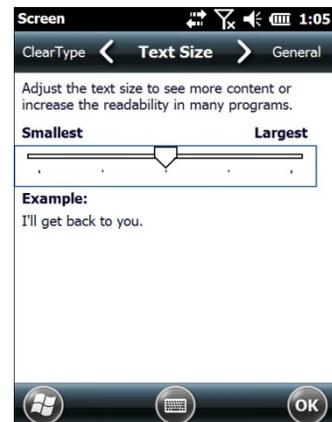
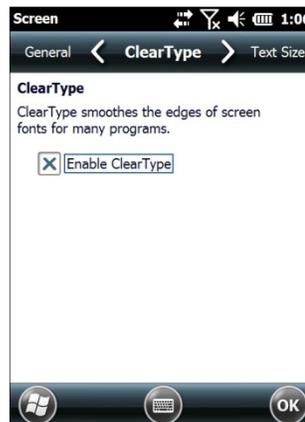
## Entering Information on the XG3 Series Device—Options

### Enabling ClearType Text

Clear Type softens the edges of the screen fonts for many applications.

#### To use ClearType for screen text:

1. Tap the **Settings** (icon) from the Windows Embedded Handheld **Start** menu > **System** (folder) > **Screen** (icon) > **ClearType** (tab).
2. Select the **Enable ClearType** check box.



### Text Size

#### To increase or decrease screen text size:

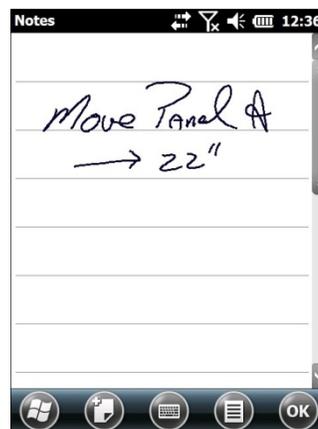
1. Tap the **Settings** (icon) from the Windows Embedded Handheld **Start** menu > **System** (folder) > **Screen** (icon) > **Text Size** (tab).
2. Using the supplied stylus, move the slider left to decrease text size or to the right to increase text size.

### Drawing and Writing

The **Notes** application accepts input from the physical keypad, the on-screen keyboard and accepts handwriting and drawing using the supplied stylus.

#### To draw or write freehand:

- Tap the **Notes** (icon) from the Windows Embedded Handheld **Start** menu.



### Audio—Voice Note Recording

The **Notes** application provides an audio recording function to capture voice notes.

To record voice notes:

1. Tap the **Notes** (icon) from the Windows Embedded Handheld **Start** menu.
2. Tap the **Menu** (icon) on the Tile Toolbar.
3. Select the **Review Recording Toolbar** option from the pull down menu.



4. Tap the **red recording dot** to begin voice notes capture.
5. Tap The **square stop icon** to stop voice notes capture.
6. Tap the **speaker icon** in the main screen area to select a voice note for playback.



## Data Capture—Barcode Scanning

### Introduction

Janam XG3 Series mobile computers are available with two barcode scanning technology options, each of which is suited for varying end-user requirements, preferences and workspace environments. This chapter covers each of the available XG3 Series barcode scanning technologies. Therefore, some of the barcode functions described in this chapter may not apply to the XG3 Series device(s) you are using. For that reason, and depending on the configuration of your XG3 Series device(s), some information in this chapter may not apply.

If you have questions about the scanning technology utilized by specific XG3 Series device(s), please contact your Janam dealer or Janam Technical Support at:  
+1.866.915.5311

### *Barcode Scanning System*

The XG3 is equipped with either the Motorola laser or Honeywell imaging scanner.

- **Laser: MOTOROLA SE96X laser scan engine:**  
The SE96X packs the largest feature set into one of the smallest engines available, creating an engine that offers best-in-class scanning performance, scanning range, application flexibility, reliability and durability. Adaptive Scanning technology automatically toggles between a wide and narrow scan angle until a bar code is detected, allowing users to zoom in on bar codes as far as 15 ft./4.5 m and zoom out to capture bar codes at near contact — the widest working range in this class.
- **Imager: Honeywell N5600 series**  
These miniature imaging engines are built with advanced Adaptus® 6.0 Imaging Technology. The scanners feature a custom image sensor specifically designed for barcode and optical character recognition (OCR) font reading, the industry's first color imaging option and a new decoding software architecture for reading hard-to-read barcodes. Engineered to meet the demanding needs the N5600 scan engines deliver superior data capture performance for a variety of applications.

**i IMPORTANT NOTE!**

The following Barcode Scanning Demonstration and Setup material provides XG3 users with fundamental barcode scanning information to familiarize users with general scan functions. However, your devices' barcode scanning functions will likely be governed and/or managed by a third-party application not covered in this manual.

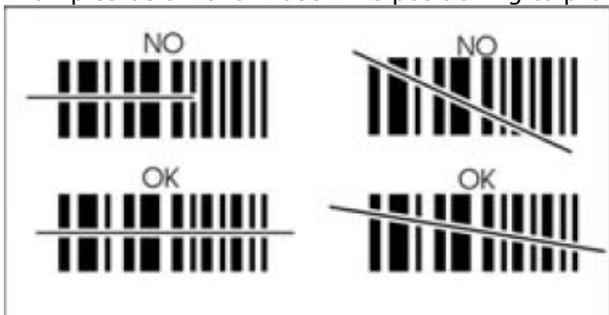
**A. Laser-Based Configurations**

This section is specific to XG3 Series configurations equipped with the **MOTOROLA SE96X** laser scan engine. Please see Section B for barcode scanning with XG3 series configurations with Honeywell Adaptus Imager scanning technology.

**Activating the Barcode Scanner**

When a scanning application is open, press any of the three orange Scan keys to activate the laser engine.

Examples below show laser line positioning to provide you with the best scanning performance.



## B. 2D Imager-based Configurations

### Overview

The XG3 with an N560X 2D imager scanner will instantly read all popular 1D and 2D bar codes and supports omni-directional aiming and decoding. The imager scanner can also capture digital images, such as signatures and pictures.

### Full-area Imaging

With full-area imaging the XG3 supports omni-directional aiming meaning that a positive read can be obtained from many positions. For details, see Omni-Directional Scanning Positions on page 6-7.

### To Decode a Bar Code

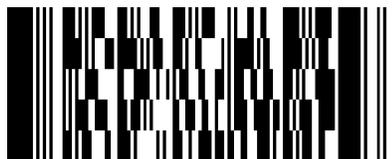
1. Tap **Start** > **Demos** > **Scan Demo**.
2. Position the Mobile Computer over one of the Sample Bar Codes on paragraph 6.9. A range of 4–10 inches (10–25 cm) from the bar code is recommended.
3. Project the aiming brackets by pressing and holding the **Scan** key. The Scan LED lights red.
4. Center the aimer crosshair over the bar code. The aiming beam should be oriented in line with the bar code to achieve optimal decoding; Omni-Directional Scanning Positions on paragraph 6.10.
5. When the bar code is successfully decoded, the decode LED **lights blue** and the terminal beeps.

### Sample Bar Codes

You can use the following bar codes to verify decoding:

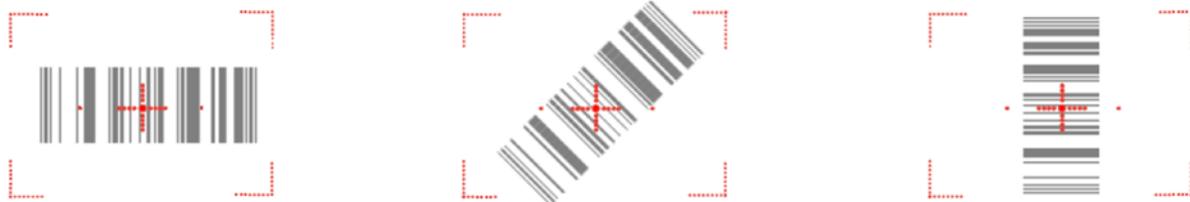
Code 39

PDF 417



### Omni-Directional Scanning Positions

The high-vis aiming pattern frames the bar code to provide you with the best scanning performance.



### IMPORTANT NOTES

*To achieve the best read, the aiming beam should be centered horizontally across the bar code.*

## Activating the Imager Scanner

When a scanning application is open, press the Scan key to activate the image engine.

## Using Demos

The XG3 comes preloaded with software applications that demonstrate the advanced features of the terminal.

### Image Demo and Scan Demo

To access these demos, tap Start > Demos.

- Select Scan Demo to verify decoding, or Image Demo to verify imaging (not available on device using the laser engine).

## Capturing Images

The image-capture process is an intuitive, split-second operation for experienced users. By following basic guidelines, however, new users can easily develop their own technique and, with practice, quickly learn to adapt to different application environments.

### Image Preview

When the imaging process is initiated, the touch screen displays a preview of the object. This is a live video image of what the imager is currently viewing and has a slightly degraded appearance compared to the captured image. This is normal; the captured image has a higher resolution.

## File Formats

The Mobile Computer supports BMP file format only.

## Using ScanWedge

### Overview

ScanWedge sends data from the installed scan engine to the foreground application as keystrokes or clipboard. The foreground application is the open software application whose window is currently active on the display.

### Enabling ScanWedge

ScanWedge is enabled by default. To review or change ScanWedge settings tap the ScanWedge icon

once  from the taskbar or go to Start > Settings > System > Scanner Settings.



## Synchronizing the XG3 Device

Microsoft® Windows Mobile Device Center and ActiveSync allow you to synchronize data between an XG3 device and a PC. ActiveSync and Windows Mobile Device Center share some similarities. This User Guide includes setup for Windows Mobile Device Center. If you need additional assistance, please contact the JanamCare Service and Support Center.

### Synchronization—Exchange and Update Data Using Windows Mobile Device Center

#### Create a User Profile

1. Tap Start menu > Settings > Personal tab.
2. Select Owner Information.
3. Enter Identification, Notes and display Options information.  
Check the Identification information check box only if you prefer Owner Information to be the first screen to appear at start up.
4. Tap ok to save changes.

#### Setting Up and Deleting Partnerships

A partnership enables you to automatically synchronize selected XG3 device files at startup when all synchronization conditions are met (see Note below). Alternatively, you can run synchronization manually (on command); copying only the files you want to sync.

To set up a partnership to automatically sync files:

1. Connect your XG3 device to your PC and power the XG3 on.  
Synchronization requires the following:
  - A direct connection between the XG3 device and the host PC, using a USB sync cable (CAB-J-003U)
2. On your PC, select Start > Programs > Windows Mobile Device Center.
3. At the Microsoft Mobile Device Center Home screen (on your PC), click Set Up your device.
4. The Set Up Windows Mobile Partnership window appears. Select the data types that you want to synchronize and tap Next.
5. The Set Up Windows Mobile Partnership (Device name) window appears. Use the default name or enter a new name.
6. Tap Set Up to proceed. Set Up will start, followed by synchronization between the PC and the XG3 device.

The Windows Mobile Device Center screen on your PC will indicate synchronization progress.

#### To add/remove files to/from the device:

1. Select (mouse over) Mobile Device Settings > Change content sync settings on the PC's Windows Mobile screen.
2. The Change content sync settings window appears. Click the checkboxes of the desired file categories and click Save.

Clicking Save will initiate file synchronization automatically. Sync verification is provided as the time of the last sync, displayed at the bottom-left of the host PC's Windows Mobile screen.

### **Partnership (Connection) Settings**

#### **To change partnership (connection) settings:**

1. Open the Windows Mobile Device Center control panel.
2. Move the mouse icon over the Mobile Device Settings option, revealing the sub-menu of options.
3. Click Connection Settings.
4. Apply your preferences and click OK.

#### **To end a partnership:**

1. Unplug the USB cable from the PC to break the ActiveSync connection.
2. Open the Windows Mobile screen on the PC.
3. Click Mobile Device Settings and click End a partnership from the pop-up screen.
4. From the resulting End a partnership screen, select the partnership to be deleted, click the End partnership button.
5. Click Yes on the resulting confirmation screen.
6. If there is a Synchronized Files folder, a Confirm Folder Deletion screen will appear. Tap Yes to proceed.

## WLAN (802.11 a/b/g/n Radio)

### Introduction

The XG3 has a 2.4 GHz and 5GHz **802.11 a/b/g/n** WLAN (Wireless Local Area Network) radio. The radio is interoperable with other 802.11a/b/g/n, Wi-Fi compliant products including wireless controllers, access points (APs), workstations via PC card adapters, and other wireless portable devices.

By default, the 802.11a/b/g/n radio is powered-off (i.e., disabled) "out of the box". Once enabled, the state of the radio will survive subsequent soft and hard resets. The next step is to configure the connection parameters of the radio to connect to a wireless network.

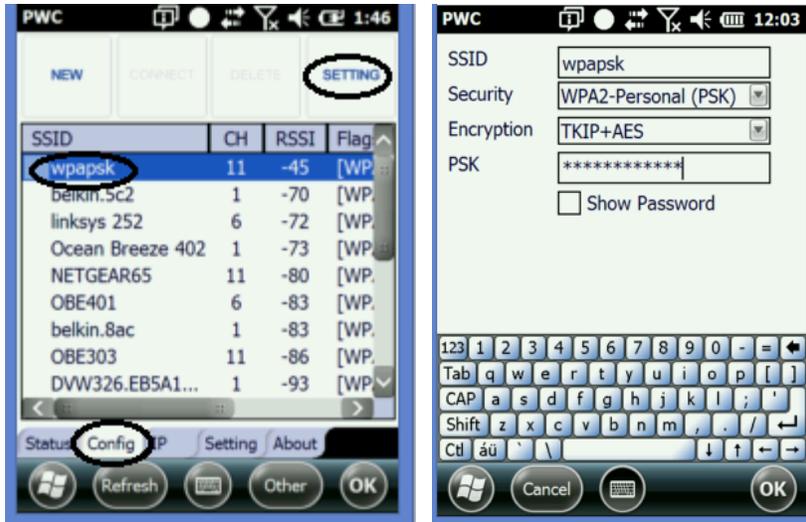
### Configuring the WLAN Radio

The WLAN radio is configured using the Portable Wireless Configuration Utility (PWC) from the "Start" screen.

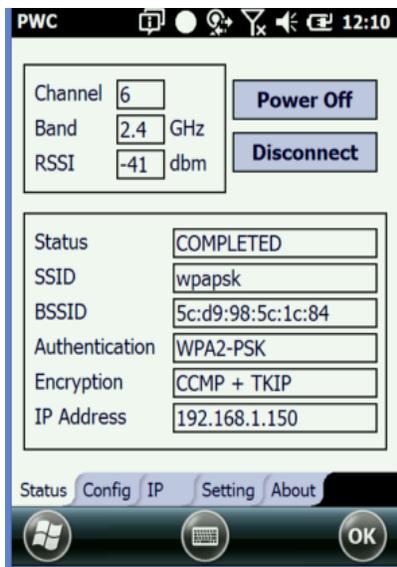
1. Tap PWC
2. Tap "Power On"
3. Tap "Config"



4. Select the desired WLAN Profile or tap "New" to create your unbroadcasted wireless profile.
5. Enter your PreShared Key/Credentials



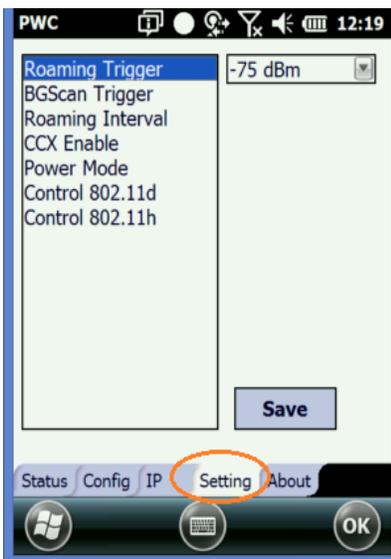
- Configuration is complete and accurate when the "Status" changes to "COMPLETED". The "Status" panel provides useful information about your wireless connection including the channel, Band and signal strength (RSSI).



The IP tab shows your network configuration



The "Settings" tab allows access to higher-level radio controls. The default values have been derived and set to accommodate the majority of environmental conditions and should not be changed without a good working knowledge of the subject matter.



## Bluetooth

### Overview

Bluetooth is a short-range wireless communications technology. Devices with Bluetooth capabilities can beam to exchange information over a distance of about 10 meters (30 feet).

Unlike infrared, you don't need to line up the devices to beam information with Bluetooth. You can even beam information to a device in a different room, as long as it's within range.

You can use Bluetooth as follows:

- Beam information, such as files, appointments, tasks and contact cards, between devices that have Bluetooth capabilities.
- Use a Bluetooth service. Once you connect to another device or computer using Bluetooth, you can locate and use any of the services available on that device.

 **NOTE:** In order to conserve battery capacity, the Bluetooth, module is off by default.

 **NOTE:** Suspending the terminal powers off the Bluetooth radio and drops the Bluetooth connection. When the terminal resumes, it takes approximately 10 seconds for the Bluetooth radio driver to re-initialize the radio.

## Enabling the Bluetooth Radio

1. Tap on the Bluetooth icon in Start > Settings.
2. The Bluetooth Manager is launched.
3. Tap "Mode" to enable the radio
4. Tap "Add new device", the Bluetooth Manager will search for discoverable devices.



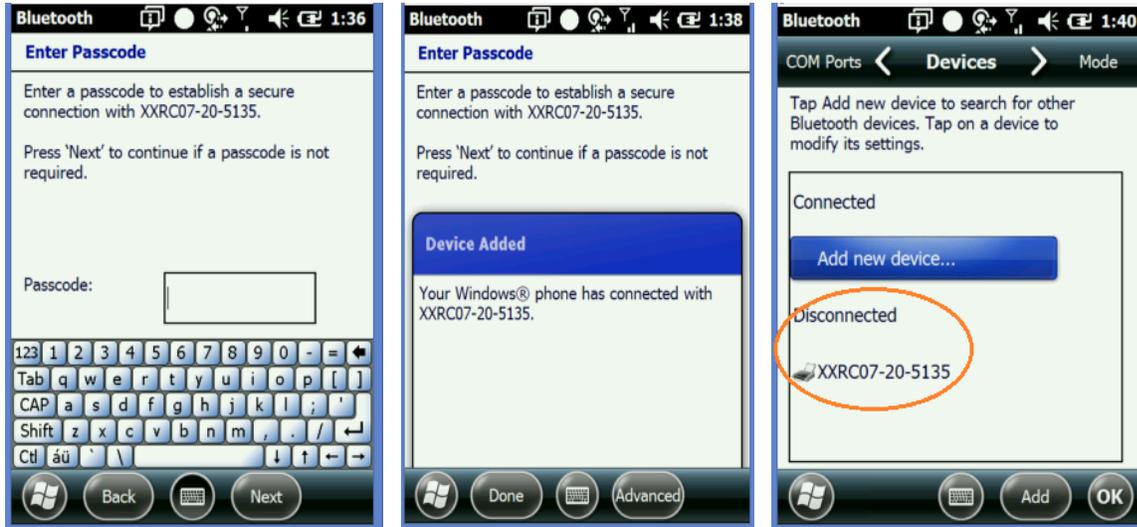
## Pairing Bluetooth Devices

1. Tap on the desired device in the Bluetooth Manager.

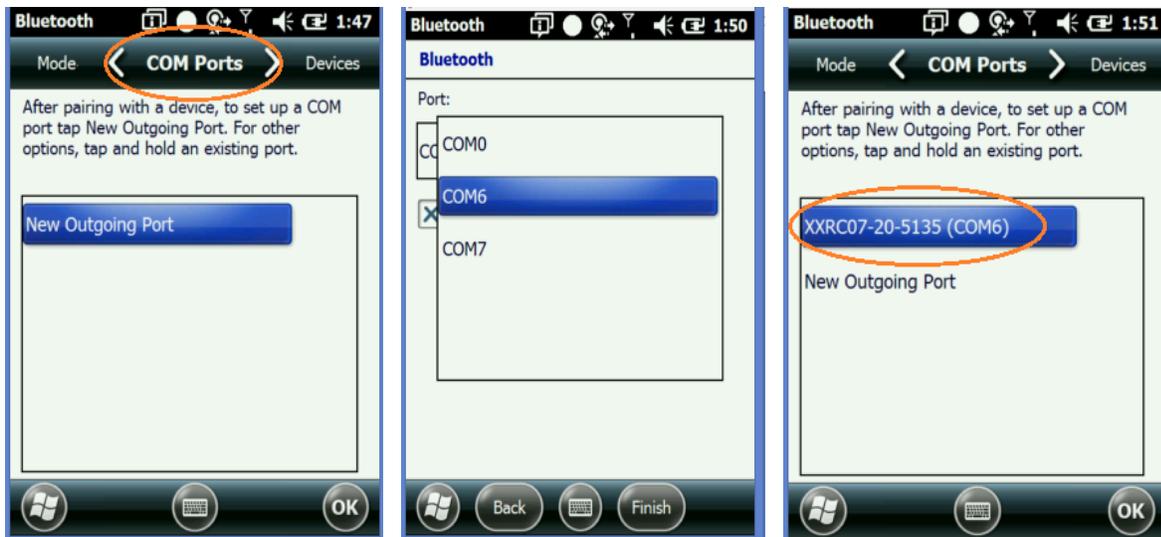


2. Tap the Next Button on the bottom

3. Enter 4 digit passkey and tap the Next button
4. Enter the same passkey on the other device when prompted.
5. Pairing is complete.



6. The paired device will show as disconnected while viewing the Bluetooth Manager
7. For devices like serial printers select "Com Ports" and assign a "New Outgoing Port"



## Regulatory

### XG3 Rugged Mobile Computer Regulatory Information

Thank you for purchasing the Janam Technologies XG3 rugged mobile computer. This manual generally provides you with the safety information and basic features and operations of the XG3 device. Please read all safety precautions and this manual carefully before using your device and peripherals to ensure safe and proper use.

#### Trademarks

The official name of Windows XP is Microsoft Windows XP Operating System. The official name of Windows Vista is Microsoft Windows Vista Operating System. The official name of Windows 7 is Microsoft Windows 7 Operating System. Microsoft, Windows, Windows Embedded Handheld 6.5 Pro, ActiveSync, and the brand names and product names of other Microsoft products are trademarks of Microsoft Corporation in the US and other countries. Other company and product names given in this manual or displayed in this software may be the trademarks of their respective companies.

#### Symbols in this manual

In this manual, some important items are described with the symbols shown below. Be sure to read these items before using this equipment.

**WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury, serious damage, or fire in the equipment or surrounding objects.

**CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, partial damage to the equipment or surrounding objects, or loss of data.

 **NOTE** Indicates information to which you should pay attention when operating the equipment.

This section outlines the safety precautions associated with using the XG3 terminal.

 **NOTE:** The XG3 terminals meet or exceed the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to read this manual carefully before performing any type of connection to the handy terminal and operate them according to the agency guidelines described in the manual.

## 2.1. General Safety Rules

### CAUTION

- Use only the components supplied by the manufacturer for the specific XG3 being used.
- Do not attempt to disassemble the XG3 terminal, as it does not contain parts that can be repaired by the user. Any tampering will invalidate the warranty. When replacing the battery pack or at the end of the operative life of the XG3 terminal, disposal must be performed in compliance with the laws in force in your country. Before using the devices and the battery packs, read this manual carefully. Do not submerge the XG3 terminal in liquid products.

## 2.2. Power Supply

The power supply for this device has met applicable KCC/CCC safety requirements. Please adhere to the following safety instructions per UL guidelines:

- FAILURE TO FOLLOW THE INSTRUCTIONS OUTLINED MAY LEAD TO SERIOUS PERSONAL INJURY AND POSSIBLE PROPERTY DAMAGE. • IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS. WARNING
- DANGER – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

### WARNING

Use only Janam Technologies-approved power supply. Use of a non-Janam-approved power supply may be dangerous and the warranty does not cover damage to the device caused by non-Janam approved power supplies. The package includes international AC plugs. The AC plugs must be plugged into the power supply before the power supply itself is plugged on the wall outlet. The power supply is intended to be correctly oriented in a vertical or horizontal or floor mount position.

## 2.3. Laser Safety

### CAUTION

A Class 2 laser is safe because the blink reflex limit the exposure to no more than 0.25 seconds. It only applies to visible-light lasers (400–700 nm). Class-2 lasers are limited to 1mW continuous wave, or more if the emission time is less than 0.25 seconds or if the light is not spatially coherent. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring at the beam as one would with any very strong light source, such as the sun. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces such as mirrors, etc. The laser light is visible to the human eye and is emitted from the device scan window.

If the laser light label is attached to your device, it indicates the product contains a laser engine or laser aimer that emits the laser light. The following information is provided to comply with the rules imposed by international authorities and refers to the correct use of the XG3 terminal.

Laser Safety Statement This product has been tested in accordance with and complies with CDRH 21 CFR 1040.10 and 1040.11 and IEC 450825-1 Ed 2 (2007) except for deviations pursuant to Laser Notice No 50, dated June 24, 2007. LASER LIGHT. DO NOT STARE INTO BEAM. CLASS 2 LASER PRODUCTS. 1 mW MAX OUTPUT: 650nm.

For installation, use and maintenance, it is not necessary to open the device.

**WARNING:** Do not attempt to open or otherwise service any components in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations. The optics system is a factory only repair item. **WARNING:** Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.

**WARNING:** Use of optical systems with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, eye glasses and magnifying glasses.

The LED output on this device has met IEC62471 LED safety and certified to be under the limits of a CLASS 1 LED product.

## 2.5. FCC/EU RF Exposure

This device complies with FCC/EU RF exposure guidelines set forth for an uncontrolled environment. For body worn operation, this device has been tested and meets the RF exposure guidelines for use with an accessory that contains no metal and the positions the handset a minimum of 1.0cm from the body. Use of other enhancements may not ensure compliance with RF exposure guidelines. If you do not use a body-worn accessory and are not holding the device at the ear, position the handset a minimum of 1.0cm from your body when the device is switched on.

This device was tested for typical body operation, keeping a distance of 1 cm (0.39 inch) between the user's body and the device. To comply with RF exposure requirements of the FCC standards, a minimum distance of 1 cm (0.39 inch) between the user's body and the device is required. Belt-clips, holsters, and similar accessories containing metallic components from others manufacturers should not be used. Accessories worn close to the body, without keeping a minimum distance of 1 cm (0.39 inch) between the user's body and the device, and that have not been tested for typical body operation, may not comply with FCC's RF exposure limits and should be avoided.

## 2.6. CB Scheme

This device complies with CB Scheme IEC 450950-1

### 2.7. FCC Part 15 Regulation

Pursuant to part 15 of the FCC Rules, you are cautioned that changes or modifications not expressly approved by Janam could void your authority to operate the XG3 terminal.

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.

This device 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 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.

In accordance with FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. To maintain compliance with FCC/EU RF exposure guidelines for body-worn operation, do not use accessories that contain metallic components. .

## 2.8. Canadian Compliance

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device. Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p) is not more than that necessary for successful communication. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## 2.9. Radio Compliance

XG3 terminals are in conformity with all essential requirements of the R&TTE Directive (1999/5/EC).

This device is marked in accordance with the Class II product requirements specified in the R&TTE Directive, 1999/5/EC. The device is intended for use throughout the European Community; PAN European Frequency Range: 2.402 ~ 2.480 GHz. Restrictions for use in France are as follows: • Indoor use: maximum power (EIRP\*) of 100 mW for the entire 2.400 ~ 2.4835 GHz • Outdoor use: Maximum power (EIRP\*) of 100 mW for the 2.400 ~ 2.454 GHz band and maximum power (EIRP\*) of 10 mW for the 2.454 ~ 2.483 GHz band.

The CE mark on the device indicates that the system has been tested to and confirm with the provisions noted within the 2004/108/EC Electromagnetic Compatibility Directive and the 2006/95/EC Low Voltage Directive, 1999/5/EC (R&TTE), and 2011/65/EU (RoHS). Janam shall not be responsible for use of our product with equipment (i.e., power supplies, personal computers, etc.) that is not CE marked and does not comply with the Low Voltage Directive.

**2.11. WEEE Compliance**

Information for the user in accordance with the European Commission Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on Waste Electrical and Electronic Equipment (WEEE)

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed. In order to avoid the dissemination of those substances in our environment and diminish the pressure on the natural resources, we encourage you to reuse, recycle and recover the product. If the product is disposed according to the Directive, it will avoid potentially negative consequences to the environment and human health which otherwise could be caused by incorrect disposal.

For more detailed information about disposal, reuse, and recycle system, contact your local or regional waste administration.