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Introduction

About the Janam XM2-RFID

XM2-RFID UHF

With its best-in-class read range and accuracy, the XM2-RFID UHF mobile computer delivers high-performance data capture for organizations looking to improve the efficiency and reliability of their supply chain. Optimized for all-day, every-day use in challenging environments, this mobile RFID reader helps companies cut costs, improve customer service, reduce labor, increase accuracy and improve production throughput.

The XM2-RFID UHF is fully-featured to provide the power and performance required by mobile workers in retail, transportation and logistics, manufacturing, consumer electronics and defense. It reads ISO18000-63, EPC Global Class 1 Gen 2 tags—ensuring the right goods are available in the right place with no discrepancies or errors. Additional features include a brilliant 3.2-inch color display, 2D imager for robust decoding of the hardest-to-read barcodes and support for Microsoft's Windows Embedded Handheld 6.5 operating system.

XM2-RFID for Rail

Janam's XM2-RFID for Rail is the lightest, fastest and most affordable RFID-reading solution for the railroad industry. A fully rugged, highly capable, handheld RFID reader, the XM2-RFID for Rail offers best-in-class read range and battery life and is the first fully integrated handheld computer to deliver the ability to read Automatic Equipment Identification (AEI) RFID tags to the palm of the hand.

Fully-featured to provide the power and performance required for all-day, every-day use by mobile workers in freight and rail operations, the XM2-RFID for Rail is specially-designed to read the Automatic Equipment Identification (AEI) RFID tags required on all railcars in North America and widely used globally, allowing rail and intermodal companies to track and monitor equipment effectively. The XM2-RFID for Rail is equipped with a user-addressable compass for integration with transportation applications, brilliant 3.2-inch color display, Motorola SE4500 2D imager for robust decoding of the hardest-to-read barcodes and support for Microsoft's Windows Embedded Handheld 6.5 operating system.

Feature Summary

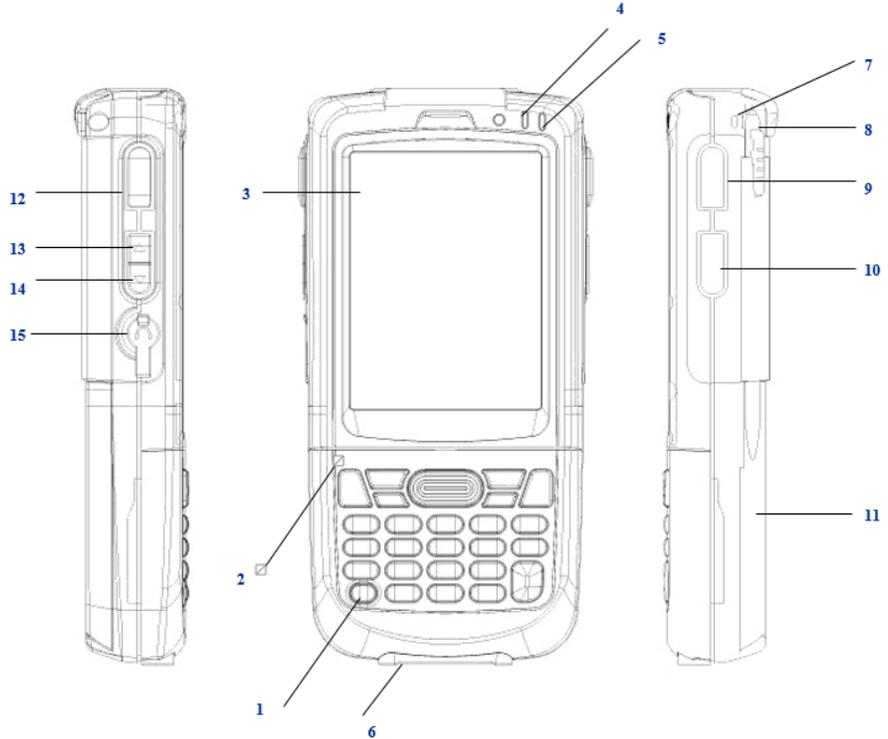
- Impressively small and light – less than 13 ounces with battery
- Reads ISO1800-63, EPC Global Class 1 Gen 2 tags or AEI RFID tag for railroad industry
- All-day battery life
- Brilliant 3.2-inch color display
- High-performance barcode scanning
- Microsoft Windows Embedded Handheld OS
- Powerful ARM 9 CPU
- Sealed to IP64 standards
- 802.11b/g/n Wi-Fi and Bluetooth
- 2880mAh hot-swappable Li-ion battery

Hardware Overview

Front and Side View

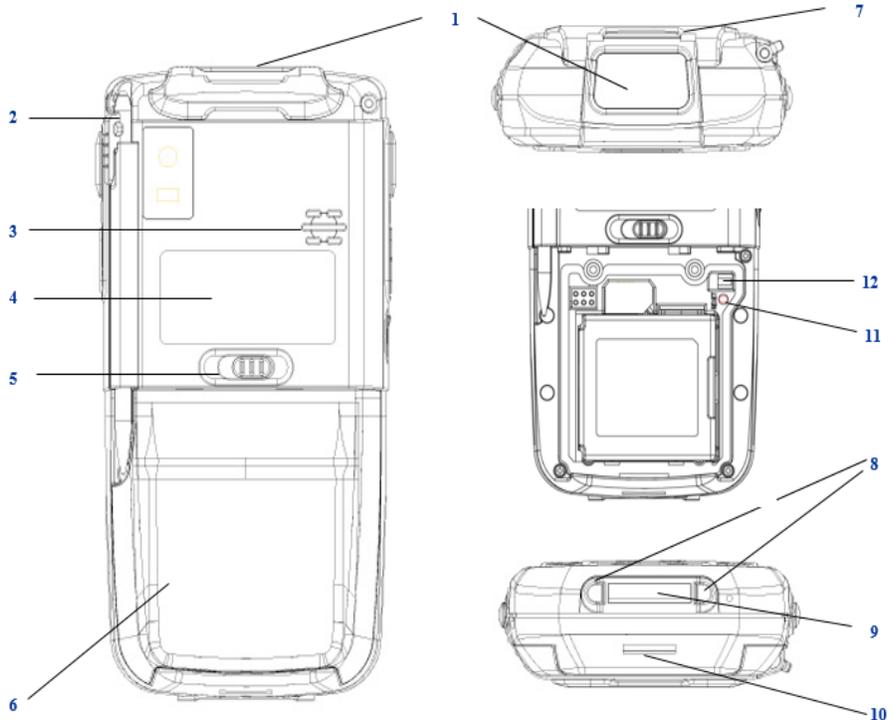
RFID Reader

1. Power button
2. Keypad
3. LCD display
4. Charging LED
5. Status LED
6. I/O connector
7. Lanyard hole
8. Stylus
9. Scan / action button
10. Action button
11. Battery cover
12. Scan / action button
13. Up button
14. Down button
15. Headset plug



Rear Top and Bottom View

1. Data capture window
2. Stylus
3. Speaker
4. Label recess
5. Battery cover latch
6. Battery cover
7. Handstrap clip
8. I/O connector lock guide pin
9. I/O Connector
10. Handstrap bar
11. Reset Key
12. Battery cover switch



Getting Started

Unpacking your Janam XM2-RFID

Make sure you have the following:

- Janam XM2-RFID mobile computer
- Handstrap
- Stylus
- Documentation (Quick Start Guide, License Agreement and Regulatory Guide)
- Janam one slot Cradle with AC adapter

Recommended host computer configuration/requirements

The Janam XM2-RFID Software Development Kit enables programmers to develop applications for Janam XM2-RFID Series rugged mobile computers running the Microsoft Windows Embedded Handheld operating system. It contains details and instructions including sample source code for developing applications that access the Janam XM2-RFID libraries, including scanning, RFID 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.

- Windows-compatible host computer
- 100 MB of available hard disk space
- One available serial or USB port

Update your desktop 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 XP, Windows 7, Windows 8 or 2000. For additional ActiveSync information and downloads, please visit the Microsoft website at <http://www.microsoft.com>.

Attaching the Handstrap

To attach the handstrap:

1. Separate the velcro of the handstrap.
2. Feed the loose end of the extended handstrap through the handstrap clip.
3. Wrap the handstrap around the clip and fasten together to close the strap.

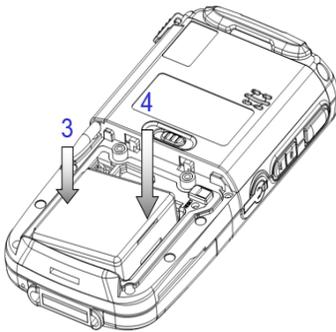
Installing the MicroSD Card and Battery

To install the MicroSD Card:

1. Remove battery if necessary.
2. Insert MicroSD card into the card slot.
3. Make sure the card connector (golden contacts) is facing the top of the device.

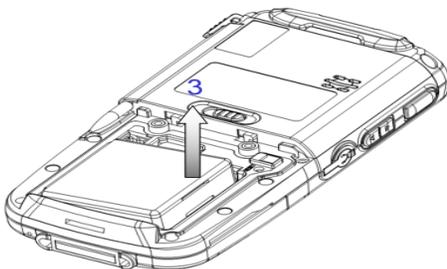
To install the battery:

1. If battery cover is installed on the device, slide the battery latch to the left.
2. The battery cover will lift up slightly. Grasp the battery cover and remove it.
3. Insert the battery, left side (with golden contacts) first, into the battery compartment.
4. Press the battery down until the battery fully rests on the bottom of battery compartment.
5. Put the battery cover back, tab first, and press down until the latch secures the battery cover.



To remove the battery:

1. Slide the battery latch to the left.
2. The battery cover will lift up slightly; grasp the battery cover and remove it.
3. Remove the battery, right side first, from the battery compartment.



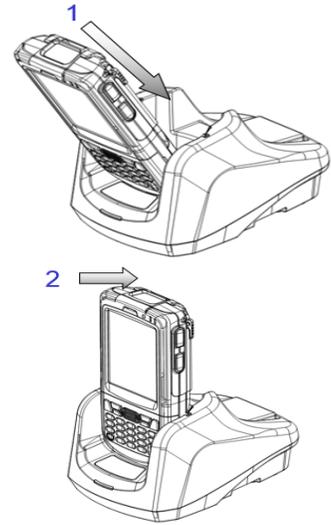
Cradling and Charging

Cradling the device:

1. Slide the device into the cradle with slight angle.
2. Slightly push the device back so that it sits securely in the cradle.

Charging the device:

1. Connect the power supply to the cradle and make sure the cradle LED is green.
2. Put the device on the cradle.
3. Charging status LED on device:
 - a. Orange LED = charging
 - b. Green LED = fully charged
 - c. Red LED = charging error



Important notes

- 8 hours is recommended for the first time charging.
- Recharge of 2880mAh battery will take 2-3 hours for 80% battery capacity.
- Internal backup battery takes 8 hours to be fully charged.

Battery Status

To check battery power, tap the battery icon to open the Power Properties. The Battery tab will display the charge status of the main battery.



Understanding the Startup Screen

The XM2-RFID 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.

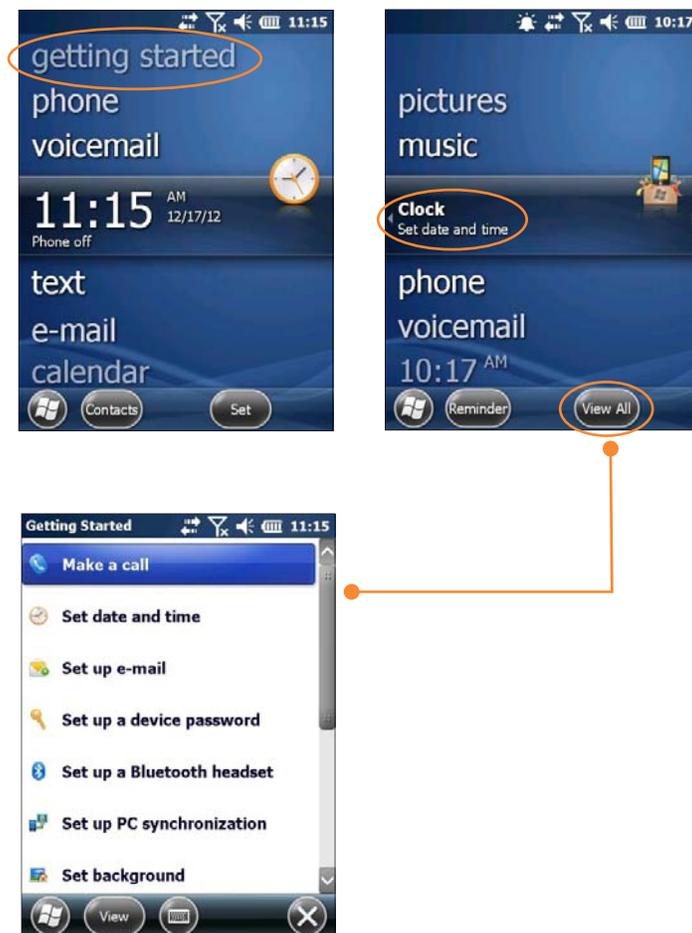


Getting Started

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 the XM2-RFID 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 Mobile Desktop**.
- Tap the **Home** icon on the **Windows Mobile Desktop** to access the **Home** screen.
- Tapping the **Windows** icon from the **Windows Mobile Desktop** provides alternative access to the **Getting Started** menu.

Home Screen



Start Screen



Windows Icon

- ① **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 & Controls



Indicator Icon Key

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



Icon	Meaning
	Open the start menu
	Access the Wireless Manager
	Access the Wireless Manager
	Shows the volume
	Indicates the Battery Control Panel (CPL)
	Indicates Clock & Alarm CPL
	Zoom in/ out
	Access the Bluetooth radio

Setting Up Your Janam XM2-RFID

Keyboard-Controlled Screen Navigation

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

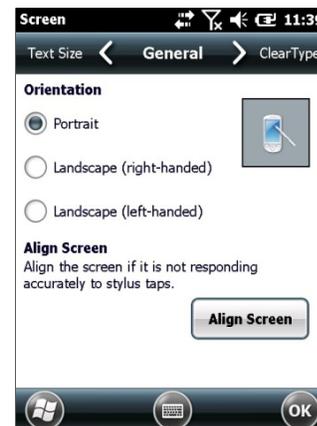
- To scroll up or down, press the **Up** or **Down** arrow button.
- To scroll left or right, press the **left** or **right** buttons.

LCD Screen Options and Calibration

The XM2-RFID provides a utility that enables users to customize LCD screen orientation and recalibrate the screen tapping function's accuracy.

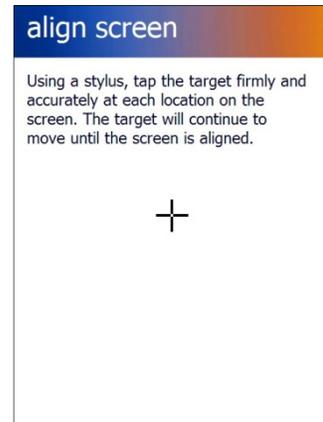
Accessing the Screen Menu:

1. From the **Windows Mobile Start Desktop**, 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).

- 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 XM2-RFID mobile computers can be customized in many ways to suit task requirements, security and/or individual user preferences. The following is an overview of key XM2-RFID 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.

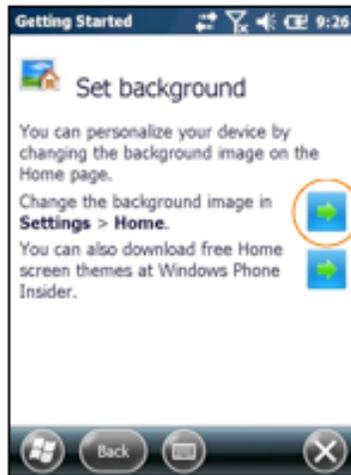
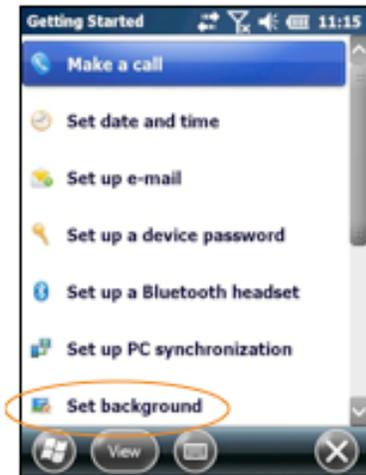
To access the settings, tap **Getting Started** to open the **Getting Started** menu, then **view all** to access all options:



Setting a Background

To set 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**.



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



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



Password Protection

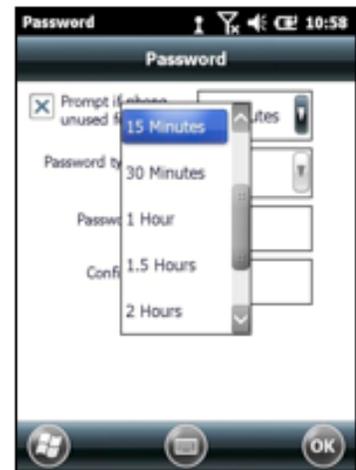
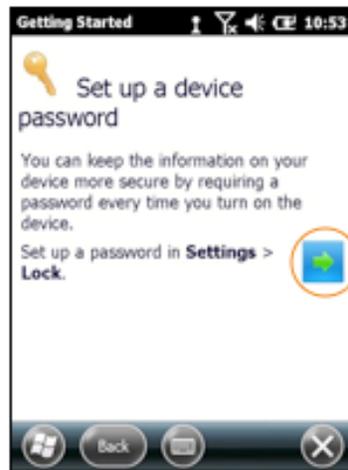
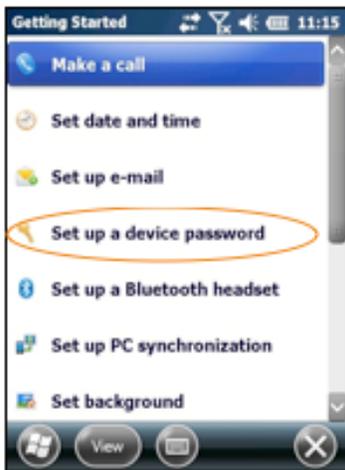
To set up a device password:

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.*



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** 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.

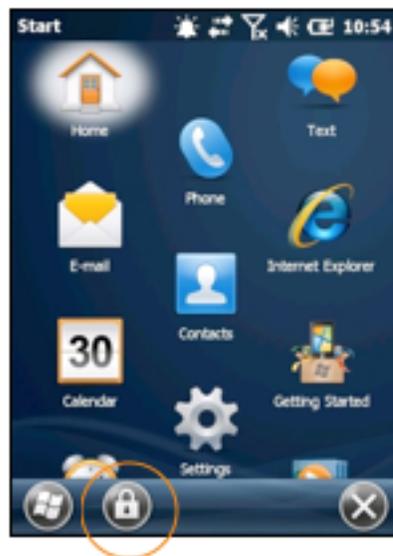
Screen/Keyboard Lock



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 **Start** screen.

To unlock the device: Tap **Unlock**.



Regional Settings

The style in which numbers, currency, dates and times are displayed is controlled by **Regional Settings**. XM2-RFID mobile computers are shipped with regional, language and input settings pre-set to English (United States).

To change Regional settings:

1. From the Windows Mobile desktop Start screen; Tap **Settings** > **System** > **Regional Settings**.



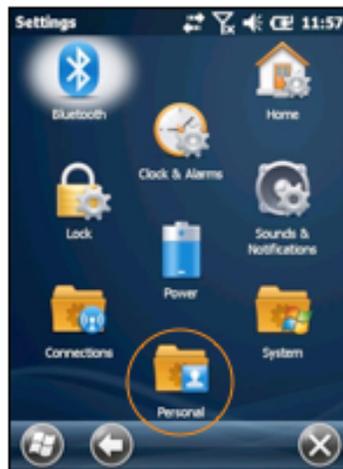
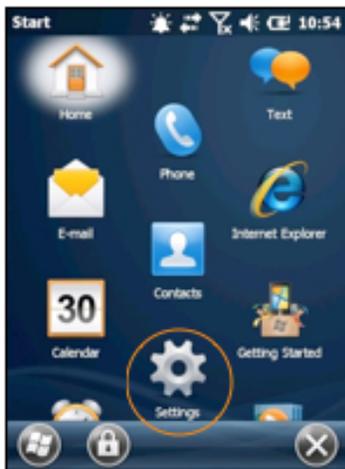
2. Select the desired setting from the **Regional Settings** pull-down menu.



Owner Information

Entering owner information:

1. From the Windows Mobile **Start** menu, tap **Settings** > **Personal** > **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 Mobile Start** menu, tap **Settings** > **Personal** > **Owner Information**.

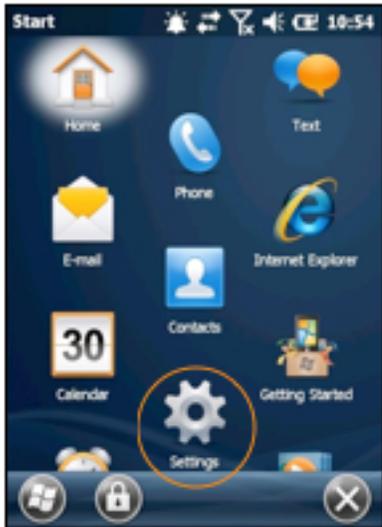
Device Name

The XM2-RFID 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** > **System** > **About**.



2. Tap the **Device ID** tab.

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



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

□ **IMPORTANT NOTE!**
To synchronize multiple XM2-RFID devices with the same PC, each device must have a unique name.



Volume and Alert Adjustments

To adjust the volume:

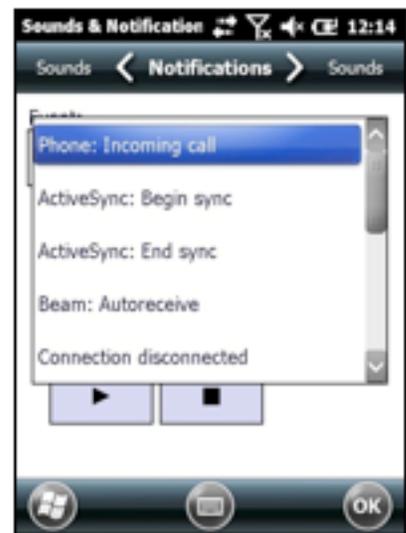
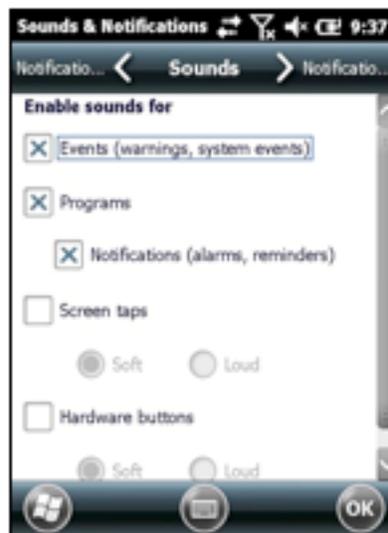
1. Tap the speaker in the title bar and then tap the speaker in the horizontal scroll bar.
2. Select speaker ON or OFF. Use the slider gauge to raise and lower the volume.



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**.

Power Management

Conserving Battery Power

XM2-RFID mobile computers feature multiple power conservation options. Options include timers with custom settings designed to balance 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, conserve battery life by:*

1. *Using the AC adapter to plug the XM2-RFID 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.*

Screen OFF Function

To adjust Screen Off function (device suspend mode):

1. Tap **Settings, system** on the Windows Mobile **Start** desktop.
2. Tap **Power** on the Windows Mobile **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**.



Backlight OFF Delay Function

To adjust backlight off delay function:

1. Tap **Settings** on the **Windows Mobile Start** desktop.
2. Tap **System** on the **Windows Mobile Settings** desktop.
3. Tap **Backlight** on the **Windows Mobile System** desktop.



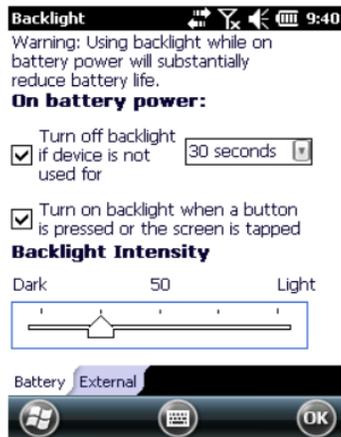
4. Check the **“Turn off the backlight if device not used for”** box and select the preferred length of inactivity before activation of the **screen off** power saving function from the pull-down menu. Shorter *off* delays will increase battery power conservation.

Backlight Brightness Adjustment Function

To adjust backlight brightness function:

1. Tap **Settings** on the **Windows Mobile Start** desktop.
2. Tap **System > Backlight**.

3. Adjust the brightness level using the sliding bar in 20 percent increments.
4. The Backlight will be turned off when the **Enable Backlight** check box is disabled.



Disabling Connectivity

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

To disable connectivity functions:

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



Opening and Removing Applications

To open an application:

Tap the desired application from the **Windows Mobile desktop**.

To remove an application (applies only to user-installed programs):

1. From the Start screen, tap **Settings** > **System** > **Remove Programs**.
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 XM2-RFID Comm Ports that are currently allocated. When selecting a Virtual Comm Port, the Comm Ports below will not be available for use if the XM2-RFID is configured with that function.

COM6	Physical COM for Bluetooth	Will be occupied when the Bluetooth function is turned on
------	----------------------------	---

Resetting the XM2-RFID

In addition to On (Resume) and Off (Suspend) functions, XM2-RFID mobile computers provide two device reset (boot) procedures.

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

To Suspend or Resume the XM2-RFID operation:

1. Press the **Power key** once to suspend operation
2. Press the **Power key** again to resume.

Soft Reset

A soft reset or warm boot 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 (warm boot):

1. Remove the battery door and, using the stylus, press and release the red "Reset" button found in the battery compartment.
2. Wait for the device to boot.

Master Reset

A master reset or clean boot returns the XM2-RFID to factory settings, removing ALL applications and data stored on the device. Any files or programs stored in the \Application folder or a MicroSD card will remain. Be sure that all data is backed up before performing a master reset.

To perform a master reset (clean boot):

1. Remove the battery door.
2. Hold down the **"Windows"**  and yellow hard key and tap the red reset switch in the battery compartment.
3. Immediately turn the device over and while keeping the keys above pressed, add the **"#" key** and hold all three until you see the LED flash green.
4. When clean boot is completed, calibrate screen.

Barcode Scanning

Overview

The Zebra SE4500 barcode scan engine offers a comprehensive feature set that redefines imaging technology. Stunning performance on 1D and 2D bar codes allows businesses to deploy a world of new applications.

Decode Ranges:

SR Focus Near Far

5 mil - Code 39 - 2.1 in./5.3 cm - 7.5 in./19.1 cm

100% UPC/EAN - 1.6 in./4.1 cm - 15.5 in./39.4 cm

6.7 mil PDF417 - 3.4 in./8.6 cm - 7.1 in./18.0 cm

Barcode scanning demonstration

To run the demonstration:

1. Tap the **Start** menu > **HHT Applications** > **ScanSamp2**.
2. Select **Codes**.
3. Tap to manually select the type of barcode you need.
4. Tap **OK** to save.
5. Point the **scanner** at a barcode, and tap the **"Scan"** tab or any of the **barcode scan trigger buttons**. The results will display after a successful scan.



Sample Bar Code

Use the following barcode to verify decoding:



ScanWedge Feature

When the ScanWedge feature is enabled, barcode data is presented to any application input field as if the data was hand keyed.

To enable the ScanWedge feature:

1. Tap the **Start** menu > **HHT Applications** > **ScanWedge**.
2. Select **Enable** from the *ScanWedge* menu.
3. Tap **Setup** > **Symbology Config**.
4. Select **enable all** to enable every type of barcode or manually select the barcode symbologies you need.
5. The setup panel allows addition of prefix or suffix characters to be inserted and option to send an **enter** and/or **tab** key after the scanned data.
6. Tap **OK**.

Note: The ScanWedge function will be disabled if manual scanning is initiated either by a command API or by using the Janam Barcode Test program.



RFID Tag Reading

The XM2-RFID has two different orderable configurations. The **XM2-RFID for Rail** reads Automatic Equipment Identification (AEI) RFID tags required on all railcars in North America and widely used globally. The XM2-RFID UHF reads ISO18000-63, EPC Global Class 1 Gen 2 tags.

XM2-RFID Reader



XM2-RFID Sample Application

1. Tap the **Start** menu > **HHT Applications** > **RFID Sample**.
2. Present the AEI or EPC tag depending on your model to the reader
3. The output is in HEX code string of the tag data.



Entering Data

Entering information on the XM2-RFID

You can enter data into your XM2-RFID mobile computer in several ways:

1. **Barcode scanning** — Scan barcodes to automatically capture data. See Chapter 5 for information about barcode scanning.
2. **Typing** — Use the physical keypad or the on-screen keyboard to input text, numbers and other characters.
3. **Drawing and Writing** — Use the stylus within the **Notes** application to enter freehand drawing and/or handwriting.
4. **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 XM2-RFID features a numeric, blue key shift alpha, yellow key shift function, physical keypad. The XM2-RFID also provides an on-screen keyboard for entering alphanumeric and special character data.*

Typing

XM2-RFID mobile computers are capable of running a variety of applications, many of which rely upon or require the input of alphanumeric or special character data. In addition to an alphanumeric physical keypad, the XM2-RFID features 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** 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.



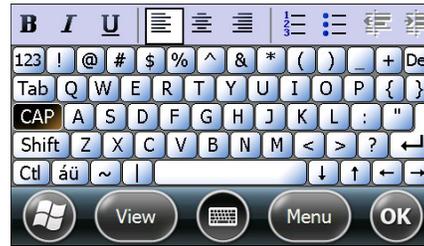
The default on-screen keyboard is a standard, lowercase QWERTY keyboard.

To change on-screen keyboards:

- 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 on **áü** key at the lower left of the keyboard.



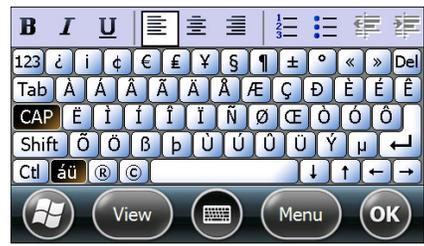
Lowercase Keyboard



Uppercase Keyboard



Numeric Keyboard



International Keyboard

Custom Key Programming

A selection of XM2-RFID keypad function keys can be reprogrammed as shortcuts to various actions.

To reprogram function keys:

1. Tap **Settings** from the Windows Mobile desktop.
2. Tap **Personal > Buttons**.
3. Select the reprogrammable button.
4. Select the action to be assigned to the selected button from the drop-down menu.

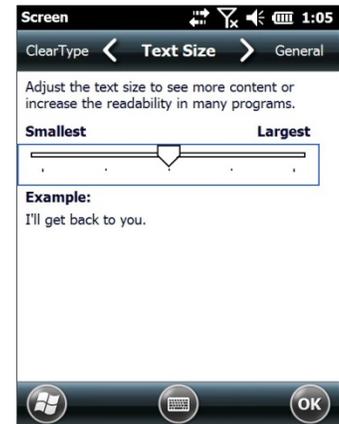
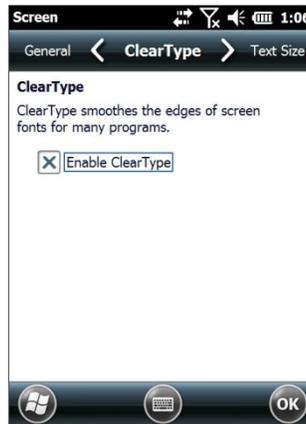


Enabling ClearType Text

ClearType Text softens the edges of the screen fonts for many applications.

To use ClearType for screen text:

1. Tap the **Settings** icon from the **Windows Mobile Start** menu > **System** > **Screen** > **ClearType**.
2. Select the **Enable ClearType** check box.



Text Size

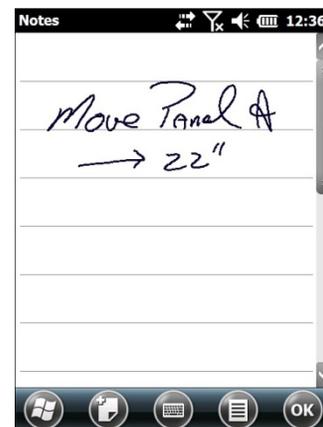
To increase or decrease screen text size:

1. Tap the **Settings** (icon) from the Windows Mobile **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 Mobile Start** menu.



Synchronizing the XM2-RFID Device

Microsoft® Windows Mobile Device Center and ActiveSync allow you to synchronize data between an XM2-RFID 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.

Creating a User Profile

To create a user profile:

1. Tap **Start** menu > **Settings** > **Personal** tab.
2. Choose **Owner Information**.
3. Enter **identification**, **notes** and **display** information.
4. Check the Identification information check box only if you prefer Owner Information to be the first screen to appear at startup.
5. Tap **OK** to save changes.

Managing Partnerships

A partnership enables you to automatically synchronize selected XM2-RFID 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 XM2-RFID to your PC and power the XM2-RFID on.
 - a. **Note:** Synchronization requires a direct connection between the XM2-RFID and the host PC, using a USB sync cradle.
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 will appear. Select the data types that you want to synchronize and tap **Next**.
5. The **Set Up Windows Mobile Partnership (Device name)** window will appear. 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 XM2-RFID.
7. 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 will appear. Click the checkboxes of the desired file categories and click **Save**.
3. 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 to reveal 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 and 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.
7. Tap **Yes** to proceed.

WLAN 802.11 b/g/n Radio

Overview

The XM2-RFID has a 2.4 GHz 802.11 b/g/n WLAN (Wireless Local Area Network) radio. The radio is interoperable with other 802.11 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 802.11 b/g/n radio is powered-on "out of the box". The next step is to configure the connection parameters of the radio to connect to a wireless network. The XM2-RFID uses the Microsoft Windows Zero Config (WZC) as its wireless connection management utility.

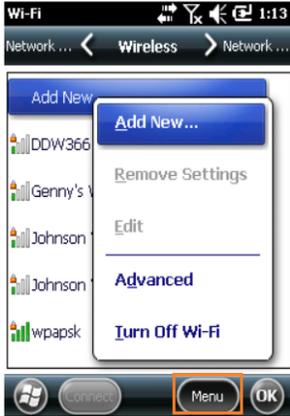
Configuring WLAN Radio

To configure the WLAN using the WZC Utility:

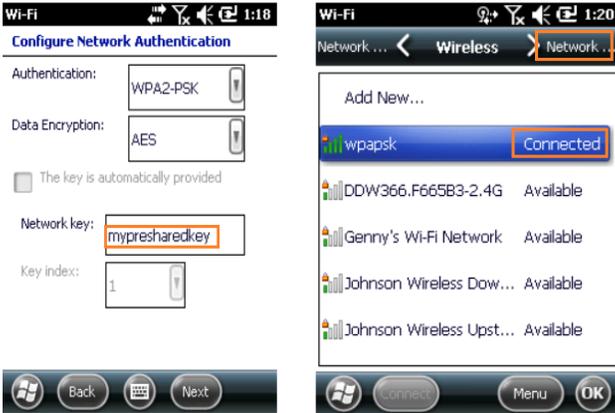
1. Tap **Start > Settings > Connections**.
2. Tap **Wi-Fi**.
3. Select the broadcast SSID.



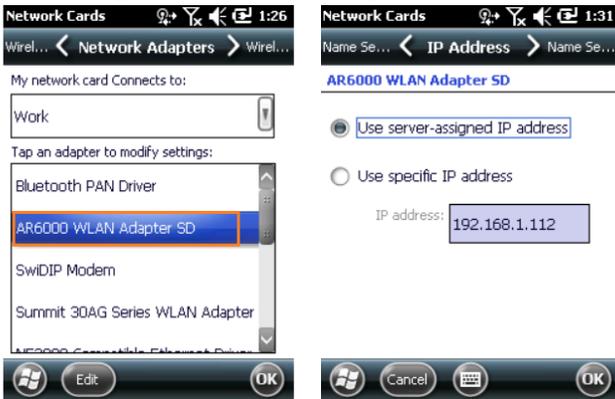
- If your SSID is hidden, create your WLAN profile with the **Add New** tab from **Menu**.



- Enter your Pre-Shared Key/Credentials.



- Configuration is complete and accurate when **Status** changes to **Connected**.
- To view your IP address, tap the **Network** tab, then **AR6000**.



Using 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.

Bluetooth uses:

- Beam information (e.g. files, appointments, tasks, 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.

Bluetooth Configuration

To enable 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.



To pair Bluetooth devices:

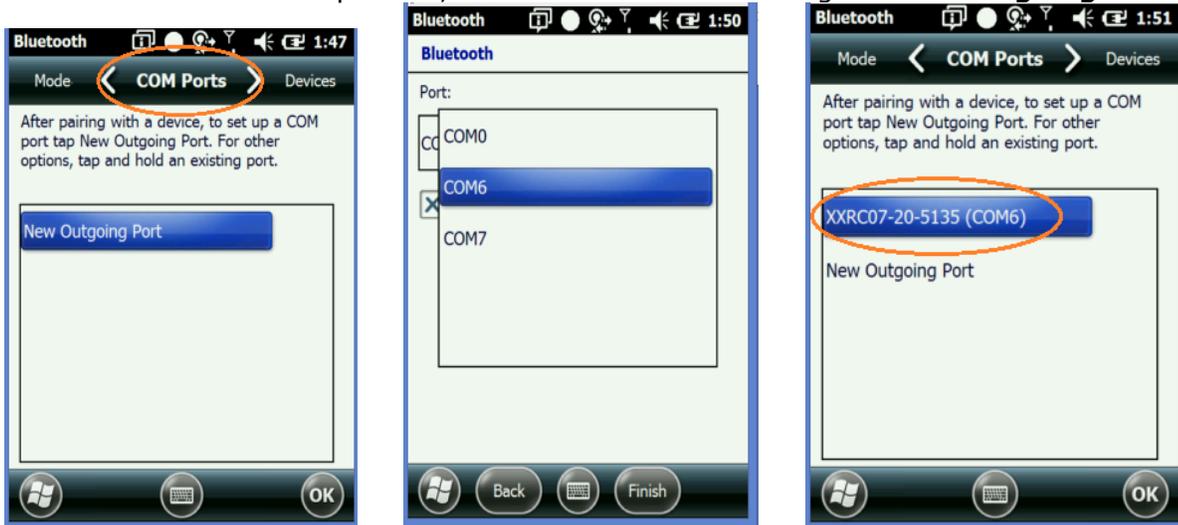
1. Tap on the desired device in the Bluetooth Manager.



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**.



Regulation and Maintenance

Regulatory information

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Important: Please read the End User Software License Agreement for this product before using the device or the accompanying software program(s). Using the device or any part of the software indicates that you accept the terms of the End User License Agreement.

For additional information, visit www.janam.com, email janamcare@janam.com, or call +1.877.JANAM.99.

 The CE mark on the product indicates that the system has been tested to and conforms with the provisions noted within the 1999/5/EC Electromagnetic Compatibility Directive.

For further information, please contact:
Janam Technologies; 100 Crossways Park West, Suite 105; Woodbury, NY 11797.

Janam Technologies shall not be liable 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.

FCC and Canadian Compliance

 Tested to Comply with FCC Standards.

FOR HOME OR OFFICE USE

XM series mobile computers meet or exceed all applicable standards and have been manufactured to the highest level of quality.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

XM Series batch terminal

Regulatory and safety approvals

Parameter	Specification
U.S.A.	FCC Part 15, Subpart B
Canada	ICES-003 Issue 4
European Community	EN55022:1998+A1: 2000+A2:2003 EN55024:1998+A1: 2000+A2:2003
Australia	AS/NZS CISPR 22:2004

This Class B digital apparatus complies with the Canadian ICES-003.

Cet appareil numérique de la Class B est conforme a la norm NMB-003 du Canada.

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.

L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

XM Series RF Terminals with WLAN and/or Bluetooth

RF, regulatory and safety approvals

Parameter	Specification
RF approvals	
U.S.A.	FCC Part 15 Subpart B and Subpart C
Canada	RSS 210 Issue 6

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 equipment 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, uses and can 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 to 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.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something about Interference." This is available at local FCC regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connective cables and equipment other than those specified by our company. The correction is the responsibility of the user. Use only shielded data cables with this system.



This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. To maintain compliance with the FCC RF exposure guidelines for body-worn operation, do not use accessories that contain metallic components other than what is specified by the manufacturer.

This Class B digital apparatus complies with the Canadian ICES-003.

Cet appareil numérique de la Class B est conforme a la norm NMB-003 du Canada.

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.

L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

RF, regulatory and safety approvals

Parameter	Specification
R&TTE	EN 300 328 v1.6.1 (2004-11)
	EN 301 489-1 v1.6.1 (2005-09)
	EN 301 489-17 v1.2.1 (2002-08)
	EN 300 440-2 v1.1.2 (2004-07)
	EN 300 440-1 v1.2.1 (2001-09)
Australia	EN 301 489-3 v1.4.1 (2002-08)
	EN 60950-1:2001+A11
	EN 50371:2002
	AS/NZS CISPR 22:2004

Hereby, Janam Technologies LLC declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 100/5/EC. The equipment is intended for use throughout the European Community.

Care and cleaning of terminals

When needed, clean the image engine window and the LCD display with a clean, non-abrasive, lint-free cloth. The terminal can be cleaned with a damp cloth.

Waste electrical and electronic equipment (WEEE) information

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 to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.



The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse and recycling of these systems, please contact your local region's waste administration. You may also contact your supplier for more information on the environmental performances of this product.

Battery Warning



CAUTION!
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Use only Janam-approved batteries such as the BA-PT-15 and recharge batteries using only Janam-approved chargers. Use only easily accessible wall outlets that are reached with the length of the supplied power cables.

The standard charger provides an easy and convenient way to charge the device. You can purchase the charger through an authorized dealer. Visit Janam's website www.janam.com for information.

General information

1. Before using the standard charger, read all instructions and warnings.
2. Please retain these instructions for future reference.

**Warning**

1. No user serviceable parts inside. Do not open the charger. The charger is not serviceable.
2. If found any damage or cracking on the enclosure of the charger, do not use the charger. This charger shall be disposed of.
3. Do not short-circuit the output terminals of the charger.
4. The charger is for indoor use only. Do not expose the charger to moisture or place the charger at location which could subject to water spillage.
5. The charger is designed for use with this product only. Do not use this charger for other purpose.

Operating instructions

1. Connect the power cord to the charger before plugging the charger into an outlet.
2. After use, always unplug the charger from the outlet.
3. Ensure that your local power supply system complies with the technical data of the standard charger.

For more battery safety and charger safety guidelines, refer to the XM2-RFID Series Quick Start Guide.