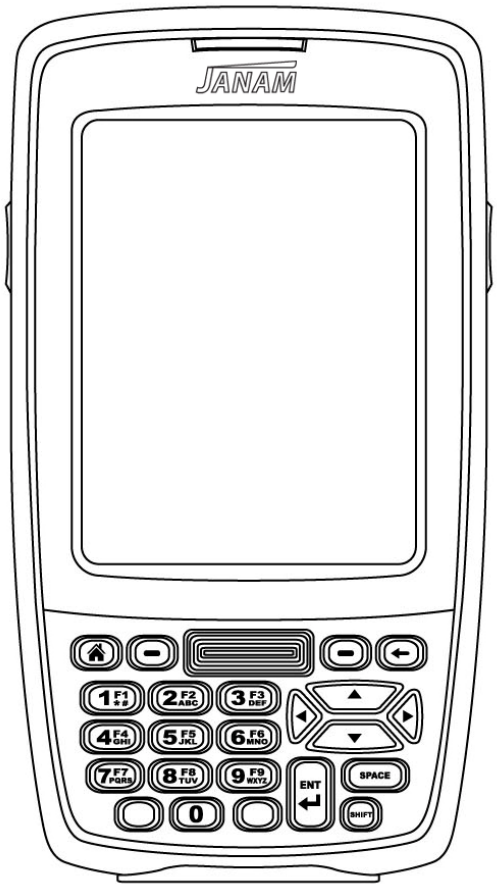
JANAM

XM60 User Guide



Version 5
April, 2009

CONTENTS

Chapter 1: Introduction	
About the Janam XM60	1-1
Hardware features	1-1
Specifications	1-2
Hardware overview	1-3
Chapter 2: Get Started	
Unpack your Janam XM60	2-1
Recommended host computer configuration/requirements	2-1
Update your desktop software	2-1
Attach the hand strap	2-1
Install/charge the battery	2-2
Remove the battery from spare charging well	2-2
Turn on the XM60	2-2
Understanding the desktop	2-3
Update your ROM	2-3
Check your current ROM	2-3
Download the correct BIN file	2-4
Install the latest ROM	2-4
Troubleshooting tips	2-5
Reset the XM60	2-6
Chapter 3: Bar Code Scanning	
Demonstration and setup	3-1
Enable the ScanWedge feature	3-2
Unlock 2D scanning	3-2
Enable ScanCapture feature	3-3
Chapter 4: Set Up Your Janam XM60	
Locate front panel controls	4-1
Locate back panel components	4-1
Tap versus click	4-1
Recalibrate the screen	4-1
Use the regional and language features	4-2
Open applications	4-2
Remove applications	4-3
Enter data	4-3
Customize	4-3
Set the date, time and time zone	4-4
Format the date, time and numbers	4-4
Set the display properties	4-5
Select volume and enable sounds	4-6
Change keypad options	4-6
Set internet options	4-6
Chapter 5: Enter Data	
Use the stylus or touch screen with the onscreen keyboard	5-1
Import data	5-2
Use the barcode scanner	5-2
Chapter 6: ActiveSync	
Create a user profile	6-1
Set up/delete a partnership	6-1
Partnership settings	6-4
Chapter 7: 802.11 Wireless Configuration	
Wireless local area network access	7-1

Chapter 8: Bluetooth Manager

Start Bluetooth manager	8-1
Scan Device Wizard	8-2
Bond Wizard	8-2
Send files	8-3
File browser	8-4
Bluetooth ActiveSync	8-4
Settings	8-6

Chapter 9: Beam Information

Turn beam on/off	9-1
Beam information	9-2

Chapter 10: Regulatory and Maintenance

Regulatory and safety approvals	10-1
Battery warning	10-2
General information	10-2
Operating instructions	10-3

1

Introduction

The XM60 rugged mobile computer delivers all the built-in capabilities that today's business applications demand. Plus, it's smaller, lighter and far less expensive than comparable products. Designed for maximum value and performance, the XM60 is a cost-effective mobile solution for Windows® CE applications.

About the Janam XM60

The XM60 delivers powerful computing performance packaged in a small, light and truly pocketable mobile computer. It features a color, quarter-VGA display, Freescale™ MX21 processor, backlit numeric keypad, WLAN and Bluetooth. The XM60 weighs less than 10 ounces, meets IP54 sealing requirements and withstands multiple 4-foot/1.2m drops to concrete across a wide temperature range.

Further enhancing its value, the XM60 features integrated 1D barcode scanning as well as built-in 2D barcode scanning capability. Janam's 2D scanning solution enables users to upgrade barcode scanning capability from 1D to 1D/2D on any device at any time with a simple firmware upgrade. With **Adaptus® Imaging Technology**, the XM60 easily reads all types of barcode symbologies including linear, stacked and 2D. It offers the flexibility to adapt as business needs change, without the need to invest in new hardware.

Hardware features

- Microsoft® Windows® CE 5.0
- Brilliant QVGA color display
- High-performance 1D and 2D barcode scanning capability
- Backlit numeric keypad
- 64MB SDRAM/128MB NAND
- NAND flash backup of OS, applications and user data
- User-accessible mini-SD memory slot
- Weighs less than 10 ounces
- Sealed to IP54 standards
- Rugged design: withstands multiple 4-foot/1.2 meter drops to concrete
- Enterprise-class WLAN with WPA security protocols
- Bluetooth WPAN data communications
- Full system of accessories

Specifications

TECHNICAL	
Operating System	Microsoft® Windows® CE 5.0
Processor	Freescale™ MX21-266MHz
Memory	64MB SDRAM 128MB NAND
Expansion	User accessible mini-SD slot; compatible with up to 4GB mini-SD card
Battery	Swappable 3.7V 1880mAh rechargeable Li-ion
Backup Battery	Rechargeable 20mAh Ni-MH
PHYSICAL	
Dimensions	1.20″ H x 3.11″ W x 5.75″ L / 30.5mm H x 79mm W x 146mm L
Weight	9.88oz / 280g
Keypad	Backlit numeric keypad
Display Size	2.17″W x 2.95″L / 55.0mm W x 75.0mm L
Display Type	262K colors TFT QVGA (240x320)
Touch Panel	Analog resistance type; stylus input
ENVIRONMENTAL	
Operating Temp	14º to 122º F / -10º to 50º C
Storage Temp	-13º to 158º F / -25º to 70º C
Humidity	5% to 90% RH (no condensation)
Drop	Multiple 4ft / 1.2m drops to concrete on all sides across a wide temperature range
Water & Dust	IP54 Category II
Vibration	0.03 G^2/Hz from 20Hz to 2kHz; 1 hour random wave per axis
Electro Static Discharge (ESD)	+/- 15kVDC air; +/- 8kVDC contact
Sterilization	76.9% to 81.4% concentration alcohol rub
Ambient Light	450ft-candelas (artificial light); 8,000ft-candelas (sunlight)
INTERFACE FEATURES	
Audio	Speaker and Microphone
Alerts	Vibration, LED indicators, audio beep
LED Indicators	Tri-color
Scan Triggers	Left, right, center buttons
DATA CAPTURE	
Imager	1D/2D Adaptus® Imaging Technology; 752 x 480 pixel CMOS area imager
1D Symbologies	China Post, Codabar, Codablock F, Code 11, Code 16K, Code 32 Pharmaceutical (PARAF), Code 39, Code 49, Code 93 and 93i, Code 128, EAN-8, EAN-13, Interleaved 2 of 5, ISBT 128, Matrix 2 of 5, Korea Post, MSI, Plessey Code, PosiCode, Reduced Space Symbology (RSS-144, RSS Limited, RSS Expanded), Straight 2 of 5 IATA (two-bar start/stop), Straight 2 of 5 Industrial (three-bar start/stop), Telepen, Trioptic Code, UPC-A, UPC-A with Extended Coupon Code, UPC-E, UPC-E1
2D Symbologies	PDF417 (EAN-UCC Composite, MicroPDF417, PDF417, TCIF Linked Code 39, TLC39), 4-CB (4-State Customer Barcode), Australian Post, Aztec Code, Aztec Mesas, British Post, Canadian Post, Data Matrix, ID-tag (UPU 4-State), Japanese Post, KIX (Netherlands) Post, MaxiCode, OCR, Planet Code, Postnet, QR Code
DATA COMMUNICATION	
IrDA	Standard v1.2 (up to 115,200bps)
USB	v1.1 client (up to 12Mbps), OTG support
WPAN	Bluetooth v1.2
WLAN	IEEE 802.11b/g radio, 2.4GHz

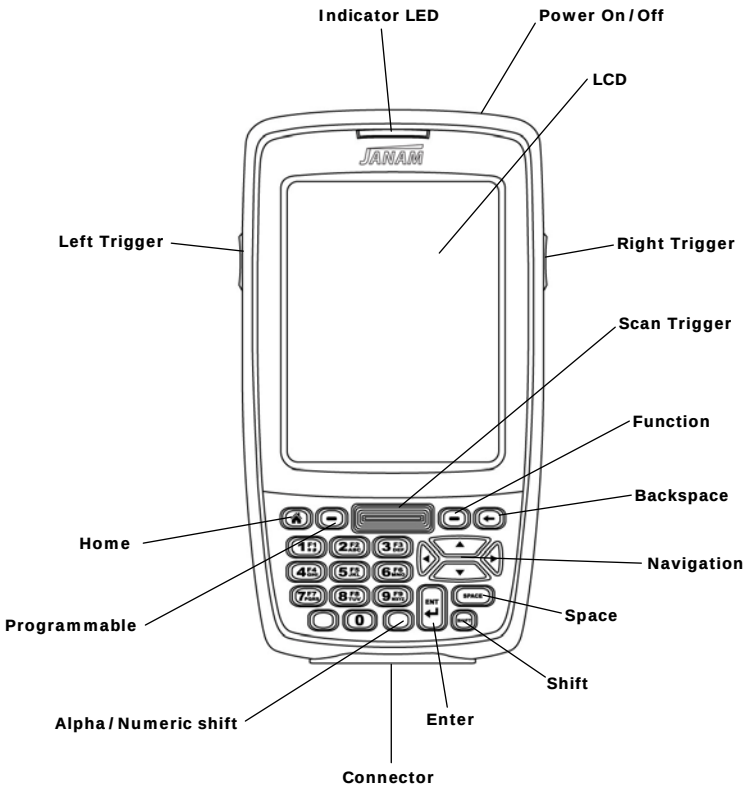
ACCESSORIES

Single Slot Cradle Kit	RFID Reader	Stylus 5-Pack
Four Slot Cradle Kit	Cable Cup	Stylus Tether
Modem Cradle Kit	Vehicle Charger	Nylon Holster
Larger Capacity Battery	Synching/Charging Cables	Adjustable Handstrap
Magnetic Stripe Reader	Battery Charger	Operating Case

SAFETY/REGULATORY	
Safety	CSA C22.2 No. 60950-1-03, EN60950-1:2001+A11
EMI	FCC Part 15 Subpart B, EN55022:1998+A1: 2000+A2:2003, EN55024:1998+A1:2000+A2:2003, ICES-003 Issue 4, AS/NZS CISPR 22:2004
RF	FCC Part 15 Subpart C and Subpart B, EN300 328 v1.6.1 (2004-11), EN301 489-1 v1.6.1 (2005-09), EN301 489-17 v1.2.1 (2002-08), RSS 210 Issue 6
Hazardous Locations	UL Listing (US and Canada) Class 1, Division 2, Groups A, B, C, D

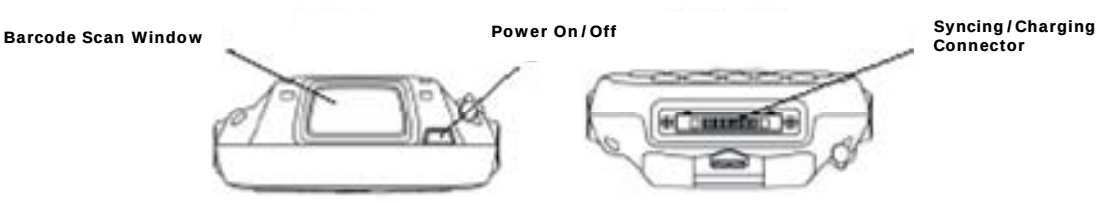
123008XM60s14 Specifications subject to change. Janam Technologies LLC

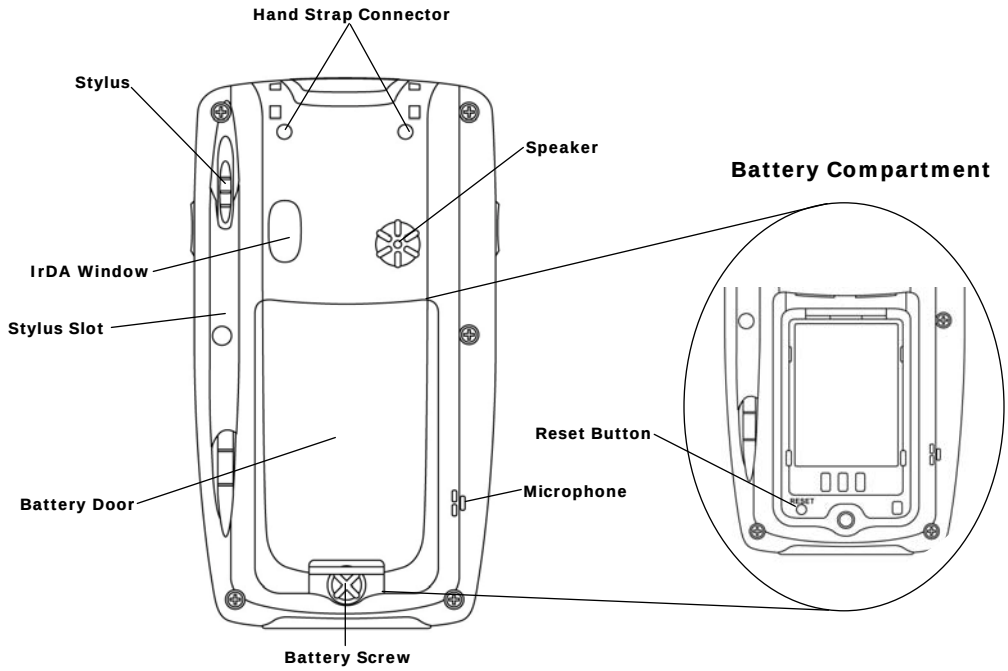
Hardware overview



Top View

Bottom View




Hand Strap Connector
Stylus
Speaker
Battery Compartment
IrDA Window
Stylus Slot
Reset Button
Microphone
Battery Door
Battery Screw

2

Get Started

Unpack your Janam XM60

Make sure you have the following:

- Janam XM60 handheld computer
- Janam authorized battery
- Hand strap
- Charging accessory (ordered/packed separately) with one of the following kits:
  - Single-slot cradle kit
  - Four-slot cradle kit
  - USB syncing/charging cable with AC adapter
  - Serial syncing/charging cable with AC adapter

Recommended host computer configuration / requirements

The Janam XM Series Development Kit helps assist programmers with the development of applications for Janam XM Series rugged barcode scanners running the Microsoft® Windows® CE 5.0 operating system. It contains all necessary details and instructions for developing applications that access Janam XM Series libraries, including scanning, imaging and hardware utilities.

The development kit is designed for use with Microsoft® eMbedded Visual C++ 4.0 (*SP4 or above*) or Microsoft Visual Studio 2005.

- IBM-compatible host computer with Pentium 450 MHz processor or higher
- Microsoft Windows XP or Microsoft Windows 2000 operating system
- 128 MB RAM
- 100 MB available hard disk space
- CD-ROM drive
- One available serial port
- Mouse

Update your desktop software

Microsoft ActiveSync software is available at the Microsoft web site at http://www.microsoft.com.

Attach the hand strap

1. Push the thin, looped portion of the strap through the left or right side of hand strap connector on the back on the handheld.
2. Thread the Velcro part of the strap through the loop at the bottom of the terminal and pull tight.

Install the battery

IMPORTANT Battery Warning!
CAUTION: Use only Janam-approved batteries.
There is the risk of explosion if battery is replaced by an incorrect type.
Always dispose of used batteries according to the instructions.

1. To access the battery compartment, turn the **locking screw counterclockwise** to open the latch and remove **battery cover**.
2. Position the **battery lift strap** against the back of battery well, ensuring tab extension is on left side.
3. Place a **Janam Lithium-ion rechargeable battery** in and snap into place.
4. Replace the **battery cover** by positioning the top prongs first and sliding into place. Tighten locking screw by turning clockwise.

To charge the battery:
Important Note: The main battery charges the backup battery in the XM60. Once the main battery is fully charged, do not remove it from the unit for 24 hours. If the battery is removed during this period, the device cannot maintain any user data.

To charge the battery using the USB syncing/charging cable or serial charging cable:
1. Connect the **power supply** to the USB syncing/charging cable or serial/syncing charging cable.
2. Connect **snap-on end** of USB syncing/charging cable or serial/syncing charging cable to bottom of XM60, making sure the word TOP on the connector faces front.
3. Insert **country-specific AC plug,** and **plug in the power supply**.
4. The LED will illuminate to confirm connection (orange indicates charging, green indicates fully charged and red indicates fault).
5. The battery is fully charged in approximately two hours.

To charge the battery using the single-slot or four-slot cradle:
1. Connect the power supply to the cradle.
2. Connect the line cord to the appropriate power supply.
3. Plug in the power supply.
4. Insert the XM60 into the cradle. **Important**: Proper insertion is required to ensure connection. Be sure to insert the device as follows:
   - Place the XM60 in cradle well (seating the device without trying to join connectors).
   - Tilt-rotate the XM60 forward (bringing the top end of the unit forward) as you apply downward pressure to fully insert in cradle well, joining connectors.
5. The LED will illuminate to confirm connection (orange indicates charging, green indicates fully charged and red indicates fault).
6. The battery is fully charged in approximately two hours.

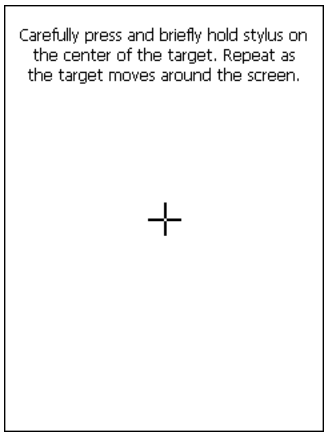
Remove the battery from spare battery charging well

Do not force-pull the battery from charging well. Follow these instructions to remove the battery:
1. While gently holding down with thumb, slip index finger down against the battery so that you feel the edge where the battery meets the cradle.
2. Press down and forward with index finger to lift battery edge.

Turn on the XM60

The first time the device is turned on, calibrate the screen using the stylus. The stylus is located on the back of the device. To calibrate, simply follow the on-screen instructions and remember to save your settings.

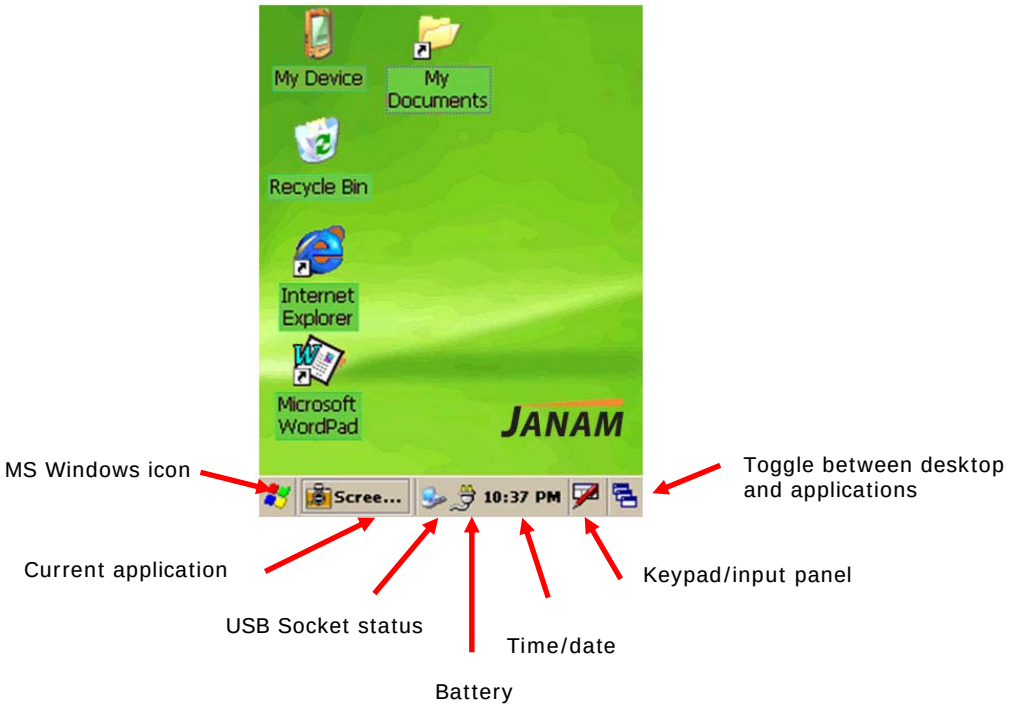
Note: If your XM60 came pre-loaded with a custom software application, a welcome utility may not appear. If this happens, follow the on-screen instructions.



Understanding the desktop

Command bar

Your XM60 mobile computer desktop includes a command bar with the following features.

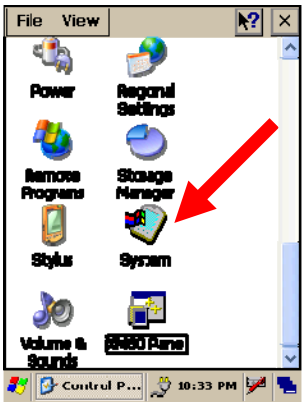


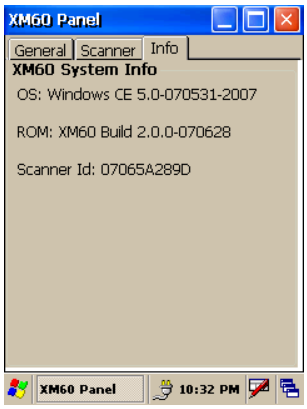
Update your ROM

NOTE: ALL applications and data will be DELETED, so make sure you are properly backed up before starting this process.

To check your current ROM version:

1. Tap the **MS Windows icon or start menu**, go to **settings** and select **control panel.**
2. Tap twice on the **XM60 Panel** icon (use scroll down to locate icon).
3. Select **Info**.
   - This first number after the device type indicates the build version (i.e. 2.0.0) and the second number (i.e. 070628 or June 28, 2007) is the release date.
   - The scanner ID info shows the unique scanner ID on each XM60 device.
   - **Note:** this number will be requested if you purchase the 2D unlock code.



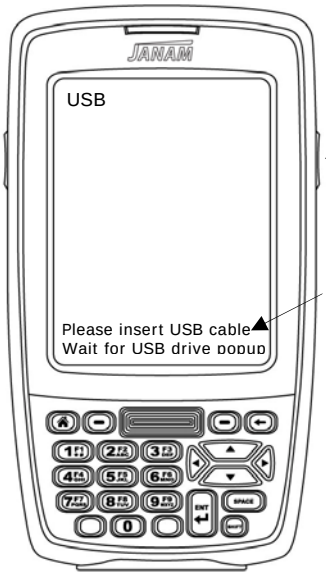


To download the correct BIN file:

1. Download the **latest ROM** by logging in to *Janam PartnerZone*. (You will need a login name and password.)
2. Accept the **terms and conditions**, and go to **PartnerZone**.
3. Locate the **BIN file** for the XM60. If the version number matches the version on the web site, there is no need to update the ROM.
4. Click the **arrow at right** to begin download. Remember to store the BIN file in an easily accessible location, like your desktop. You will need this file for the next section.

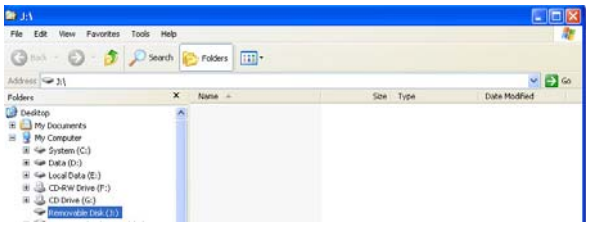
To install the latest ROM:

1. Remove **battery door** from unit.
2. Place fully **charged battery** in device. Unit will power up.
3. While device is booting:
   - Press and hold the **right trigger button** until "USB" appears on the device.

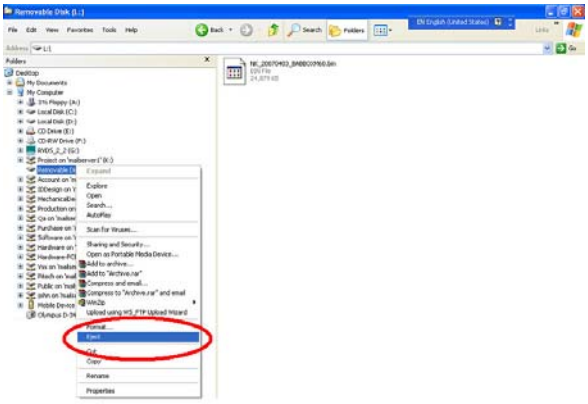


4. Connect **device** using USB cable to PC.

5. A removable drive will appear on PC.
6. Copy the **suitable BIN file** to drive.
   - IMPORTANT: Make sure you use the correct BIN file for each model. The incorrect BIN file will cause the system to fail to boot.



7. Eject **the drive** after update is completed.
   - The update ROM process will proceed.
   - Device will boot up within three minutes.



8. After a hard reset of the device (see next section), the new ROM will be updated in your mobile computer.

To troubleshoot during ROM update:
The following helps resolve any issues that might be encountered during the ROM update process.

Description	Resolution	Explanation
The scanner turns on when pressing the right scanner button.	Return to the main application display of the device, remove the battery and restart the ROM installation process.	In some situations, the application may cause the device to focus on the scanner. It is best to perform the upgrade process from the main application display.
The front LED is staying on and the device is non-functional.	Perform a soft reset of the device.	It is possible that the ROM update process was unexpectedly terminated and the device needs a reboot.
Windows is not recognizing the device.	• Disconnect the sync cable from the device and perform a soft reset. With the cable already plugged into the host computer, reconnect the XM60. • Perform reset first.	Sometimes, Windows attempts to find the device and the appropriate driver, but it takes too long, so the process aborts. Typically, on the second (or sometimes third) attempt, Windows will properly discover the device.
Windows finds the device, but the My Computer screen is not displaying an associated removable drive.	Same as previous resolution.	The speed of the host computer and the version of Windows XP being used may impact the process.
The letters USB are not displaying on the screen of the device.	Hard reset the device, and restart the ROM update process.	This can happen when the process is aborted and the updated ROM file has been placed on the removable drive. In some situations, the letters USB may no longer appear, and you will need to presume the update will take place. That means, the device has a boot-program that can still connect with Windows, but the display is no longer functional.

Reset the XM60

To soft reset:
In most situations, a soft reset restarts the device and saves all stored records and entries. However, any data that has not been saved will be lost during a soft reset. To perform a soft reset, do the following:

1. Remove the **battery door** from the back of the unit.
2. Locate the **reset button**.
3. Using the stylus, press the **reset** button (one time).
4. Replace the **battery door**.

To hard reset:
A hard reset returns the XM60 to factory settings, removing ALL applications and data from the device. Be sure that all data is backed up before performing a hard reset.
To perform a hard reset, do the following:

1. Remove the **battery door** from the back of the unit.
2. Locate the **reset button**.
3. While holding the arrow-up key, located on the front panel, right side of the computer, use the stylus to press the **reset** button (once). Continue to **hold the arrow-up key**.
4. After the reset has occurred and the calibration screen appears on the screen, release the **arrow-up key.**

IMPORTANT NOTE about battery door: XM60 mobile computers feature a **battery door removal detection switch**. This is designed to protect against data loss if the battery is removed during data collection or processing. The system will not fully operate when the battery cover is removed. As a result of this feature, XM60 devices automatically create a safe state until the battery cover is secured, meaning a device will power-down until the battery door is closed. It will then recall and resume from the user's most recent screen when the battery door is fully in place.

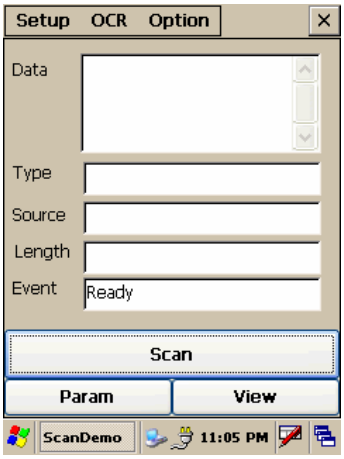
Power-down: Upon performing a reset, you may find that the device automatically powers-down shortly after the reset begins to take. This is a normal function of the battery door removal detection switch; the reset will hold. Simply secure the battery door and the XM60 device will resume activity at the last screen. While there is no technical reason to rush to secure the battery door, you may avoid the power-down activity by quickly securing the battery door.

3

Barcode Scanning

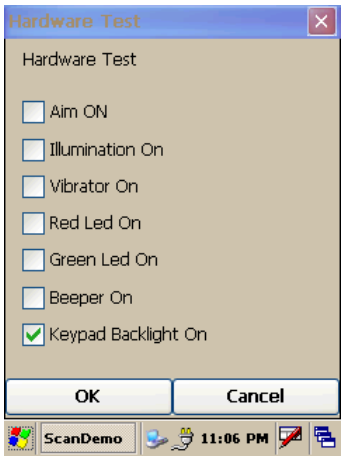
The XM60 provides an easy migration path so that minimal application code changes are required for barcode scanning applications.

Barcode scanning demonstration and setup

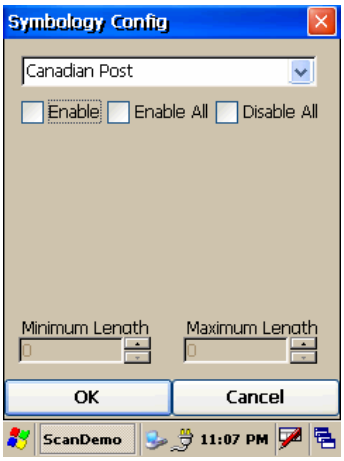


To run the demo:

1. Tap the **MS Windows icon > programs > XM60 Applications > ScanDemo**.
2. Three menus will appear (setup, OCR, options) on the top of the screen.

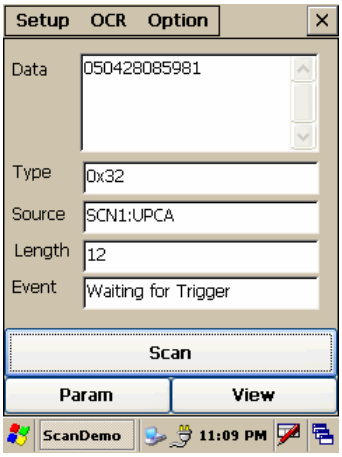


3. In the setup menu, select **hardware test** to review all the functions of the scanner and determine if everything is working properly.
4. Select **each item individually** to verify that all hardware is working properly.
5. Tap **OK** to return to the main demo.



6. Select **setup > symbology config**.
7. Tap **enable all** to let the scanner decide the best method of decoding the barcode.
8. Tap **OK** to save.

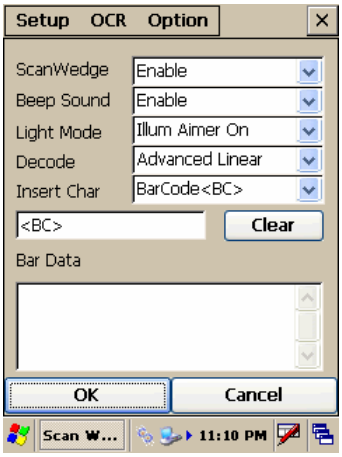
9. Select **scan**.
   - Point the **scanner** at a barcode, and press any of the **barcode scan trigger buttons** on the XM60. The results will display after a successful scan.



Enable the ScanWedge feature

When the ScanWedge feature is enabled, data can be entered into the specified application by opening the application on the handheld and scanning a barcode.

1. Go to **MS Windows icon > programs > XM60 applications > ScanWedge**.
2. Select **enable** from the *ScanWedge* menu.
3. Choose **setup > symbology config** from the top menu. You can then select **enable all** to enable every type of barcode or manually select the barcode symbologies you need.
4. 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.

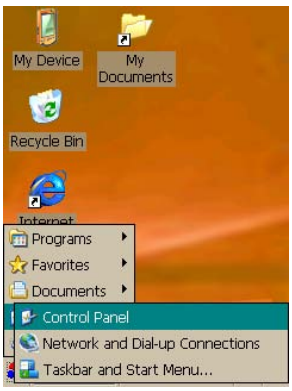
Unlock 2D scanning

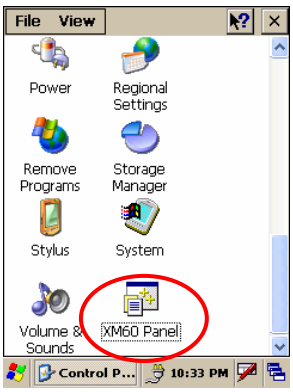
All of Janam's mobile computers can be upgraded in the field to read both 1D and 2D barcodes with a simple firmware upgrade (Part Number 2D-XP-1). With each upgrade, a key code is provided that unlocks 2D scanning capability on the device. To purchase an upgrade for your XM60, contact your authorized Janam dealer.

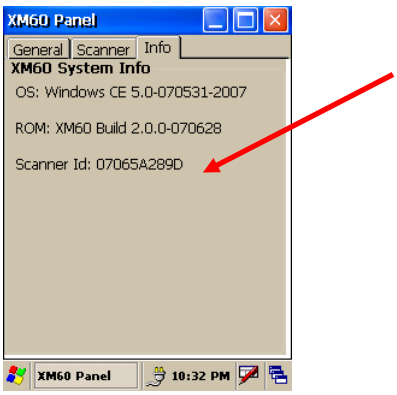
You will need to provide the product imager ID number so the appropriate five-digit key code sequence can be assigned. To access the imager ID number, follow these steps:

To get your imager ID number:

1. Tap the **MS Windows icon or start menu > settings > XM60 panel.**
2. Select **Info**.
   - The scanner ID info shows the unique number for each XM60 device.

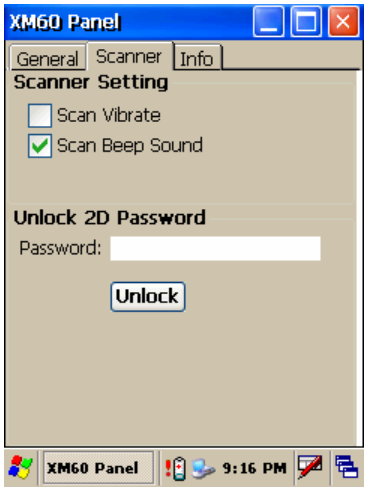






After receiving your five-digit key code, follow these steps to enable 2D scanning.

1. Go to the **MS Windows icon > settings > XM60 panel.**
2. Tap **XM60 panel icon**.
3. Select **scanner** tab.
4. Enter your **five-digit key code > unlock.**
   - A *successful unlock* notification will appear.
5. Press **X to close the screen.**



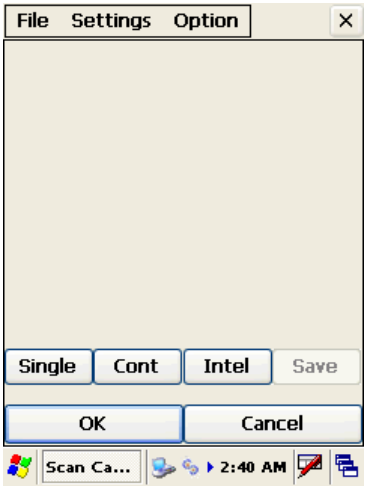
Note: Remember to keep a record of your five-digit key code. The unlock code will be maintained in the unit's system after a soft reset, but it will need to be re-entered after a hard reset.

Enable ScanCapture feature

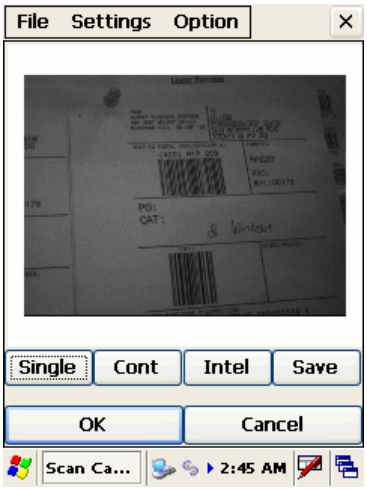
The ScanCapture demo enables you to capture normal and intelligent images.

To take a single image:

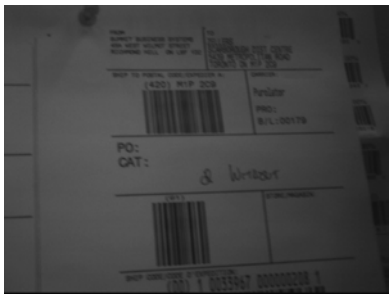
1. Click **single**.

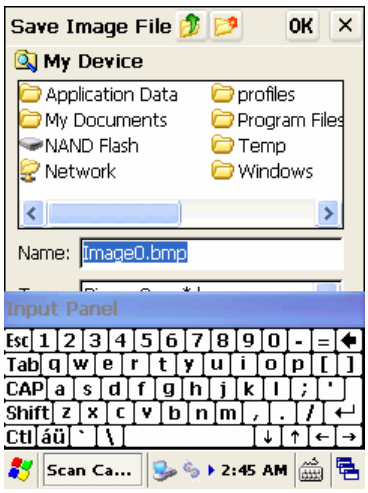


2. A preview appears on the screen.
3. Click **save**.

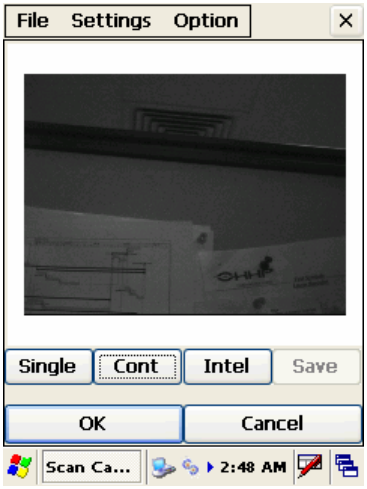


4. Enter **image's name** and **select folder**.
5. Click **OK**.
6. Below is the image that is captured.

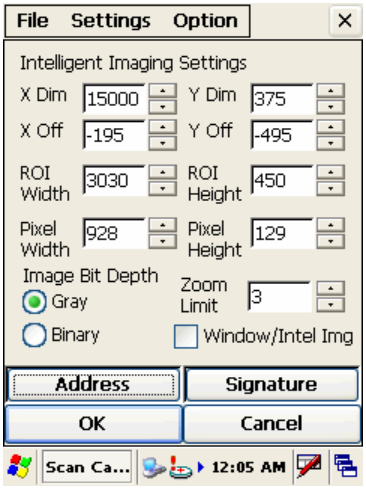




To use continuous preview:
1. Click **cont or continue button**.
2. Click **button again** to stop preview.

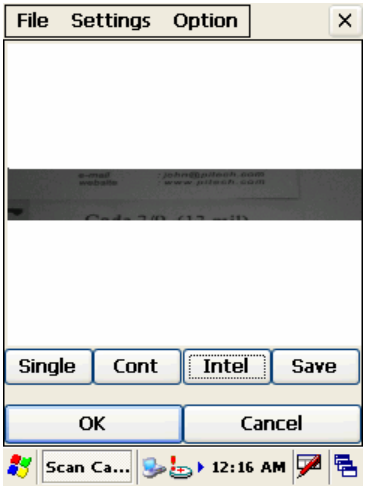


To use intelligent capture:
You can use intelligent capture to scan a signature or address that is located some distance away from a barcode. This feature supports PDF417, Code 128, Code 39 and Aztec symbologies.
1. Go to **settings > intel img**.
2. Set up appropriate settings. Click **address or signature > OK**.



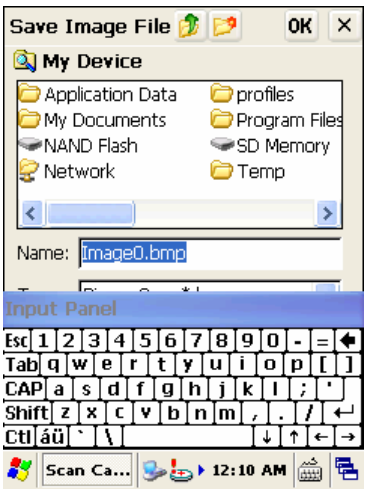
3. Select **intel button** and **aim** at any support barcode. If you need to capture a 2D barcode, be sure to unlock your 2D feature.

   Note: the image is always the same position from the barcode.



4. Select **save**.

5. Enter **image name** and **save** to appropriate folder.
6. Click **OK**.



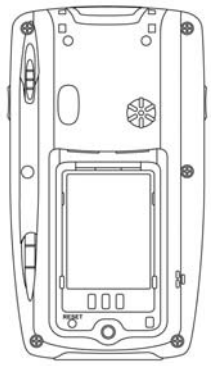
7. The below image is captured.

4

Set up your Janam XM60

Locate front panel controls

- **Power button (on top of device).** Pressing the power button turns the handheld computer on (if it is off) and returns to the last screen that was displayed. Press the power button to turn the handheld computer off.
- Use the **backlight** to illuminate the screen in low-light conditions. Hold down the power button for about two seconds to turn the backlight on and off.
- Janam XM60 **screen.** Displays the applications and data stored in your handheld computer. It is touch-sensitive and responds to the stylus.



Locate back panel components

- **Stylus channel.** Holds the stylus. To use the stylus, remove it from the channel and hold it as you would a pen or pencil.
- **IR port.** Uses infrared technology to transmit and receive data to and from other handheld computers, and to perform ActiveSync operations.
- **Reset button (located under battery cover).** Under normal use, you should not have to use the reset button.
- **USB/serial connector.** Connects your handheld computer to a PC via a USB or serial cable or by inserting XM60 into a Janam cradle.

Tap versus click

Tapping is the basic action used to execute tasks, so use the stylus to tap elements on your handheld computer's touch-sensitive screen. You can drag the stylus to select text, or use the stylus to drag the slider of any scroll bar.

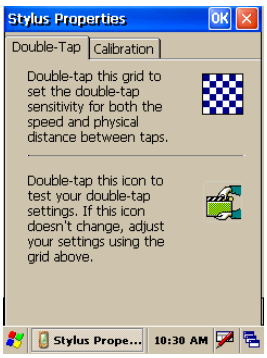
IMPORTANT: Always use the point of the stylus for tapping or making strokes on the handheld computer screen. Do not use a pen, pencil or any other sharp object to write on the screen.

Recalibrate the screen

The first time you start the Janam XM60 handheld computer, setup instructions appear onscreen. These instructions include a calibration screen, or digitizer. Calibration aligns the internal circuitry of the handheld computer with its touch-sensitive screen so your handheld computer can detect the task you want to perform when you tap an element on the screen. You can also recalibrate your screen at any time.

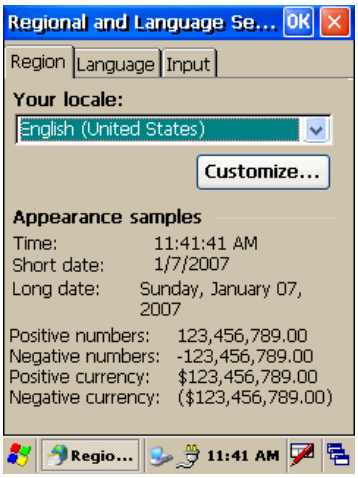
To recalibrate your screen:

1. Tap the **MS Windows icon > settings > control panel > stylus**.
2. Select **double tap menu,** and follow the instructions.
3. Tap **calibration menu**, and follow the **on-screen instructions**, tapping the screen where indicated.



Use the regional and language features

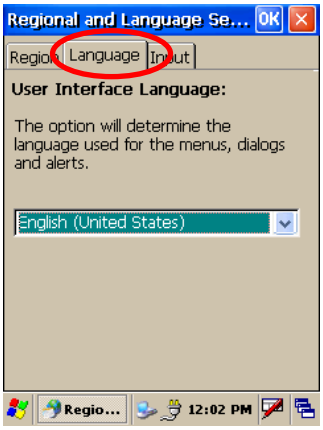
Your Janam XM60 comes with a variety of regional, language and input settings that are preset before your device is shipped. To change these settings, follow the directions below.

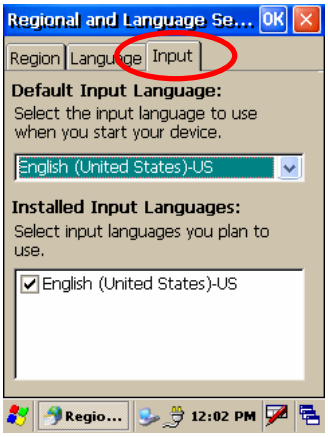


WARNING: If you change to a language other than English, you will have to perform a hard reset, which will erase all data on your handheld computer. If you have data you need to save, perform an ActiveSync operation before you change languages.

To update the regional settings:

1. Select the **MS Windows Explorer icon** in the command bar **> settings > control panel**.
2. Tap the **regional settings icon** (you may need to scroll down to find the icon).
3. Change **your locale** using the dropdown menu and tap **OK**.
   - See **customize** section (format date, time and numbers) below to further edit number, currency, time and date language and appearance.
4. Tap **language tab** to set the language used for the menus, dialog and alerts. The default is English.
5. Tap **input** to change the input language used when the device is started.

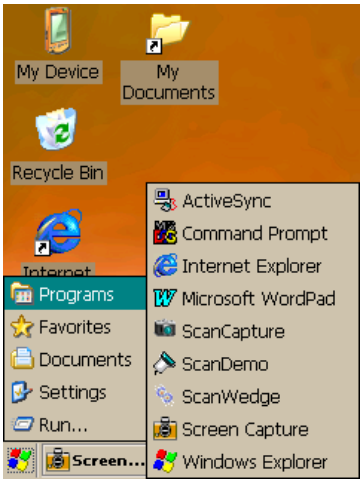




6. Perform a **hard reset** of your device IF you change to a language other than English.

Open applications

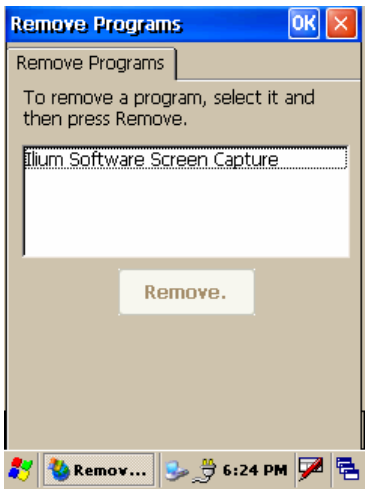
You can use the MS Windows Explorer icon in the left corner of your command bar to open any application installed on your handheld computer.



To open an application:

1. Tap the **MS Windows icon > programs**.
2. Select the **application** you want to open.

Remove applications



To remove a program:

1. Go to **MS Windows icon > settings > control panel**.
2. Double-tap **remove programs** icon.
3. Select the **program** you want to delete and click **remove**.
4. Click **OK**.

Enter data

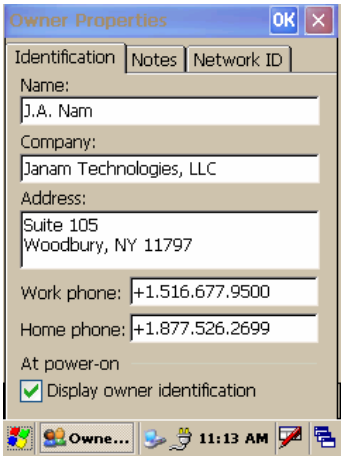
You can enter data into your Janam XM60 in one of five ways:

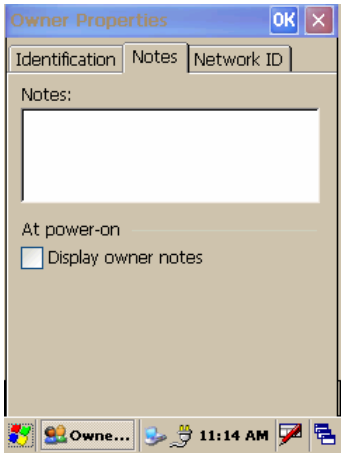
- Using the stylus or touch screen with the onscreen keyboard
- Scanning a barcode

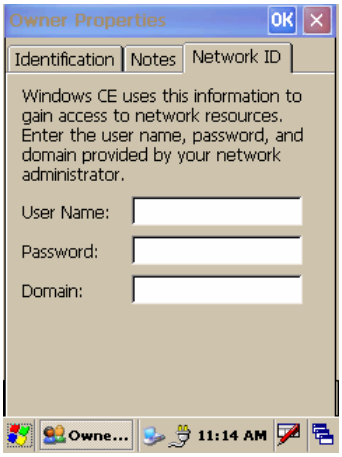
Customize

To change owner properties on your handheld computer:

1. Tap **MS Windows** icon in the lower left corner of command bar.
2. Go to **settings > control panel**.
3. Locate the **owner icon** and **tap twice**.
4. Tap **identification**, and **enter appropriate information**.
5. Tap **notes**, and **enter data**.
6. Tap **network ID**, and enter **user name, password and domain**.
7. Tap **OK** to save changes.



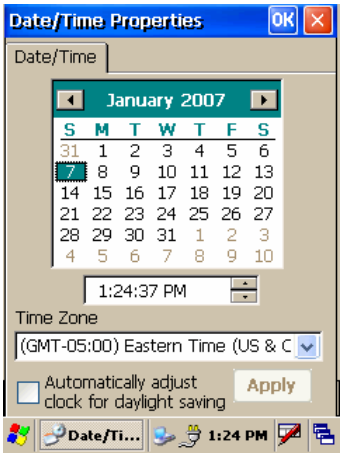




To set up a password:

1. Tap **MS Windows** icon in the lower left corner of command bar.
2. Go to **settings > control panel**.
3. Locate the **password** icon and tap twice.
4. Enter your **password** as desired.
5. Tap **OK**.

Set the date, time and time zone preferences



To set the date:

1. Tap **MS Windows icon** in the command bar **> settings > control panel**.
2. Tap on **calendar date** to change, select **new time** and choose your **time zone** from the dropdown menu.
3. Click **OK** to close.

Format numbers, currency, time and date

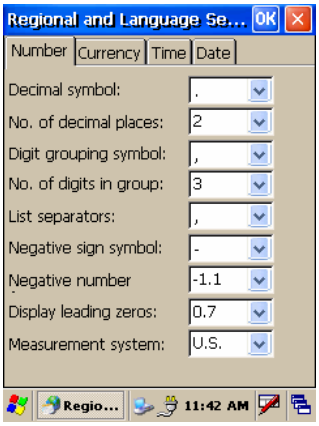
When selecting a country and time, date and number formats, keep the following in mind:

- When you select a country, the time, date, and number formats are adjusted, as well as the week's starting day.
- The time setting defines the format for the time of day.

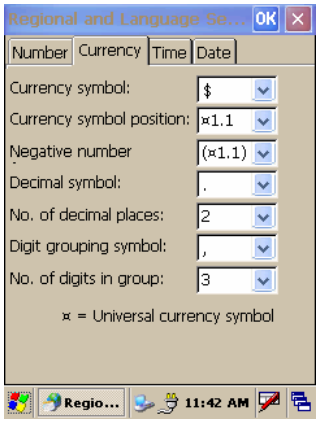
To change number, currency, time and date settings:

1. Tap **MS Windows icon** on the command bar **> settings > control panel**.
2. Tap twice on **regional settings** icon.
3. In the region tab, tap on **customize**.
4. Using the **dropdown menus**, make your **changes** and click **OK** to save the changes.

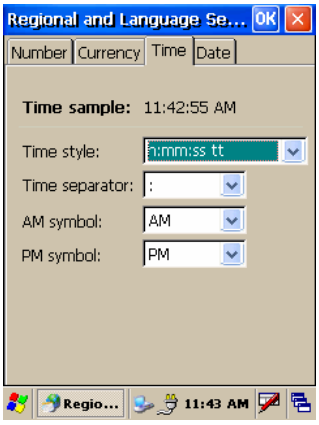
Number



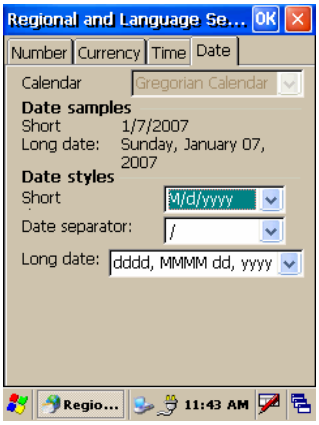
Currency



Time



Date



Set the display properties

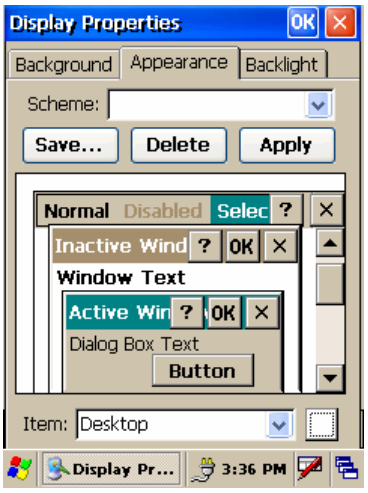
You can easily change the background and appearance on your Janam XM60, including the colors. In addition, you can save battery life by turning off the backlight when not needed.

To change the background:

1. Tap **MS Windows icon** in the command bar **> settings > control panel.**
2. Double-tap on **display** icon.
3. Use the **dropdown menu** or tap **browse** to change the background on your device.
4. Tap **OK**.

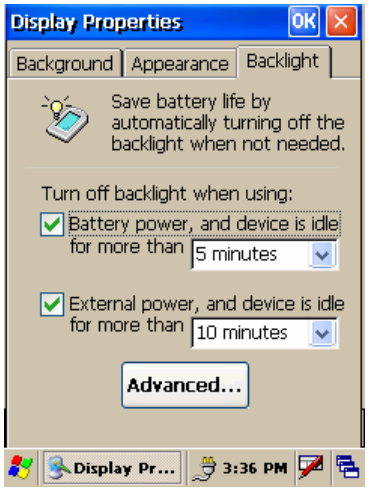
To change the appearance:

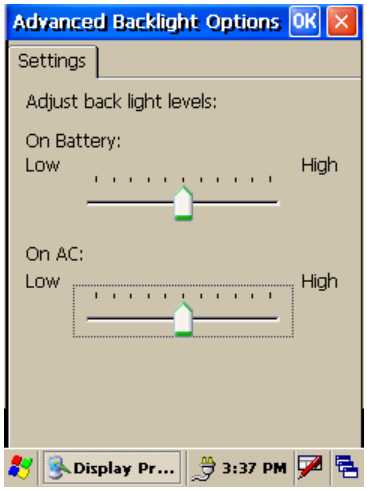
1. Tap on the **appearance** tab.
2. Change **scheme** using the dropdown menu.
3. Make **changes** to any item, including the desktop, buttons and menu background.
4. Click **OK**.



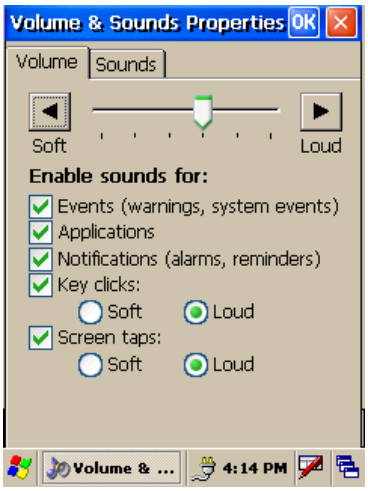
To change backlight preferences:

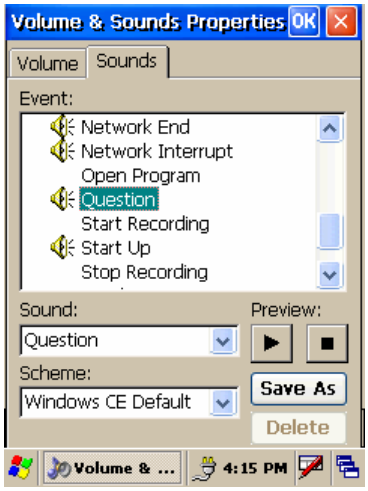
1. Tap **backlight** tab.
2. Select **battery power** and make your **change** in the dropdown menu.
3. Select **external power**, and make your **minutes selection** from the dropdown menu.
4. To further adjust levels, tap **advanced** button and make necessary adjustments for both battery and AC power.
5. Click **OK**.





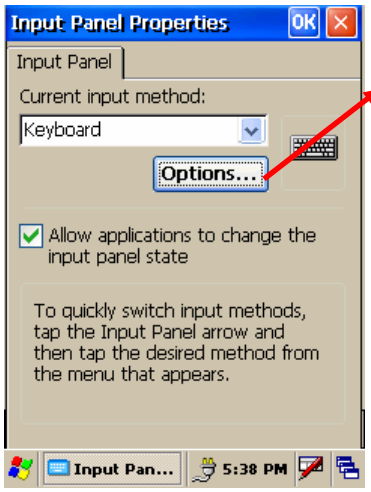
Select volume and enable sounds





1. Tap **MS Windows icon** in the command bar **> settings > control panel.**
2. Double-tap **volume & sounds** icon.
3. Tap the **volume tab** and choose **volume level and preferences.**
4. Tap **OK.**
5. Tap the **sounds tab**, choose **sound**, previewing it if necessary.
6. Click **OK**.

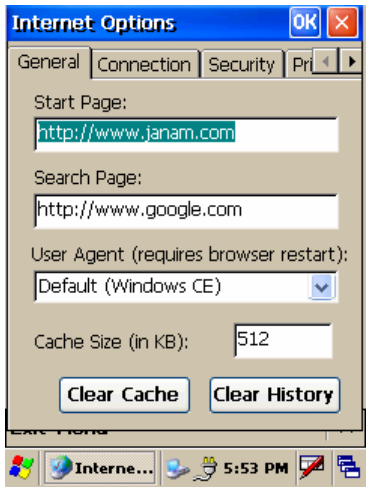
Change keypad options



To change key size on soft keyboard:

1. Tap **MS Windows icon** in the command bar **> settings > control panel**.
2. Double-tap on **input panel** icon.
3. Select **options** on the input panel tab.
4. Click on **large keys**.
5. Select **use gestures** to add this feature by clicking in the box to get a check.

Set internet options



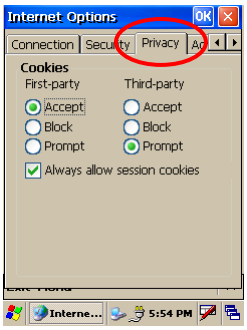
To change key size on soft keyboard:

1. Tap **MS Windows icon** in the command bar **> settings > control panel**.
2. Double-tap **internet options** icon.
3. There are six different tabs in the internet options, so you can customize your XM60 to meet your network requirements.
   - **General (at right):** enables you to select your start and search pages, in addition to user agent. You can also clear cache and history as needed.
   - **Connection (below):** lets you set the parameters for online access.
   - **Security:** provides intranet, internet, trusted and restricted sites access, including ActiveX controls and plug-ins.
   - **Privacy:** offers a way to accept, block or prompt for first- and third-party cookies.
   - **Advanced:** gives accessibility, browsing, multimedia, TV features and security options.
   - **Popups:** lets you block popups, set exceptions and enable advanced event options.

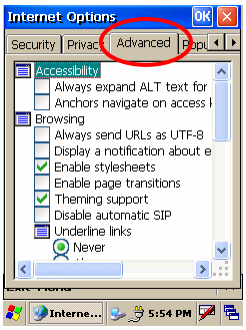
Connection

Security

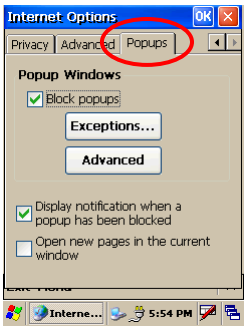
Privacy



Advanced



Popups



4. After you finish making your selections in each screen, click **OK** to save settings.

.

5

Enter Data

You can enter data into your Janam XM60 handheld computer by using the stylus or touch screen with the onscreen keyboard or by scanning barcodes.

- Using the stylus or touch screen with the onscreen keyboard
- Scanning a barcode

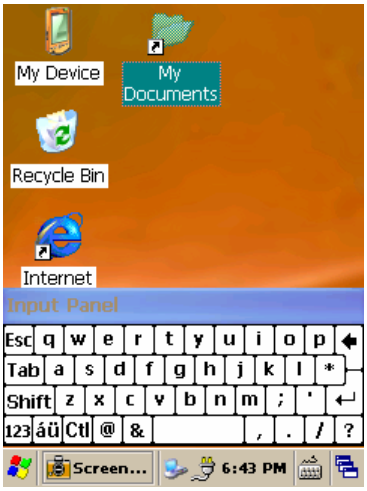
Use the stylus or touch screen with the onscreen keyboard

You can open the onscreen keyboard when you need to enter text or numbers.

To access the onscreen keyboard:

1. From the desktop or any open **application,** tap on the **keyboard icon** in the command bar**.**
2. Tap **keyboard** to select and a check will appear to the left, and the keyboard icon in the command bar will change.

3. The keyboard appears on the desktop or application (shown at right), and the keyboard icon changes.



To close the onscreen keyboard:

1. Select the new **keyboard** icon, and tap **hide input panel**.

To change input panels:

1. The standard alpha keyboard is the default.
2. For numeric, tap on **123** keyboard in the lower left corner of the main keyboard.
3. For international, tap on **áü** key, directly to the right of 123.

Alpha

Numeric

International

Import data

If you have data stored in computer applications such as spreadsheets and databases, or if you want to import data from another device, you can transfer the data to your Janam XM60 handheld computer without having to key it in manually. See chapter 6 for more details on how to transfer files and applications.

Use the barcode scanner

You can also get data by scanning barcodes into the handheld computer. See chapter 3 for more details.

6

Exchange and update Data Using ActiveSync

ActiveSync technology lets you synchronize – exchange and update – data between one or more Janam-connected handheld computers and your PC using either a USB or serial cable. To synchronize data, you must connect your Janam XM60 and PC directly, place your handheld computer in the cradle attached to your computer, use a modem or use a network.

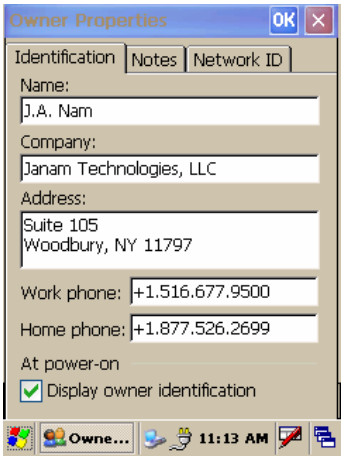
Create a user profile

You can create a user profile to load data into a Janam XM60 without associating that data with a user name. If you didn't set up a user profile in chapter 4, follow the instructions below.

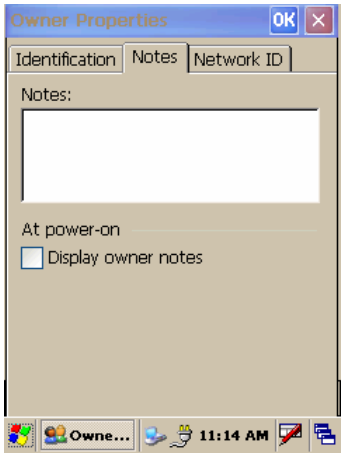
To create a user profile:

1. Tap **MS Windows icon > settings > control panel**.
2. Choose **owner**.
3. Enter **identification, notes** and **network ID** information.
4. Tap **OK** to save changes.

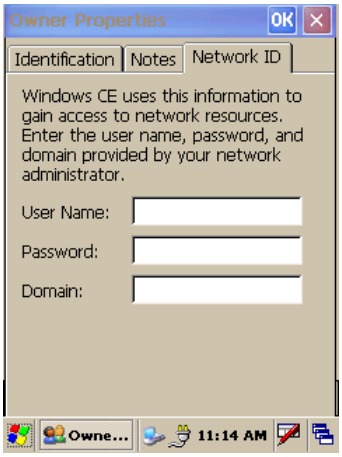
Identification



Notes



Network ID



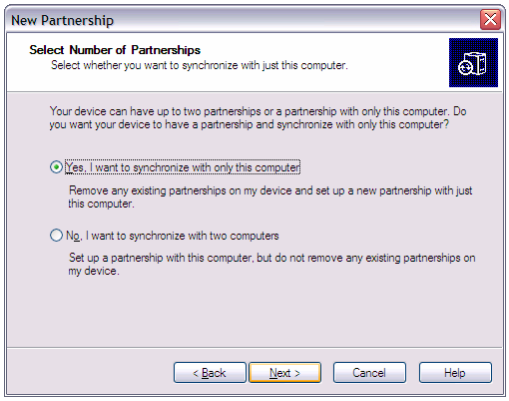
Set up/delete a partnership

There are two types of partnerships that you can create with your Janam XM60. You can automatically synchronize the files on your handheld device with your PC when you start your device. Or you can establish a guest partnership and manually copy the files you want to synchronize.

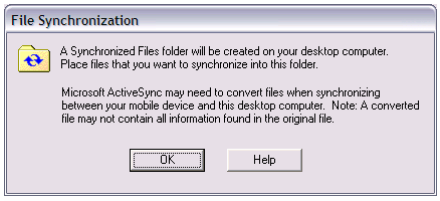
To set up a partnership to automatically sync files:

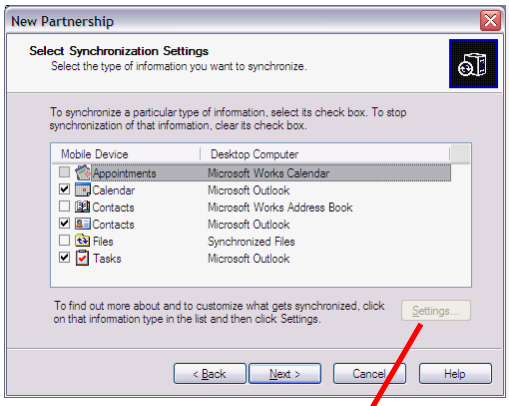
1. Connect your **Janam XM60 to your PC**.
2. On your PC, select **start > programs > ActiveSync**.
3. Click **yes > next**.

4. Select **yes** in the *select number of partnerships screen.*
5. Click **next**.

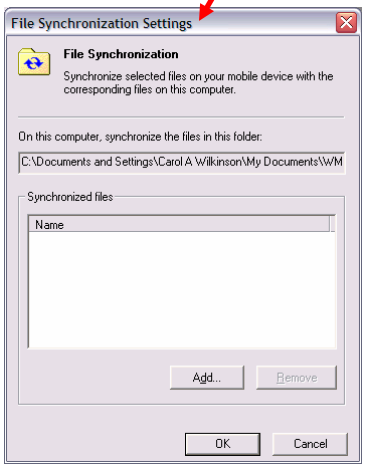


6. Select the **files** you want to sync between your mobile device and your computer.
   - Note: when you select **files**, an additional screen appears (shown below) with further information. Read carefully before proceeding, because your files may be converted.

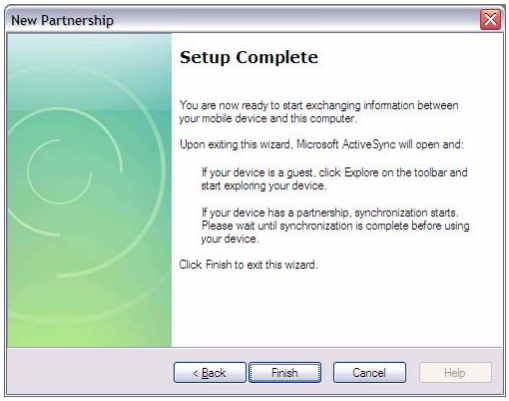




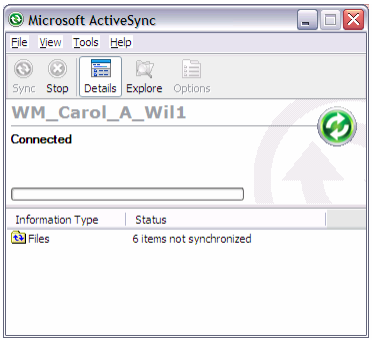
7. Click the **settings button** *in the select synchronization settings screen* (#6 above), and the screen at right will appear.
8. Add the **files** you want to sync with the files on your mobile device.
9. Click **OK > next** to continue the setup.



10. Your partnership setup is complete, and you may need to accept the partnership on your Janam XM60.

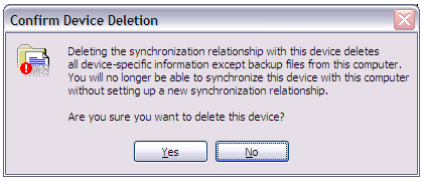


11. The ActiveSync manager screen appears on your desktop. As the automatic synchronization progresses, the status bar will fill and the sync will be displayed in the status section.



To delete a partnership:

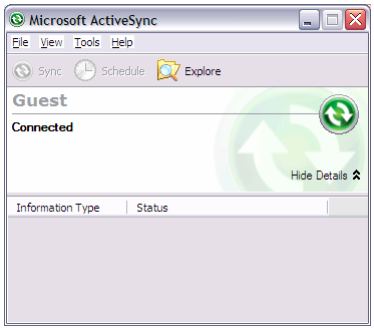
1. Go to **file > delete partnership** in the ActiveSync manager.
2. Click **yes** when confirmation screen appears.
3. You will need to **re-establish the partnership** when you connect your Janam XM60 to your PC, or you will need to connect as a guest.



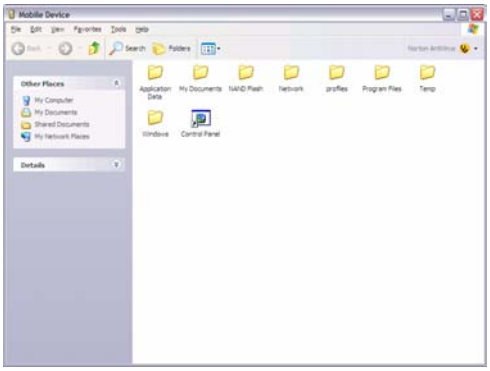
To set up a guest partnership:

1. Connect your **Janam XM60** to your PC.
2. On your PC, select **start > programs > ActiveSync**.
3. Click **no > next**.
4. You will be connected to your mobile device, and the guest connection will appear, as shown.
5. You may also need to **accept the partnership** on your Janam XM60.

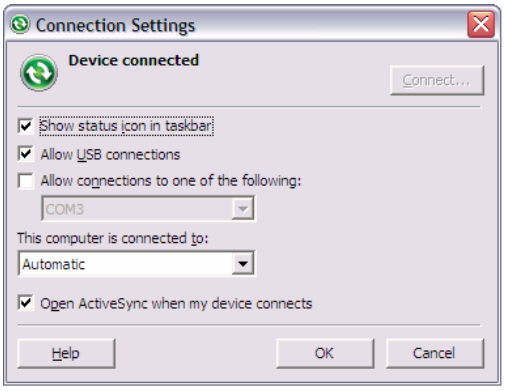
6. Select **explore** to manually copy the files on your handheld to your desktop computer.



7. Windows Explorer will appear with the folders and files on your mobile device.
8. Select the **file or file(s)** you want to move or copy.
9. Choose **copy files** and select **destination folder** on your PC.



Partnership settings



To change partnership connection settings:

1. Click the **ActiveSync icon** in your Windows system tray (bottom right corner of taskbar).
2. Choose **file > connection settings** from the ActiveSync manager menu.
3. Make **changes > OK**.

7

802.11 Wireless Configuration

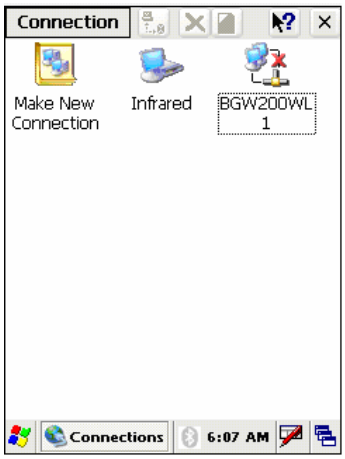
The following section details the basic 802.11 wireless configuration for your Janam XM60.

Wireless local area network access

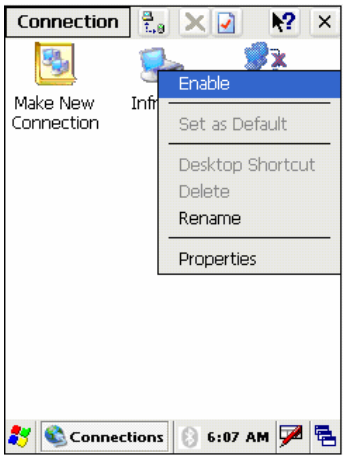
To add or edit a WLAN:

1. Tap the **MS Windows icon** in the command bar **> settings > network and dial-up connections** icon.

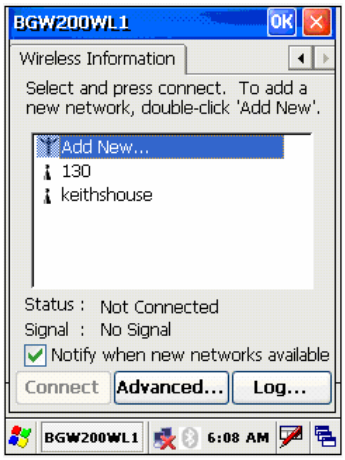
2. Tap and hold **BGW200WL1**.



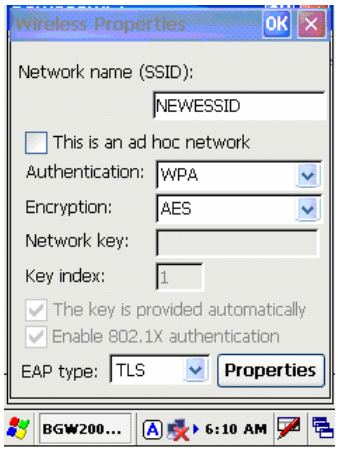
3. Tap **enable**.



4. Tap twice on **add new**.



5. Enter **ESSID, authentication** and **encryption**.



6. After wireless is configured, double tap **the network icon** to edit or add another WLAN.

8

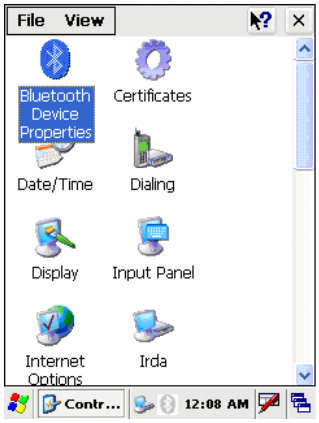
Bluetooth Manager

There are several ways to set up your computer for wireless access, and the following section details the general instructions needed to set up Bluetooth on your Janam XM60. Please note that complex or custom installations may require additional expertise from Janam's technical and support team.

Start Bluetooth manager

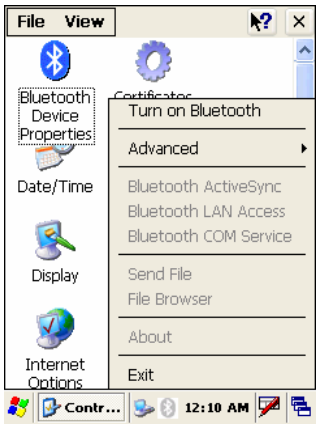
To start Bluetooth manager:

1. Tap **MS Windows** icon in the command bar **> settings > control panel**.
2. Tap twice on **Bluetooth device properties** icon.



3. Go to **tools > turn on Bluetooth**.

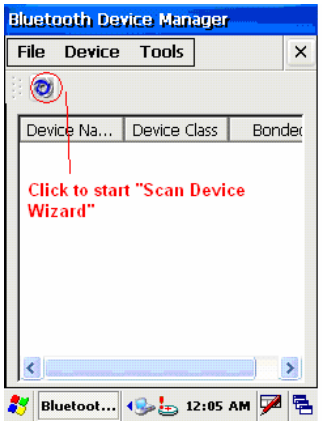
4. Start **Bluetooth** from the taskbar.
5. Click the taskbar's **Bluetooth icon,** and choose **turn on Bluetooth**.

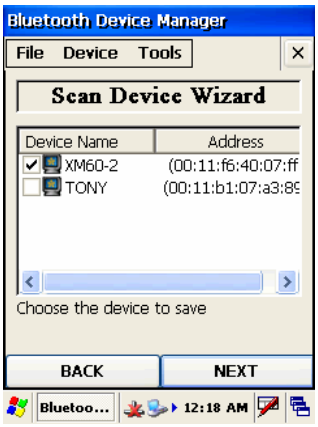


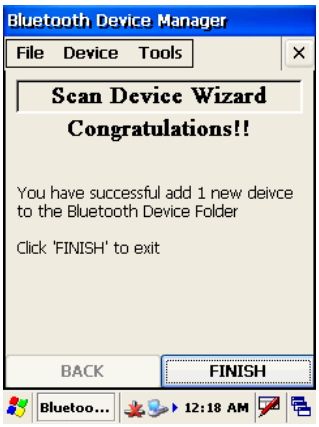
Scan Device Wizard

To use Scan Device Wizard:

1. Tap the **scan device icon** to start the wizard.
2. Tap **next**.
3. Wait until searching is finished.
4. Choose **the device** you want to add **> next**.
5. Tap **finish**.



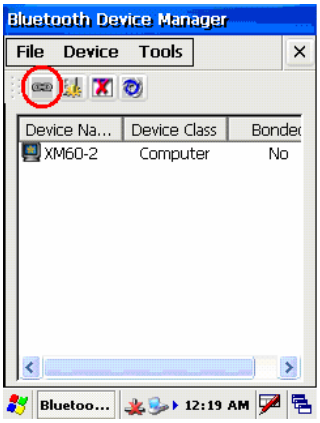


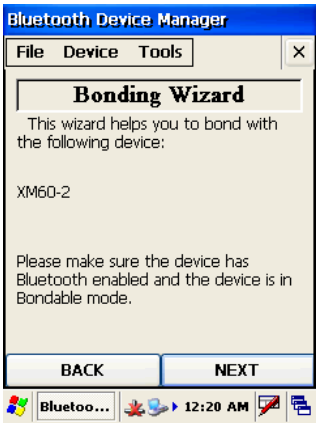


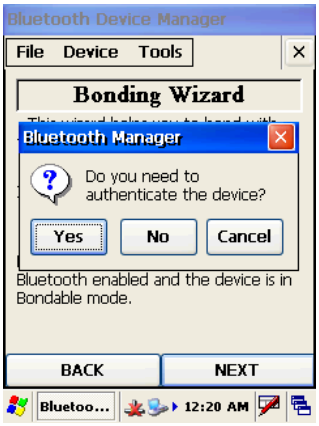
Bond Wizard

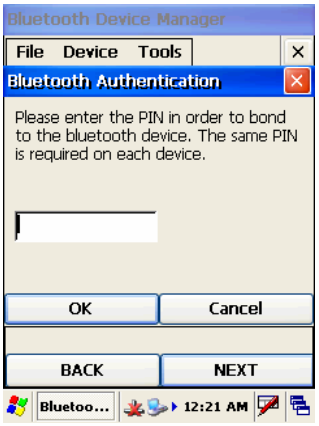
To use Bond Wizard:

1. Tap the **Bond Wizard icon.**
2. **Press next.**
3. Press **yes** to authenticate.
4. Insert **a PIN** for pairing and enter the same number on the pairing device.
5. Tap **finish** to exit.







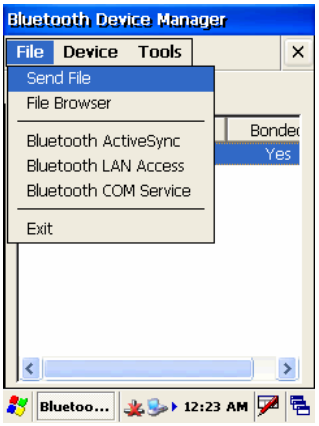


Send files

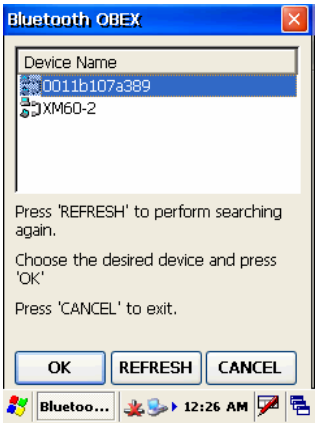
Please note that your target device needs to support OBEX file transfer option.

To send files:

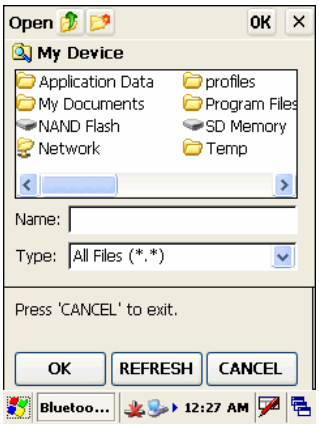
1. In the Bluetooth Device Manager, **choose send** *from the file menu*.
2. Tap **search** to start searching the device.

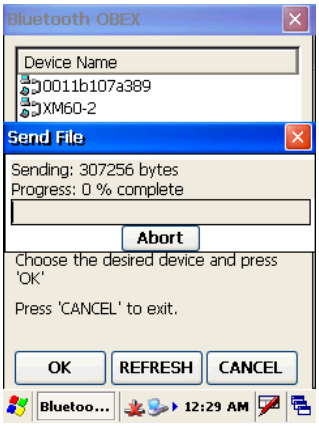


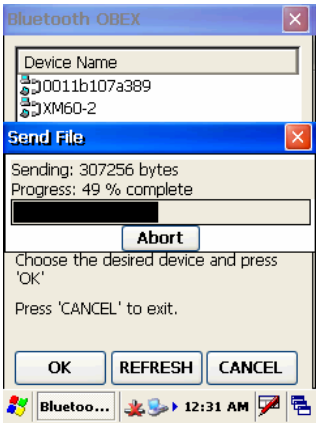
3. When you see your target device, **select it**.



4. Choose the **file** you want to send.
5. Your target device will ask you to accept the file. Transfer will start after you **accept it**.
6. Wait until transfer is finished.





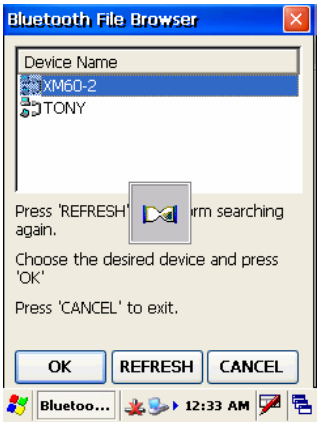


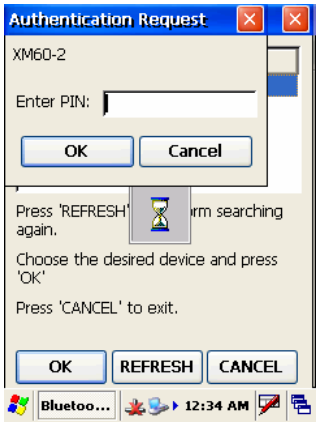
File browser

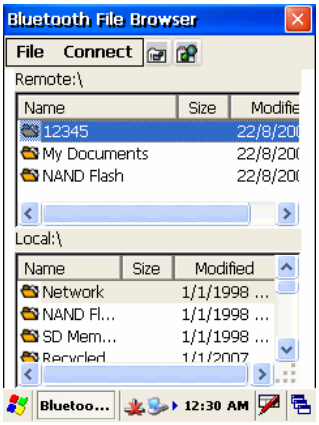
Please note that your target device needs to support OBEX file transfer option.

To use the file browser:

1. Choose the **device** you want to connect to.
2. Input **PIN number**.
3. If connection is successful, you can view the remote and local files.



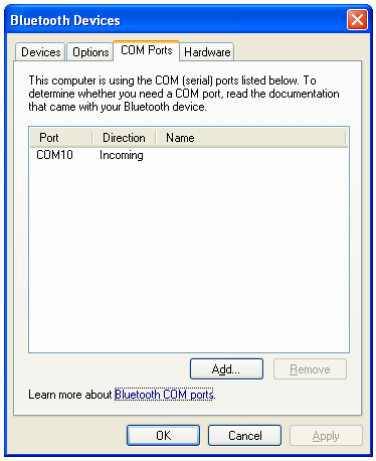




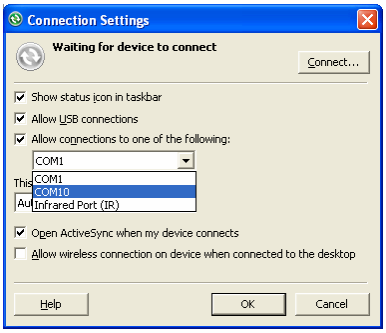
Bluetooth ActiveSync

To setup your PC to accept Bluetooth ActiveSync:

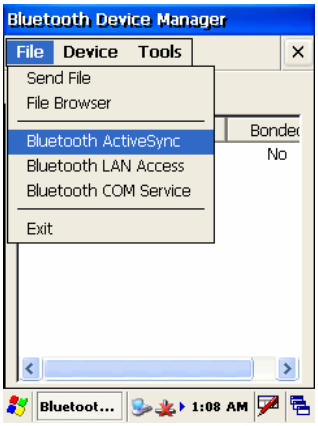
1. Go to **MS Windows icon > settings > control panel.**
2. Select **Bluetooth devices > COM ports.**
3. Add a **COM port** if needed**.**

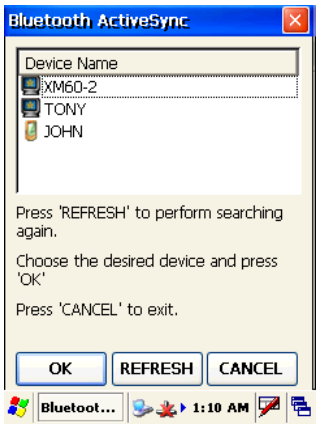


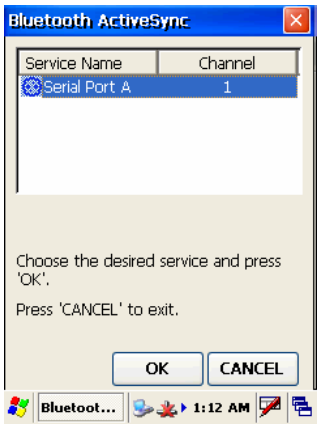
4. At the ActiveSync option, allow connections to the BT COM port (e.g., COM10).



5. Choose **Bluetooth ActiveSync** *on your XM60 device.*
6. Pick the **device** that can accept Bluetooth ActiveSync.
   - You will see the serial port provided by the PC (make sure that your PC is not currently synching with another device.
7. Tap **OK** and ActiveSync should start.

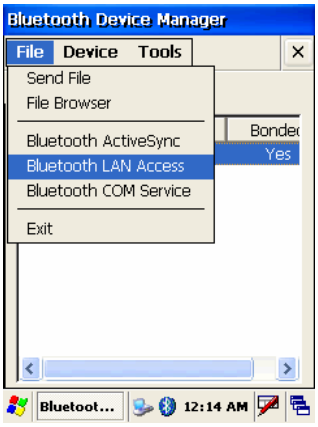


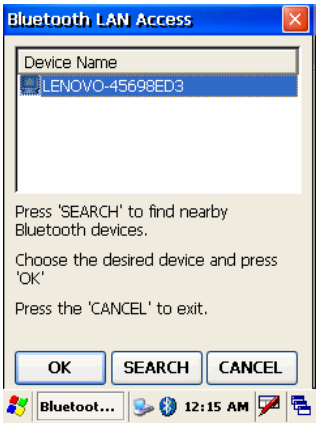


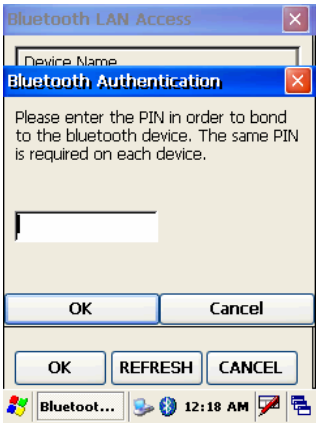


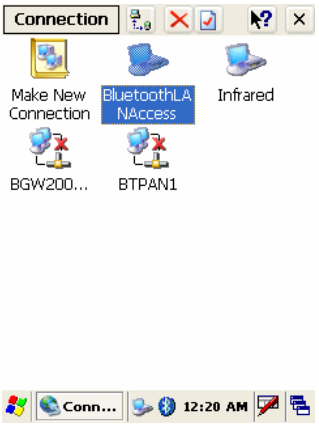
To set up Bluetooth LAN service:

1. Go to **file > Bluetooth LAN access.**
2. Press **search** to search for your target connect device
3. Make sure your target device supports Bluetooth LAN access service, because Windows XP does not support such services by default.
4. Choose your **target device** and press **OK**. Authentication may be required.
5. Enter the same **PIN number** at your target device.



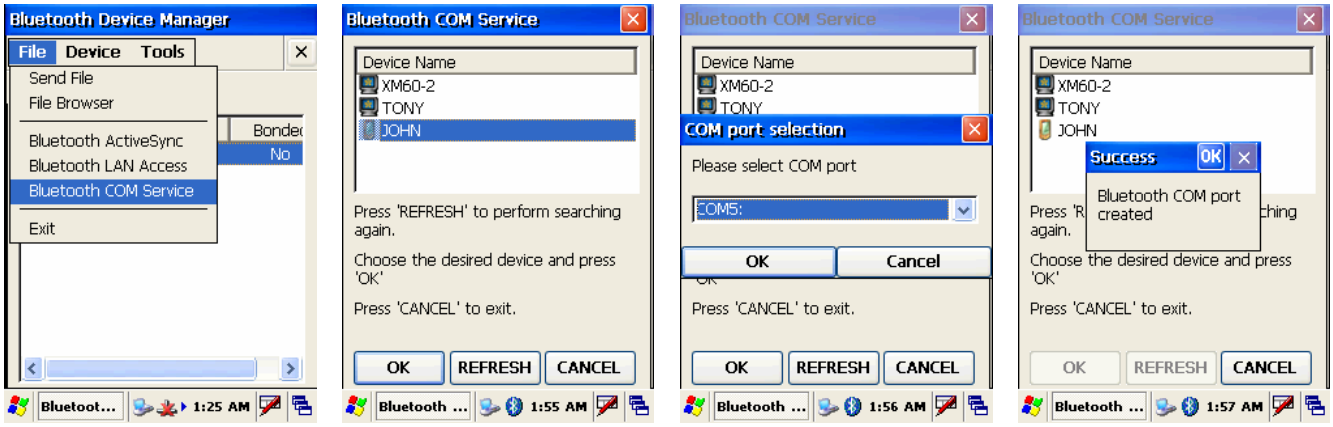






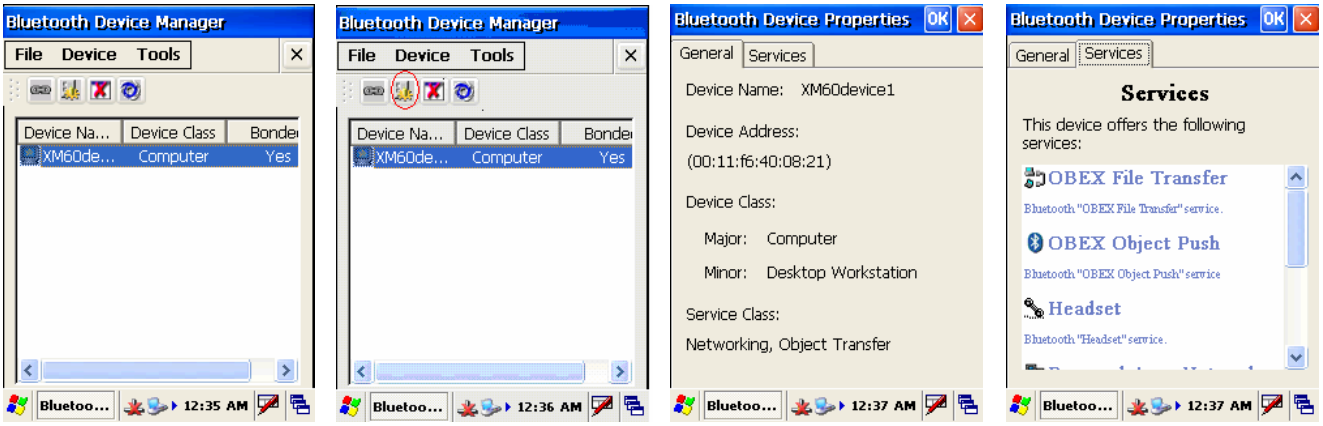
To use Bluetooth COM service (create a BT virtual COM port):

1. Choose **COM service** from *file menu in the Bluetooth device manager*.
2. Pick the **device** for creating the virtual COM port.
3. Select the **COM number** to map to.
4. A success message appears, if your target device accepted the Bluetooth connection.



To check what service the scanned BT device supports:

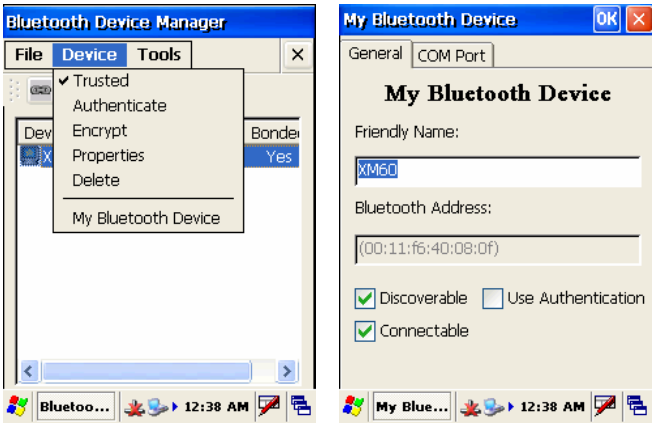
1. Choose the **target device** in the Bluetooth device manager.
2. Click on **property icon**.
3. The two tabs – general and services – will show what service the other device supports.



Settings

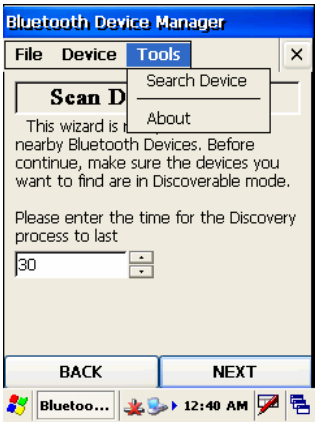
To change the Bluetooth settings:

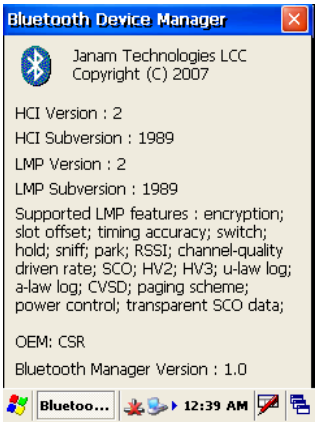
1. Go to **device > my Bluetooth device** *in the Bluetooth device manager*.
2. Change the **name and other settings**.



To check Bluetooth chip setting:

1. Go to **tools > about**.
2. The next screen will show the chip setting.





9

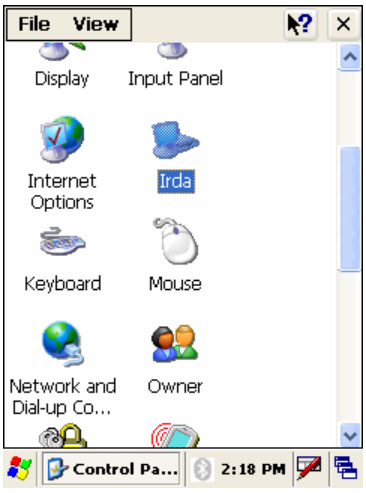
Beam Information

You can beam any file or application between Janam connected handheld devices. Beaming distance to other connected devices may be different.

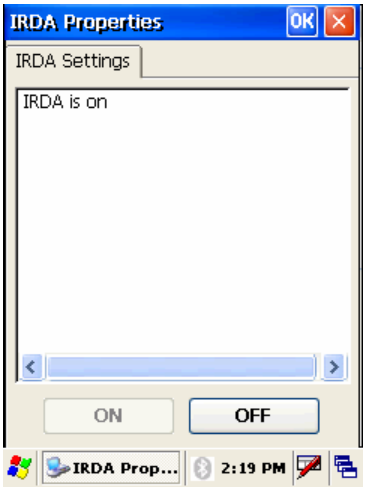
Turn beaming on / off

To turn beaming on or off:

1. Go to **MS Windows icon > settings > control panel**.
2. Double tap **Irda icon**.



3. Click **on or off > OK**.

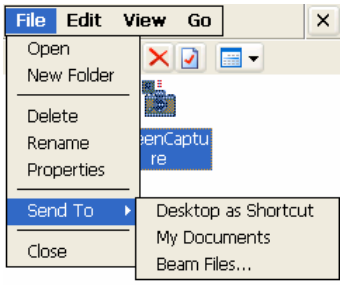


Beam information

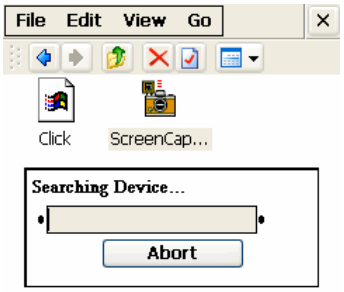
To beam a file or application:

1. Navigate to **Windows Explorer** from the MS Windows icon in the command bar.
2. Select **Windows Explorer**.
3. Highlight or select **the file you want to send**.

4. From the top menu, select **file > send to > beam files**.



5. Aim the **sending device IRDA window at the receiving XM60 IRDA window,** about 6 inches apart.
   - You will have to acknowledge and accept the receipt of the file on the receiving device.



10

Regulatory and Maintenance

Regulatory and safety approvals

CE The CE mark on the product indicates that the system has been tested to and conforms with the provisions noted within the 89/336/EEC 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

XM Series mobile computers meet or exceed all applicable standards and have been manufactured to the highest level of quality. To see the specific labels associated with RF terminals configurations, visit www.janam.com. **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 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 Class B digital apparatus complies with the Canadian ICES-003.
Cet appareil numerique 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 802.11b and/or Bluetooth

RF, regulatory and safety approvals

Parameter	Specification
RF approvals	
U.S.A.	FCC Part 15 Subpart C and Subpart B
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. Janam 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 numerique 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 60950-1:2001+A11
	EN 50371:2002
Australia	AS/NZS CISPR 22:2004

This product is marked with CE in accordance with the Class II product requirements specified in the R&TTE Directive, 1005/5/EC. The equipment is intended for use throughout the European Community. Its authorization for use in France is restricted as follows.

PAN European Frequency Range: 2.402-2.480 GHz
Restrictions in France:
Indoor use: Maximum power (EIRP*) of 100 mW for the 2400-2483.5 MHz band.
Outdoor use: Maximum power (EIRP*) of 100 mW for the 2400-2454 MHz band and maximum power (EIRP*) of 10 mW for the 2454-2483 MHz band.

Pacemakers, hearing aids and other electrically powered devices

Most manufacturers of medical devices adhere to the IEC 601-1-2 standard. This standard requires devices to operate properly in an EM Field with strength of 3V/m over a frequency range of 26 to 1000MHz.

The maximum allowable field strength emitted by the XP20 is 0.3V/m according to Subpart B of Part 1 of the FCC rules. Therefore, the XP Series has no effect on medical devices that meet the IEC specification.

Microwaves. The radio in the XP Series terminal operates on the same frequency band as a microwave oven. Therefore, if you use a microwave within range of the XP20 you may notice performance degradation in your wireless network. However, both your microwave and your wireless network will continue to function. The XP Series batch devices do not contain a radio, and therefore, are not affected by microwave ovens.

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.

For European Community users

Janam Technologies complies with Directive 2002/69/EC of THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 January 2003 on waste electrical and electronic equipment (WEEE).

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-XP-1 and recharge batteries using only Janam approved chargers. Use only easily accessible wall outlets that are easily 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.

The socket-outlet shall be installed near the equipment and shall be easily accessible.

GENERAL INFORMATION

1. Before using the standard charger, read all instructions and warnings.
2. Please retain this instruction 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 standard charger is designed for use with this barcode scanner only. Do not use this charger for other purpose.

OPERATING INSTRUCTION

1. Insert the output plug of the standard charger to the barcode scanner before plug in the charger into ac power socket outlet.
2. Always unplug the standard charger from the socket outlet after use.
3. Ensure that your local power supply system complies with the technical data of the standard charger.