

**JANAM**

**XT100 User Manual**



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## Introduction

### XT100 Rugged Touch Computer

Janam's Android-powered XT100 rugged touch computer is the lightest and most rugged device in its class and is equipped with the latest technological advancements to help mobile workers do their jobs more effectively and efficiently, all with a style that is sleek and cutting-edge.

Weighing only 7.5 ounces and featuring a brilliant 4.3-inch touch screen strengthened with Corning® Gorilla® Glass 3, the XT100 provides maximum durability and an optimized balance between screen viewability and device weight and size. As one of the smallest, lightest and fastest rugged mobile computers in its class to run Android, the XT100 is instantly familiar to the vast number of smartphone users already using Android, and fully compatible with the massive number of Android applications available through the Google Play store as well as many other sources. In addition, Android 6 delivers enterprise-strength security, making the platform even more attractive for business users dealing with mission-critical information.

Offering dual-band Wi-Fi, Bluetooth 4.1 and 4G LTE connectivity, the XT100 is designed to help mobile workers save time and make better informed decisions. High-performance 1D and 2D barcode scanning, as well as RFID and NFC reading capabilities, ensure organizations can address a full spectrum of data capture needs with one device. Integrated 13.0MP/2.0MP front- and rear-facing color auto-focus cameras enable customers to capture high-resolution photos, signatures and more. It's technology at work™

### Key Features

- Pocket-sized powerhouse weighing only 7.5 ounces
- Android operating system
- Brilliant 4.3-inch color display with Corning® Gorilla® Glass 3
- High-performance 1D and 2D barcode scanning
- Quad-core Qualcomm MSM8916 CPU @1.2GHz
- Multiple 4'/1.2m drops to concrete per MIL-STD 810G
- Sealed to IP67 standards against dust and immersion in up to 3 feet of water
- Embedded NFC reading capabilities
- 2GB/16GB of built-in memory with expansion capability
- User-accessible microSD card slot with SD and SDHC support
- Dual-band 802.11a/b/g/n/d/h/i/k/r/v Wi-Fi and Bluetooth 4.1 connectivity
- 4G LTE WWAN
- 13.0MP/2.0MP front- and rear-facing color auto-focus cameras
- Integrated GNSS assisted via WAN carrier (GPS and GLONASS)
- 3.8V 3000mAh Li-ion battery for extended-shift battery life

## Hardware Overview



- |                     |                               |                           |
|---------------------|-------------------------------|---------------------------|
| 1. Front speaker    | 8. Power key                  | 15. Android Home key      |
| 2. Barcode scanner  | 9. Scan key                   | 16. Android Open App key  |
| 3. Camera           | 10. Battery compartment cover | 17. Battery door open tab |
| 4. Audio jack       | 11. USB port                  | 18. Scan key              |
| 5. Rear microphone  | 12. Docking pogo pins         | 19. Volume down           |
| 6. Rear camera lens | 13. Alignment slot            | 20. Volume up             |
| 7. LED flash        | 14. Android Back key          |                           |

## Getting Started

### *Unpacking the XT100 Rugged Touch Computer*

**Make sure you have the following:**

- XT100 Rugged Touch Computer
- Stylus with Tether for XT100
- Screen protector for the XT100
- Power Supply (includes US Type A, Europe CEE 7/7, UK BS89/13 adapters)

### *Recommended Host Computer Requirements*

- Microsoft® Windows®-compatible host computer with USB port
- Microsoft Windows 10, Windows 8/8.1, Windows 7
- If installing the Android™ SDK, at least 1.5 GB disk space for the Android SDK, emulator system images, and caches, plus 500 MB disk space for Android Studio

### **XT100 SDK**

The XT100 Software Development Kit enables programmers to develop applications for XT100 rugged touch computers running the Android™ operating system. It contains details and instructions for developing applications that access the XT100 embedded scanner.

The development kit, which can be downloaded from Janam's Product Zone (login required), is designed for use with the publicly available Android SDK.

## Charging the XT100 Rugged Touch Computer

### BATTERY SAFETY GUIDELINES

The XT100 has a user-accessible, rechargeable battery. Replace only with a Janam-approved battery. There is the risk of explosion if the battery is replaced by an incorrect type. For more information on battery replacement see the [janam.com](http://janam.com) website or contact JanamCare at 866-915-5311. Use only battery chargers approved for the XT100 by Janam. Janam and its affiliates disclaim any liability for damage caused by the use of other chargers or batteries. Observe the following guidelines for safe use of Li-Ion batteries:

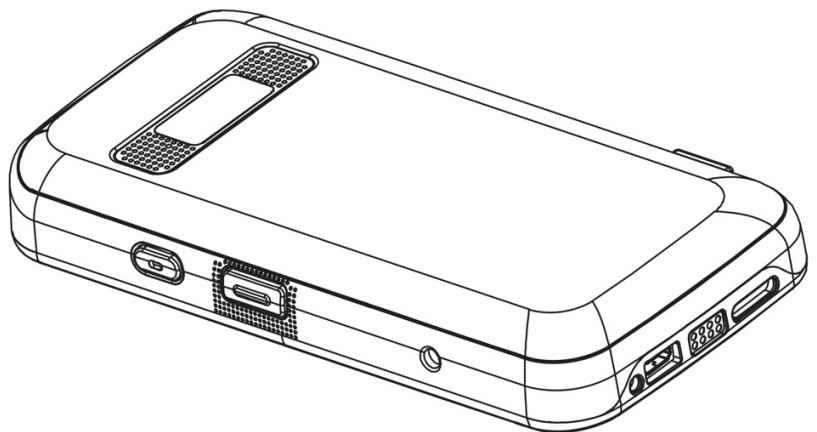
1. Do not expose the battery to excessive heat or cold. Do not short-circuit. Do not incinerate.
2. To avoid risk of fire, burn or damage to your battery, do not allow a metal object to touch battery contacts.
3. Do not disassemble the battery. There are no user serviceable parts inside.
4. If battery leakage is observed, avoid any contact with affected area and properly dispose of the battery.
5. If you come in contact with battery leakage, rinse exposed area with soap and water. If it contacts the eye, flush the eye with water for 15 minutes and seek medical attention.
6. Dispose of used battery promptly. Keep away from children. Do not disassemble or dispose of in fire.
7. When discarding a battery, contact your local waste disposal provider to understand local restrictions for disposal or recycling of batteries.

### BATTERY CHARGER SAFETY GUIDELINES

1. Do not use the equipment in or near areas in which sparks are likely or possible.
2. Do not let equipment's metal contacts and electrical sockets come in contact with metal objects.
3. For indoor use only. Do not expose the equipment to rain or any liquids.
4. Do not use or store the equipment in direct sunlight or in areas that are prone to get hot such as in a parked vehicle, near a heat duct or close to other heat sources.
5. Keep equipment's metal contacts and electrical sockets free from debris that could obstruct charging or could cause a short circuit.

## Installing the XT100 battery

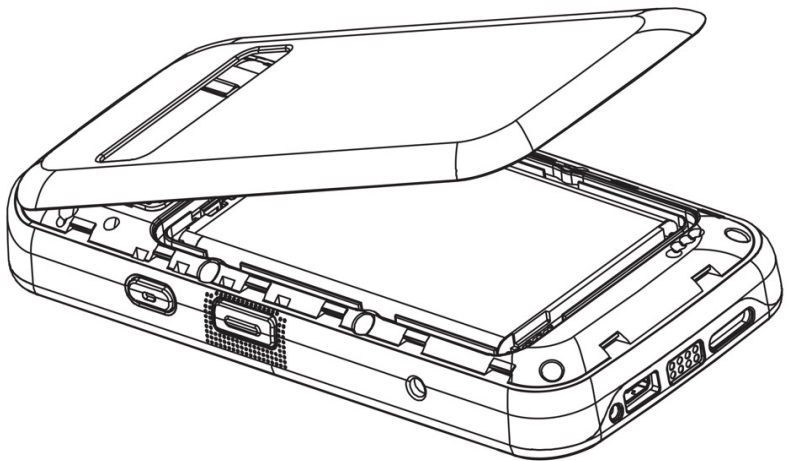
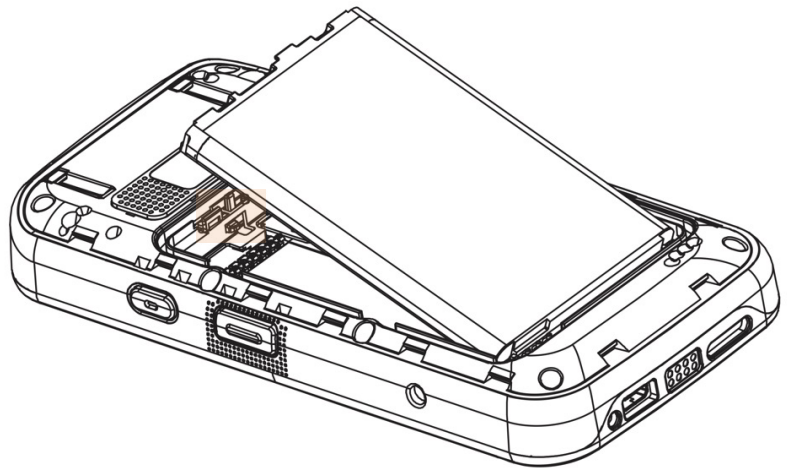
To install or replace the XT100 battery, remove the battery compartment cover. Start by lifting up the tab on the lower right side of the cover. Once it cracks open a bit, carefully lift up the cover (guiding a credit card along the gap helps). Once all snaps have popped open, lift off the cover.



Once the cover is removed place the battery, with the Janam logo up, into the compartment as shown in the illustration to the right. Firmly push the battery into the compartment until the small red locking level snaps into place and is in the "Lock" position.

Before putting the battery compartment cover back in place, check for the presence, condition, and proper fitting of the white ribbon seal along the inside perimeter of the cover. If the white seal is damaged or missing, replace it. Do not operate the XT100 with a missing or damaged battery compartment seal, as this could allow liquids to enter and damage the device.

To put the cover back on, insert its upper part with the yellow sticker on it first, holding it at an angle and gently pushing the two plastic hinges into their place. Then, starting with the upper part, gently close the cover until all of the cover clips have snapped into place and the cover lock is in its locked position.



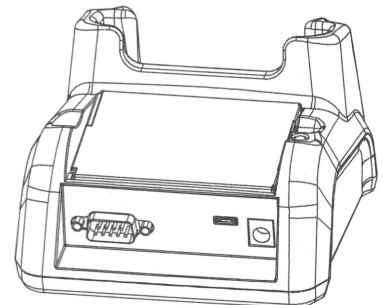
## Charging the XT100 battery

To charge the battery using the **DC Power Adapter Kit**:

1. Slide the appropriate US/UK/EUR adapter plug onto the AC/DC power adapter housing.
2. Insert the DC power plug into the USB port on the bottom of the XT100.
3. Plug in the AC/DC power supply. The XT100 LED indicator will light red while charging and will change to green when fully charged. Use only easily accessible wall sockets that are easily reached with the length of the supplied power cable.

To charge the battery using the (optional) **Cradle Kit**:

1. Insert the DC power plug into the DC power jack on the cradle. Insert the XT100 into the cradle.
2. Plug in the AC/DC power supply. The XT100 LED indicator will light red while charging and will change to green when fully charged. Use only easily accessible wall sockets that are easily reached with the length of the supplied power cable.





## XT100 Battery Condition and Usage Information

Android provides information on battery charge level in percent, estimated amount of battery charge remaining, and how much of the battery capacity has been used by various applications and device functions. This information can be accessed as follows:

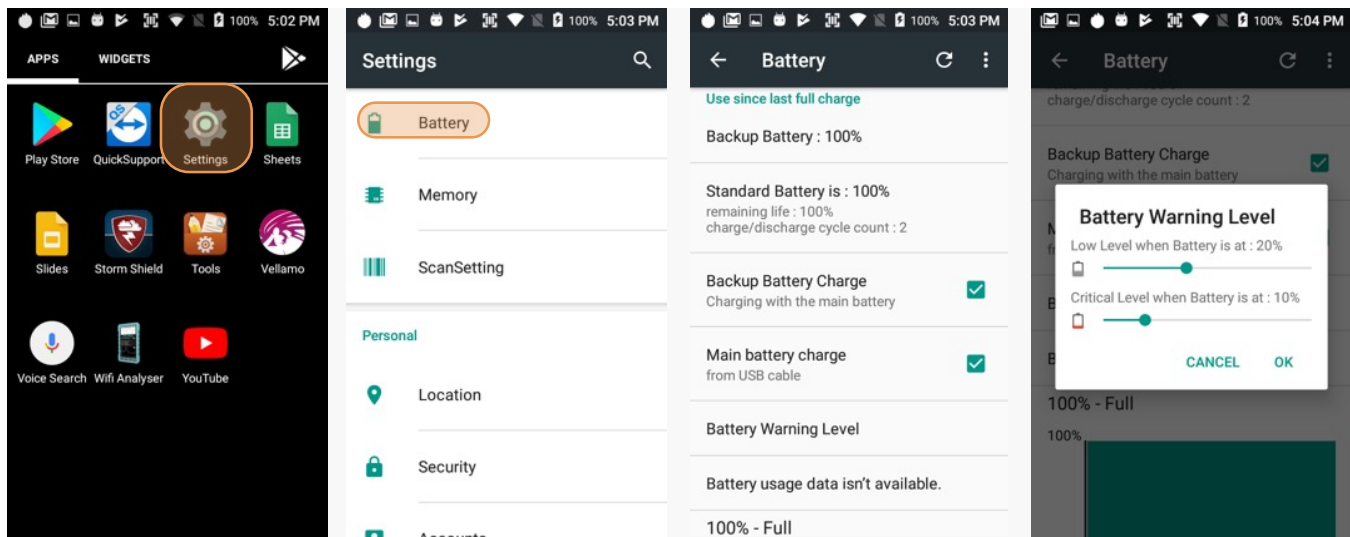
On the **start screen**, swipe down from the top to open status bar, then touch and hold **Battery** to get to **Battery screen**.

Or, from the **apps screen**, swipe left to get to the **Battery** icon, tap on it to get to the **Settings menu**, tap on **Battery** to get to the **Battery screen**.

View battery status and level, and estimated battery life remaining.

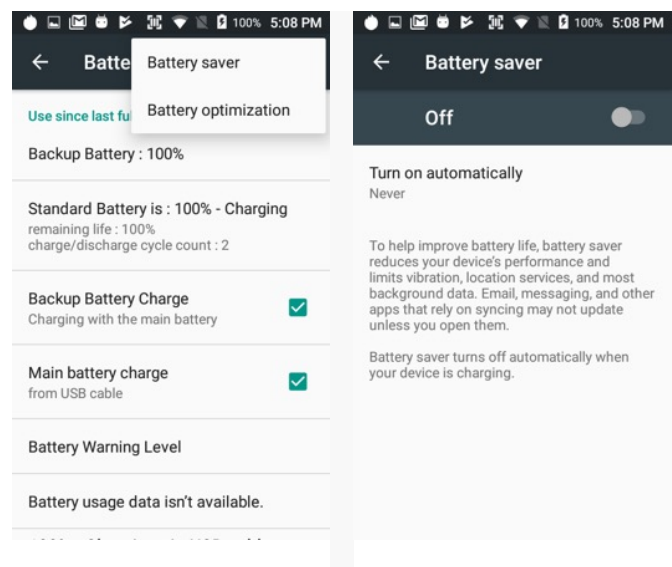
To view battery usage by application, tap on **Battery use**.

Here, you can also set the Battery Warning Level.



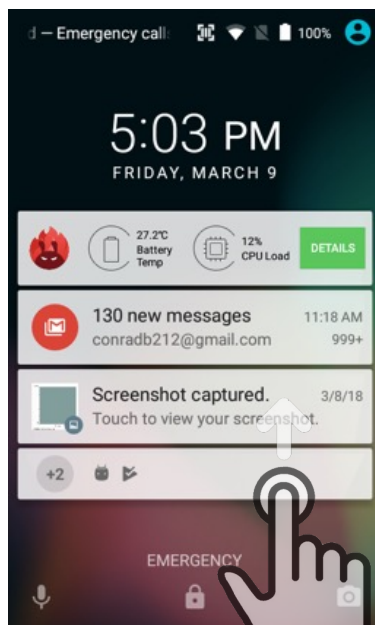
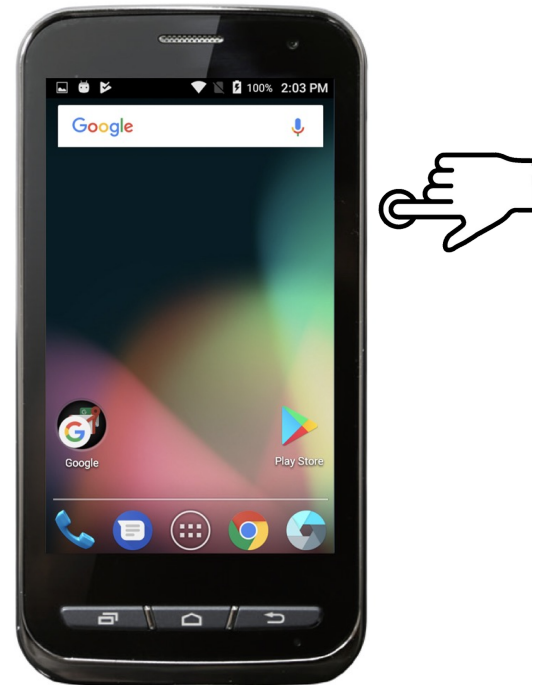
**Tip** — Whenever practical, you can conserve battery life by:

1. Using the AC adapter to plug the XT100 into an external power source.
2. Manually or auto-suspend device operation as often as is practical.
3. Reducing screen brightness.
4. Turning off wireless functionality (Wi-Fi, Bluetooth, location services, or GPS) when not in use.

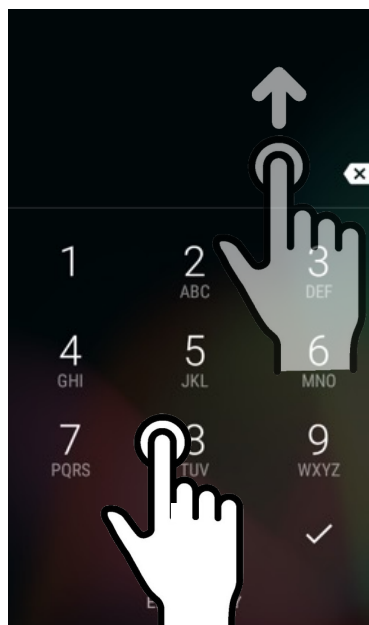


## Turning the XT100 Rugged Touch Computer On

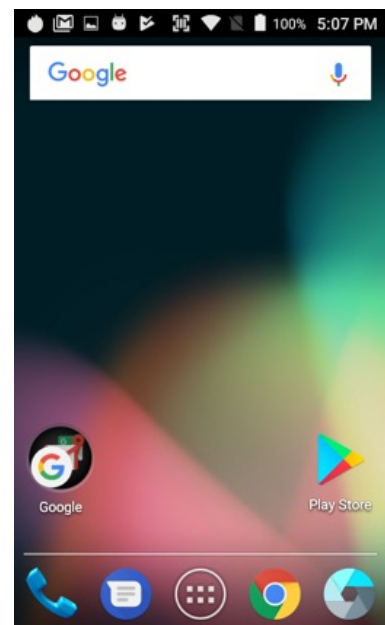
1. Press the **Power Key** (marked red in its center) on the top right-hand side of the XT100.
  - If the XT100 is being powered on for the first time, follow the on-screen setup instructions.
  - When the XT100 is on, pressing the power button briefly will suspend operation until it is pushed again.
2. When powered on, an **unsecured** XT100 will first display the **Android lock screen**. It can be unlocked by swiping up on the screen. The **lock screen** will be replaced with the **start screen**. For information about securing the XT100 with a password or pin code, refer to Chapter 3.
3. When powered on, a **secured** XT100 will also first display the Android lock screen. Swipe up to get to the **pin code keypad**. Enter your pin code. Once the correct pin code has been entered and you've tapped on the check mark, the **welcome screen** with the **pin code keypad** will be replaced with the **start screen**. For information about securing the XT100 with a password or pin code, refer to Chapter 3.



Unsecured: swipe up



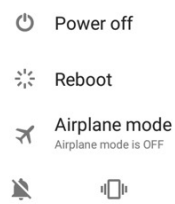
Secured: enter pin, then swipe up



Both ways get to the start screen

## Turning the XT100 Rugged Touch Computer Off

1. To simply put the XT100 display to sleep, just briefly press the **Power Key** (marked red in its center). The display will turn off. To turn the XT100 back on from this state of sleep, depress the **Power Key** again. The welcome screen will come up, and by swiping up you will return to the last used app.
2. To put the XT100 display to sleep and also shut down Android, press and hold the **Power Key** (marked red in its center) until the "Power off/Reboot/Airplane Mode" overlay appears. Press on "Power Off" until you feel the vibration and see the "Technology at Work" logo. To turn it back on, press the **Power Key** to reboot Android. Here you can turn sound on or off via the bell icon, or return to normal operation by tapping the multitask icon between the bells.
3. To completely power down the XT100 and reboot it from a cold start, press and hold the **Power Key** and keep holding it for about ten seconds. The display will go black, and in a few seconds the XT100 will reboot automatically.



## Touch Screen Navigation

The XT100 uses capacitive multi-touch technology. Almost all of the XT100's functions can be accessed and used by tapping, swiping or dragging with one finger. Some operations, such as zooming in and out, are performed with pinching two fingers together or dragging them farther apart.

Note that capacitive touch works by sensing your fingers. Never use an actual pen, pencil, or any sharp object to operate the touch screen. They may damage the touch screen.



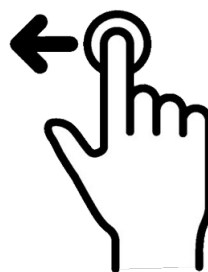
### Touch

Touch a tile or object to select or open it.



### Touch and hold

Touch and hold a tile or object to bring up available options.



### Touch and drag

Touch and then drag/ swipe an object to move it in any direction.



### Pinch and spread

Put two fingers on the display, then drag them together or apart to zoom in or out.



## Screen Rotation

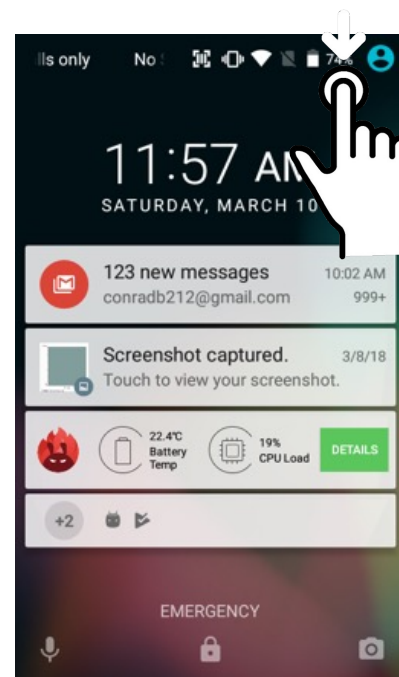
The XT100 was designed to be used in portrait (vertical) orientation. However, many screens and apps can also be used in landscape (horizontal) orientation. By default, the XT100's internal sensors will automatically present a vertical or horizontal view in sync with the physical orientation of the device. If automatic orientation is not desirable, the screen can be locked in its current orientation in Settings.

## Lock Screen

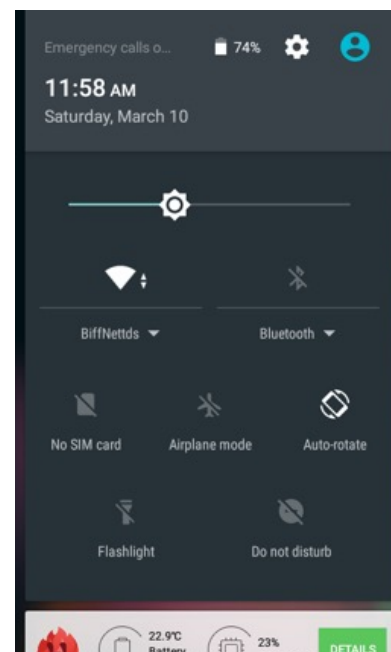
When turned on, the XT100 first displays the Android **lock screen**. The lock screen shows the current time and date. If the XT100 is secured, it may also display an access prompt. The lock screen can be personalized by changing its color, picture, and sounds. It may also provide a quick status of selected apps (such as calls, messages, emails, etc.).

Along the top of the lock screen is a **status bar** with small icons that display information about various functions. Examples include Wi-Fi and Bluetooth, cellular signal, the presence of notifications, SIM card, battery charge, airplane mode, the current time and more. Some function icons are static and indicate the presence of something (like airplane mode). Other icons provide information on a function (like the cellular or Wi-Fi signal strength, battery charge, or type of data service).

Below is a sample of the icons that may appear in the **status bar** of the **lock screen**, as well as what the icons indicate. Note that swiping down from the top of the lock screen reveals a screen with tiles that provide one-tap access to various important functions. Examples are airplane mode on/off, camera on/off, brightness settings, flashlight on/off, etc.



| Icon  | Meaning   |  |  |
|---|---|--|--|
| <i>Note: Status and notification icons are hardware and software dependent. Some of the icons listed may not be relevant to your Janam XT100 model.</i> |   |  |  |
|   | Open notification panel to see additional notifications |  | Sound is turned off  |
|   | Pending calendar event                                  |  | Vibrate mode is turned on  |
|   | Pending alarm and Alarm is set                          |  | Battery charge is at 100%.   |
|   | New Hangouts™ message                                   |  | Terminal is connected to external power and the battery is charging. |
|   | New Gmail™ message                                      |  | Downloading data   |
|   | New text message or multimedia message                  |  | Bluetooth technology is turned on                                    |
|   | New E-mail  |  | Scanner enabled  |
|   | Error with text or multimedia message delivery          |  | Download finished  |
|   | Terminal is connected to a computer using a USB cable   |  | WWAN (voice & data) network signal strength                          |
|   | ABD active (USB debugging enabled)                      |  | GPS is enabled   |
|   | Uploading data  |  | Wi-Fi network connected and signal strength                          |



## The Home Screen

In Android, the **home screen** is the central launchpad for all of the XT100's most often used features and applications. The home screen can consist of multiple screens (on the XT100 there are two additional screens to the left of the home screen and two to the right).

The home screen contains the **status bar** on top of the screen and the **favorites tray** at the bottom. The status bar displays various information icons. Swipe down to expand it and show more detail. The favorites tray has the apps screen button in the center, flanked by two (changeable) favorites on each side.

Between the status bar and the favorites tray are apps icons (which can also be **folders** containing multiple apps) and **widgets**. Tapping on apps icons launches the app. Widgets perform functions, like showing the time, weather, news, or act as shortcuts.

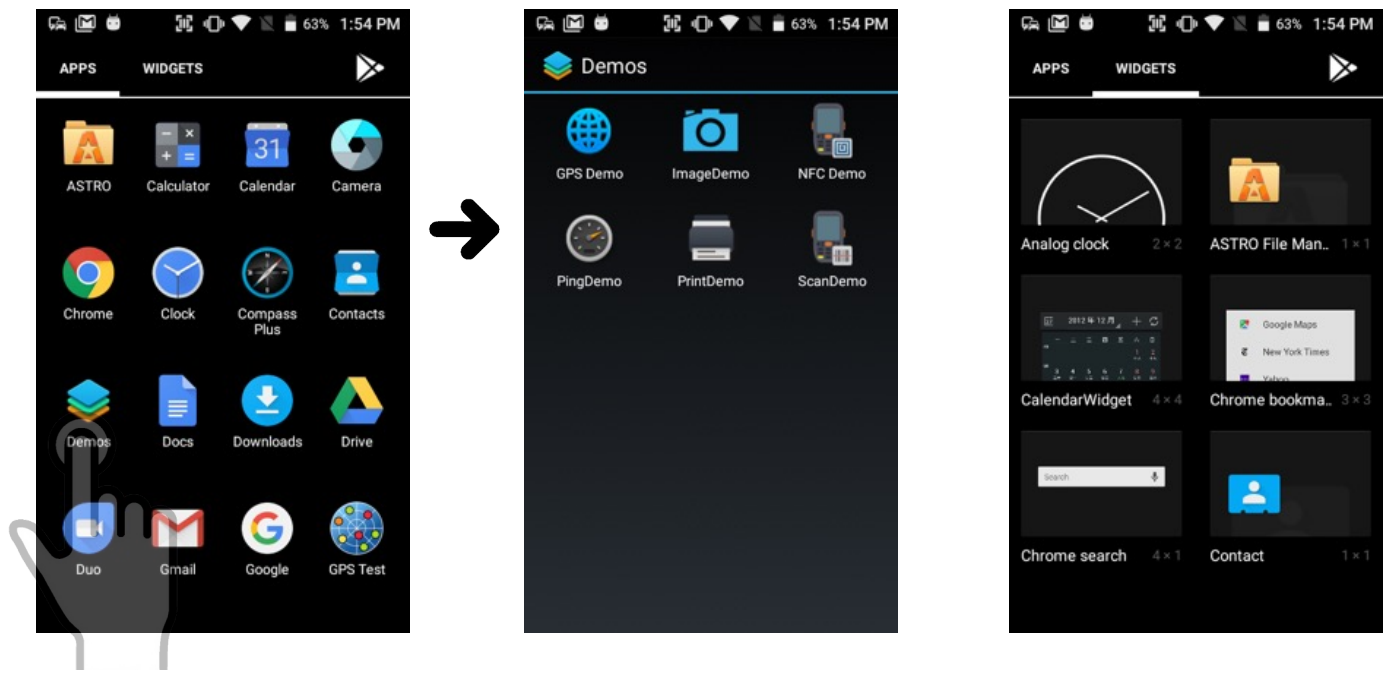


- |                                   |                                  |                                    |
|-----------------------------------|----------------------------------|------------------------------------|
| 1. Status bar                     | 9. Favorite app: phone           | 17. Opens Demos folder             |
| 2. Indicates messages waiting     | 10. Favorite app: messages       | 18. Two more apps and widget pages |
| 3. Indicates scanning enabled     | 11. Application screen button    | 19. Open Google apps folder        |
| 4. Indicates ring set to vibrate  | 12. Favorite app: Chrome browser | 20. Exchangeable wallpaper         |
| 5. Indicates cell signal strength | 13. Favorite app: Camera         | 21. Launches Settings              |
| 6. Indicates battery charge level | 14. Search bar widget            | 22. Launches Google Play Store     |
| 7. Indicates time                 | 15. Weather and News widget      | 23. Launches Traffic app           |
| 8. Favorites tray                 | 16. Contacts                     | 24. Opens Tools folder             |

## App Screen

While the Android **home screen** serves as the XT100's "dashboard" for status, information, and quick access to all the most important functions of the device, the **apps screen** provides an alphabetically listed grid of all applications installed on the device. Tap on the apps button on the home screen to get to the app screen. From the apps screen, press the physical **Home key** below the XT100's display to get back to the home screen.

To launch an application from the app screen, tap on it. If you have a lot of apps, swipe to move between apps screens. To get to your **widgets library**, tap on WIDGETS underneath the status bar.



## Function Keys

The XT100 has three physical, metallic function keys with white labels located along the bottom of the display. Depressing these keys, from left to right, brings up 1) **recent apps**, 2) the **start screen**, and 3) executes a **back/esc** (to get back to the prior screen, close a dialogue box, etc.).



## XT100 Setup

### Removable Memory

#### IMPORTANT NOTE!

*To avoid possible damage to microSD and/or SIM cards or the XT100 itself, ESD (electrostatic discharge) precautions are recommended when installing or removing microSD and/or SIM cards. Before handling, discharge any personal static electric buildup to a point of discharge other than the device.*

#### microSD Card

##### About microSD Cards

The XT100 rugged touch computer has a microSD flash memory card slot in its battery compartment that is compatible with microSD memory storage cards with a capacity of up to 64GB (FAT32 file format). When inserted, a microSD card provides additional memory storage that is designated by the XT100's File Manager tool as "MicroSD card" and by its nature is external storage. Removable microSD memory is useful for general file storage, uploading and downloading of user data, and more. The use of high-quality microSD cards supplied by a reputable manufacturer is recommended.

##### To access the microSD card slot:

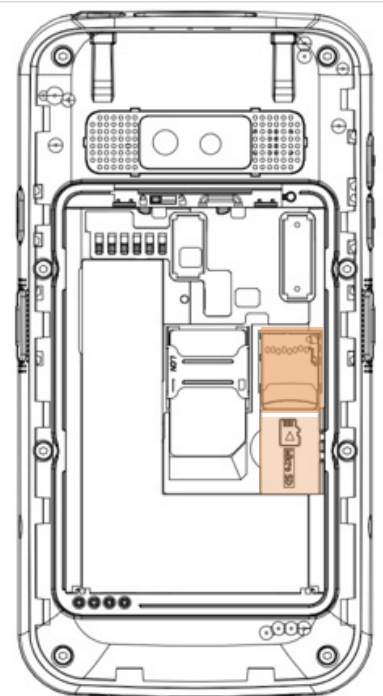
Remove the battery compartment cover on the back of the unit by lifting up the plastic tab on the lower right of the cover, then carefully undo the snaps, until the cover is loose. Remove the XT100 battery by pushing the spring-loaded orange lever until the battery pops out.

##### To install the microSD card:

Locate and push up the black rubber flap with "Micro SD" on it (light orange in illustration to the right). Place a compatible microSD card with its straight edge down (towards the bottom edge of the XT100) and its brand and capacity markings facing toward you. Fully insert the microSD card into its slot (marked dark orange). The XT100 will make a sound once the card is properly inserted and recognized. DO NOT attempt to insert the microSD card in any other orientation. Put the battery back into its compartment and put the battery compartment cover back on.

##### To remove the microSD card:

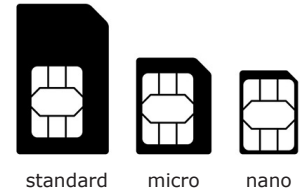
Before removing a microSD card, tap **Settings** > **System** > **Storage** > **SD card** > **Remove SD card**. This keeps data safe. Then remove the battery compartment cover and remove the battery. Gently remove the card.



## SIM Cards

### About SIM Cards

SIM (Subscriber Identity Module) cards are needed to add cellular voice and/or data communication service to devices equipped for cellular signal functionality. SIM cards carry an identification number unique to the owner, storing personal data, and preventing operation if removed. SIM cards can be transferred between devices supporting the same communications standards. SIM cards come in **standard**, **micro**, or **nano** format. Most carriers offer SIM cards in all standards, or they have cutouts for all three sizes (the electronics and contacts are the same for all sizes).



XT100 rugged touch computers equipped with optional WWAN (Wireless Wide Area Network) cellular signal functionality include a removable SIM card slot. Neither cellular signal connectivity for internet access nor optional 3rd party voice telephone applications can function without an activated SIM card installed. The XT100 SIM card slot is designed for use with a **standard SIM card**. If a SIM card provided by your cellular carrier uses the micro or nano format, you need a (readily available) SIM card adapter to use it with the XT100. Contact Janam or your local wireless carrier for more information about SIM cards and wireless service.

### To access the SIM card slot:

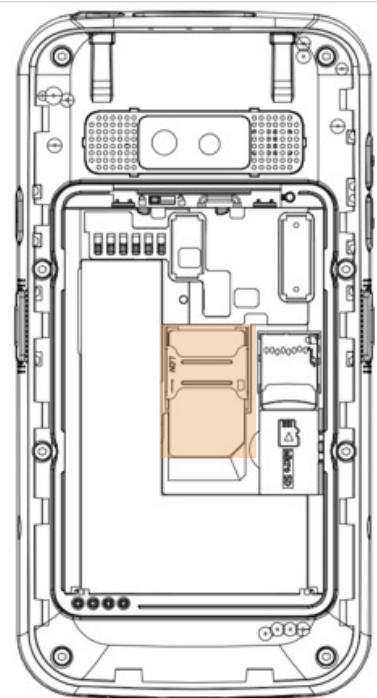
Remove the battery compartment cover on the back of the unit by prying up the plastic tab on the lower right of the cover, then carefully undo the snaps, until the cover comes off. Remove the XT100 battery by pushing the spring-loaded orange lever until the battery pops out.

### To install a SIM card:

The location of the SIM card slot in the battery compartment is shown in the illustration to the right. Orientate a compatible SIM card (or micro or nano SIM card in a standard SIM adapter) with its straight edge facing into the slot and its golden contacts surface facing down. Carefully insert the SIM card fully into slot.

NEVER attempt to insert a SIM card in any other orientation or force a SIM card into its slot.

Once the SIM card is installed, replace the battery and carefully put the battery compartment cover back on.



## USB Port

The XT100 provides USB connectivity through its **MicroUSB Connector** at the bottom of the device. Wired USB connectivity is also possible through the optional Single Slot Cradle.



## Backup, Restore and Reset

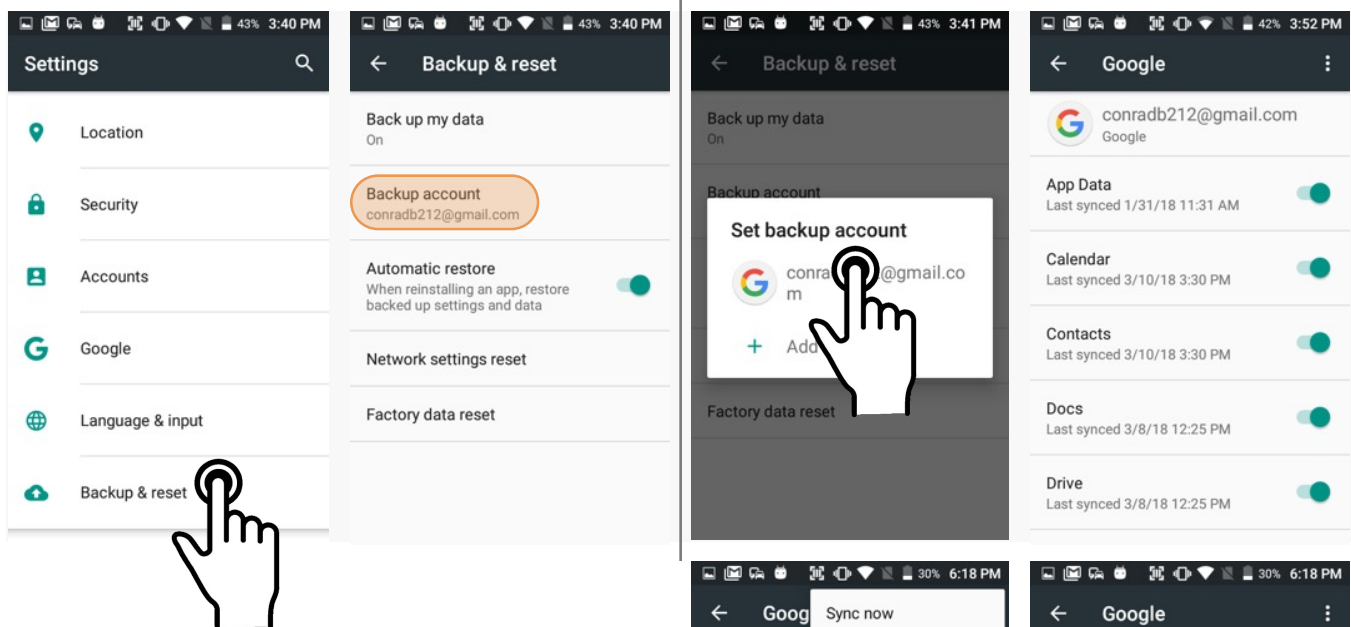
### Android backup concept

It is important to understand that Android does not offer a traditional full backup (i.e. one large file from which all software, settings, and data can be restored). Instead, Android synchronizes settings and data with Google, including WLAN passwords, bookmarks, contact and email information, a list of installed applications, application data, words added to dictionaries, app data, and most of the device settings.

All of this can be restored in case of a failure, or when moving onto a new device. The idea here is to provide continuity rather than a total 1:1 full backup. It works like this:

### Auto Backup for Apps

Android 6 allows backing up various settings and data to your account in the cloud transparently. This is enabled and set up in a two step process. First, enable the process in **Settings > Backup & Reset > Backup account**. Then go to **Settings > Accounts > Google** and check everything you want to sync.



With the above settings in place, all of the selected data, settings, and configurations will automatically be backed up to Google. You can also opt to sync at any time, either all supported applications or just a subset.

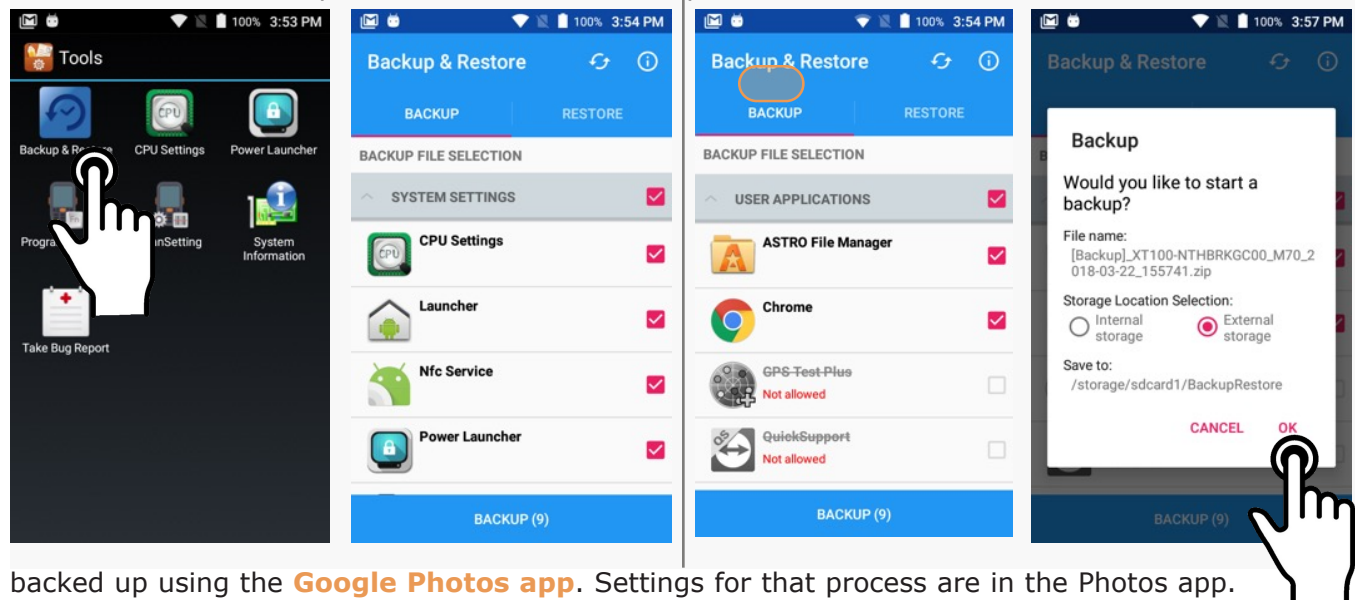
To restore everything, log into your Google account and all information and settings will be restored.

### Option B: Manual backup onto card

Android also offers a backup to local storage media. A removable microSD card can be used to restore the XT100 to its fully configured state. This process can also serve as a rapid deployment tool.

To create a card backup, go to **Tools**, then tap on **Backup & Restore**. In the Backup tab select everything you wish to be included in the backup. You can do that both for **System Settings** and **User Applications**. Note that not all user apps are allowed to be backed up (you can always download them again from the Play Store). Then tap Backup at the bottom of the screen. The backup file can be stored either on internal storage or external storage on a microSD card.

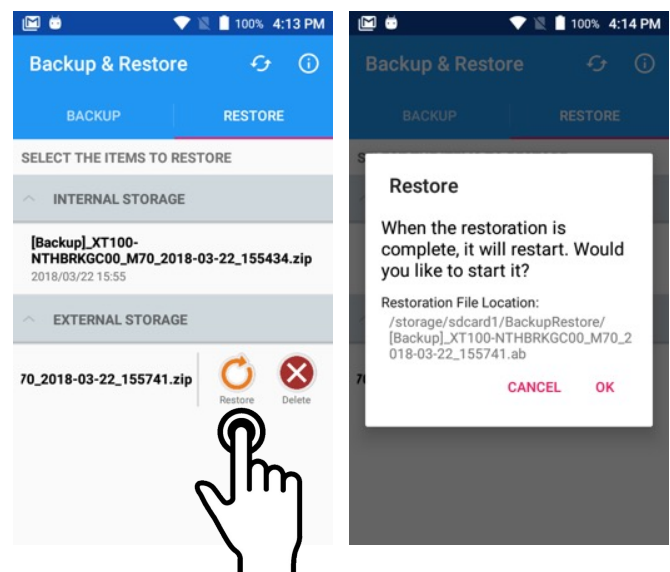
Note that these backup methods do not include photos, videos, and documents. Pictures can be



backed up using the **Google Photos app**. Settings for that process are in the Photos app. Other options are third party apps such as Flickr, Dropbox, Photobucket, or Microsoft OneDrive. There are also comprehensive third party solutions that back up everything, like MyBackup Pro.

### Restoring from a backup

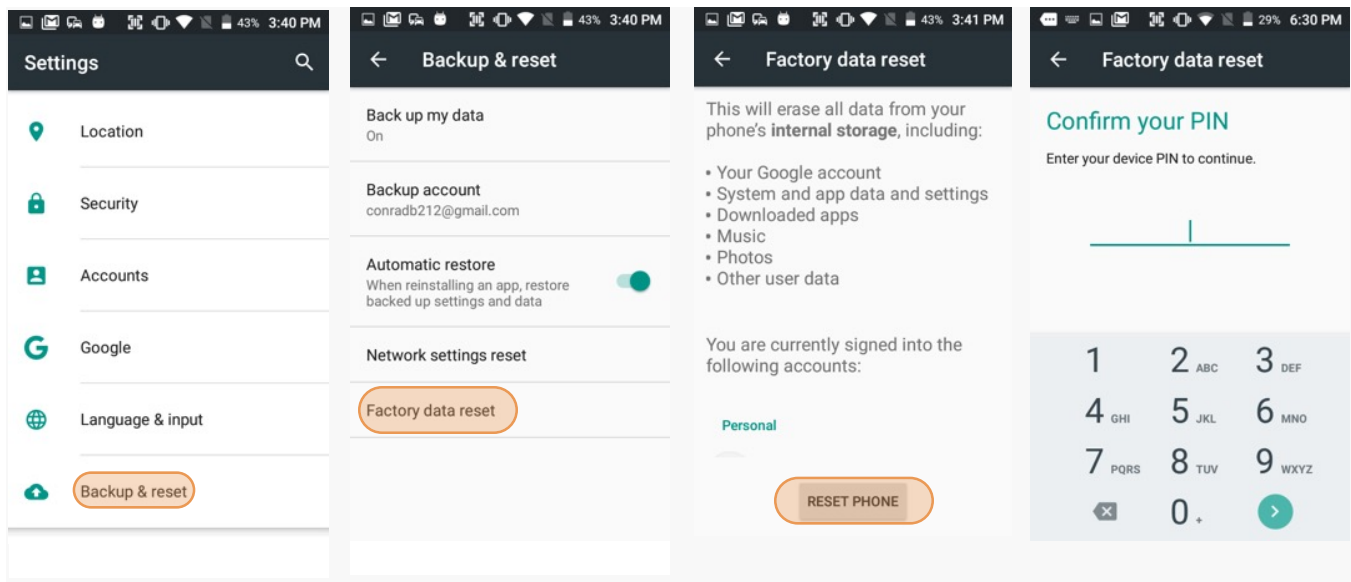
To restore from an internal or card backup, go to **Tools** and click on **Backup & Restore**, then tap on the Restore tab. If there are multiple backup files, select the one you wish to restore and tap on it.



## Resetting the XT100 to factory condition

Resetting the XT100 erases all personal data from internal device storage. This includes Google Account information, information about any other accounts, system and application settings and configurations, and any downloaded applications. The device is returned to factory condition.

To perform a full reset go to **Settings > Backup & Reset**, then tap on **Factory data reset** at the bottom of the screen. This brings up a warning screen. If you wish to proceed, tap on **RESET PHONE**. Depending on your access security options, you will be asked to supply your PIN, password, or pattern. Once everything has been erased, you can turn off the device, or opt to reboot and set it up from scratch or from a backup.



If you are unable to power on your device, you can perform a factory data reset by pressing the Power key and the Volume up key at the same time until the screen lights up.



## Security

### Android Security

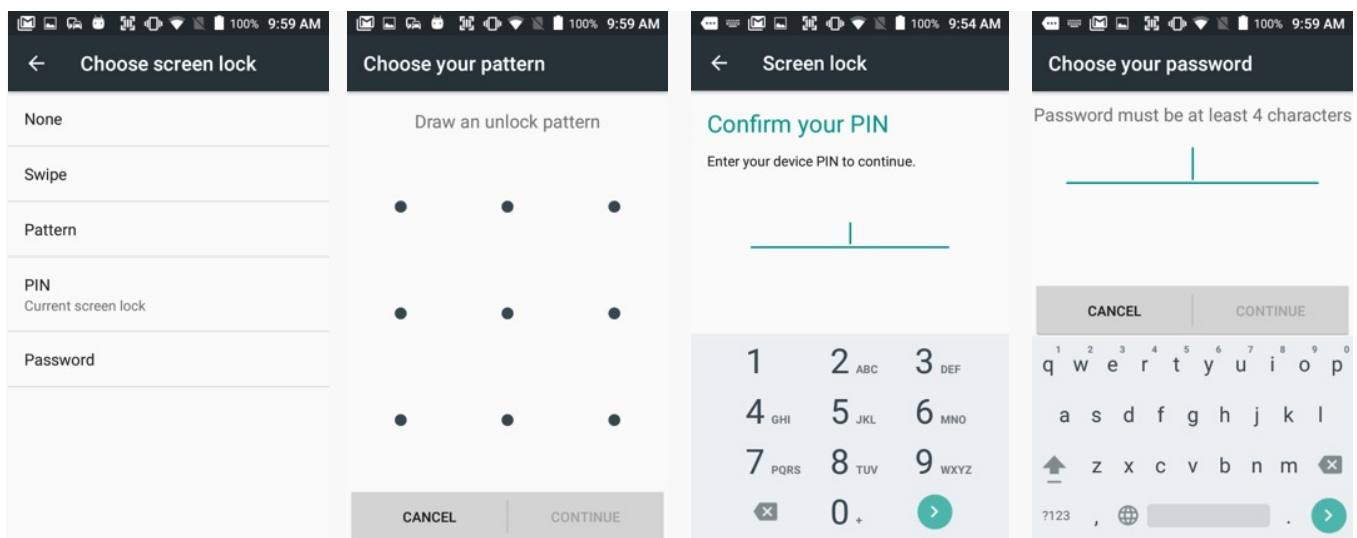
The Android 6 operating system installed on the Janam XT100 can inherently provide a high degree of security, centering around three areas:

- ☐ **Boot verification** to guard against unauthorized data access
- ☐ **Granular permission by app** to guard against unauthorized app access
- ☐ **Smart lock passwords** to store third party passwords
- ☐ A **screen lock** to guard against unauthorized data access
- ☐ **VPN separation** between multiple services
- ☐ **Encryption** strong enough to virtually eliminate data breaches
- ☐ A **device manager** that can help to find or remotely wipe a lost device

Some of this security is implemented automatically behind the scenes, but other areas require user input.

### Screen Lock Types

Android provides several lock screen options. Patterns must connect at least four unique dots, PINs must be at least four digits long (but can be as long as 16), and passwords must be at least four characters (but can also be as long as 16). To set, go to **Settings > Security > Screen lock**.



### Changing Screen Lock Settings

Lock screen options can be changed anytime. You can go from PIN to pattern or password, etc. To make a change, go to **Settings > Security > Screen lock**. If you have lock screen security in place, you must enter the code before you can change the screen lock type or code.

## Additional Screen Security Settings

Users can tailor screen lock security according to their preferences (or company policy) at **Settings > Security**. Among the available options are:

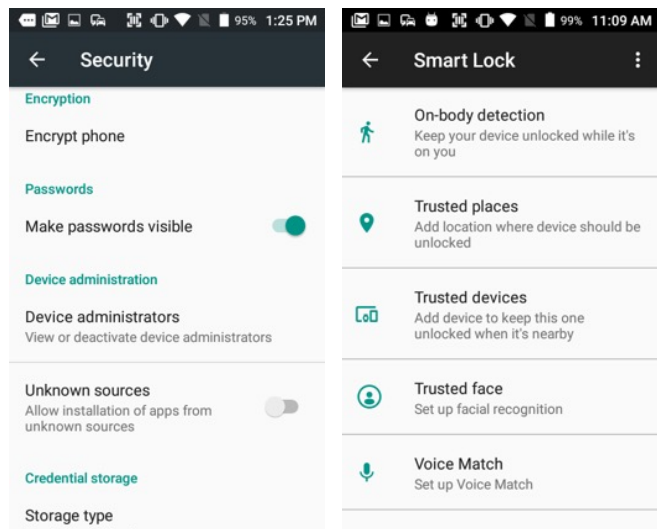
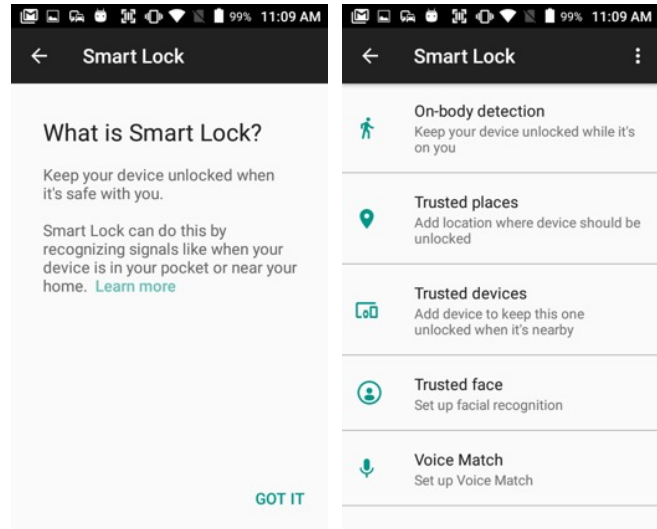
- ☐ **Automatically lock** (can be set from 5 seconds to 30 minutes)
- ☐ **Power button instant lock** (screen instantly locks when power button is pushed)
- ☐ **Lock screen message** (instant identification of device)

In addition, there is a SmartLock feature that locks your device depending on certain circumstances. This can make using your XT100 both more convenient *and* more secure.

- ☐ **On-body detection**  
(device stays unlocked as long as it is held or carried around)
- ☐ **Trusted places**  
(device stays unlocked within defined geographic areas)
- ☐ **Trusted devices**  
(device stays unlocked when close to, for example, a Bluetooth watch, or a Bluetooth-equipped vehicle)
- ☐ **Trusted face**  
(uses face recognition to unlock, with other method as a backup)
- ☐ **Voice Match**  
("Ok Google" detects your voice)
- ☐ **Encryption**

Android 6 allows full encryption of accounts, settings, downloaded apps and their data, media, and other files. Once encrypted, any device protected with a PIN, password or swipe pattern can only be decrypted with the correct code.

- ☐ **Passwords**  
Option to display passwords visibly.
- ☐ **Device administration**  
There are several **Device Administrator** apps that can be either turned on or off. Users can also opt to allow installation of apps from unknown sources.
- ☐ **Credentials storage**  
"Credentials" are used for secure transactions. The **Credential storage** section displays a list of credentials, allows installation of credentials from SD cards, as well as removal of credentials.
- ☐ **Advanced**  
Android is using **Trust agents**. An example is "Smart Lock." **Apps with usage access** lists local apps that monitor usage. Usage can be turned on or off.



## Device Settings

The XT100 can be configured according to your personal preferences. This makes the device easy to use and helps to enhance efficiency and productivity.

### Display

The **Brightness level** can be adjusted manually or the XT100 can use its **Adaptive brightness** to adjust the brightness level automatically.

**Wallpaper** allows selecting from various types of screen backgrounds.

The **Sleep** screen allows screen timeout and device suspension be set between 15 seconds and never.

The **Wakeup Source** screen sets what can and cannot wake the device up (like buttons, cables, headsets, scan triggers, etc.).

The **Daydream** setting lets you set the screen saver when being docked or charging (like clock, news, weather, pictures).

**Font size** can be set to **Small**, **Normal**, **Large**, and **Huge**.

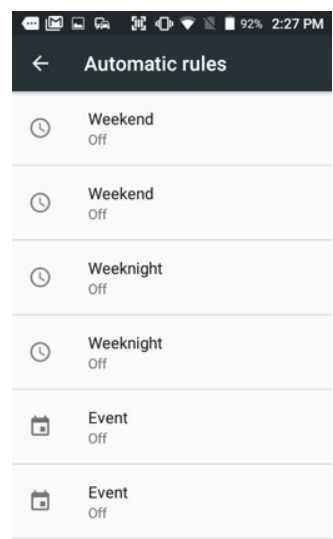
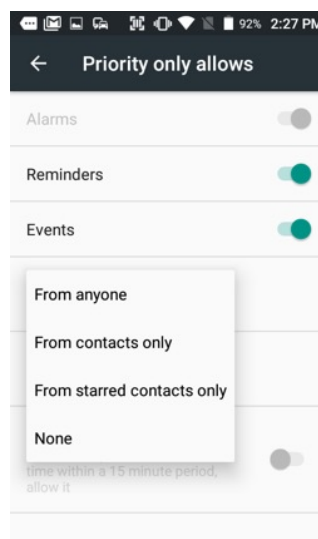
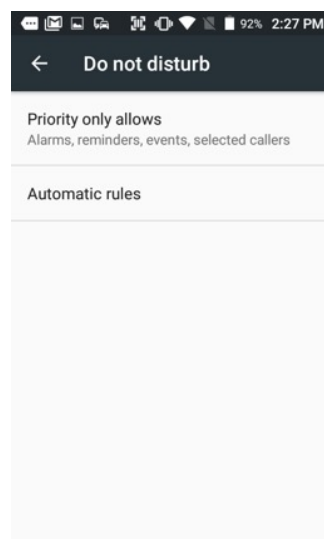
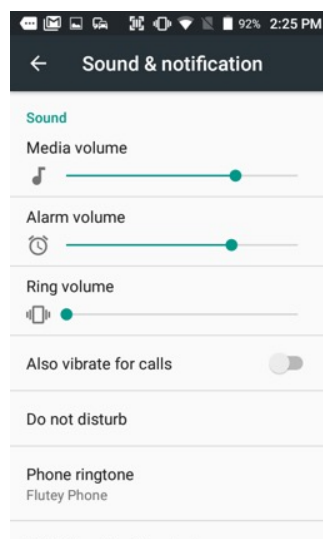
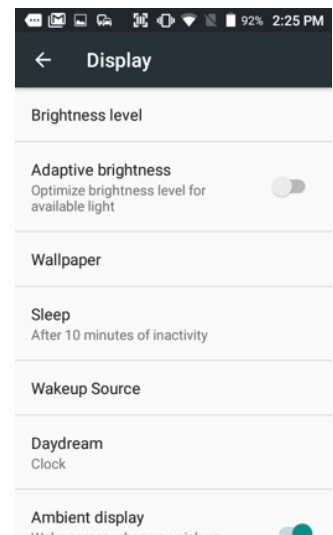
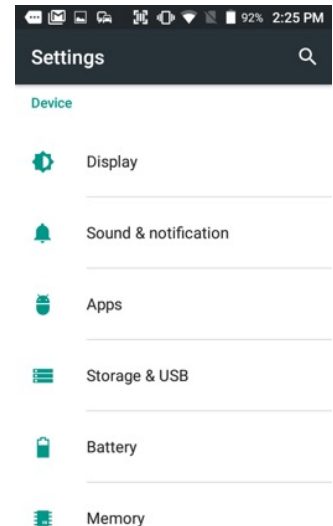
**Ambient display** wakes the screen on device pickup or notification.

**When device is rotated** determines if the display automatically adjusts the orientation of the screen between landscape and portrait when the terminal is rotated.

### Sound & notification

Allows setting of **volume of media, alarms, rings**, and the **vibrate intensity**. Calls can be set to vibrate or not.

You can set **Do not disturb** rules, both in general and for what is allowed to override. This includes getting reminders, calls, messages, restrictions on whose calls and messages should interrupt, and what days and times they may and may not interrupt.



## Device Settings (continued)

### Storage

Touch **Storage & USB** from the **Settings** screen to view use and space statistics for the internal storage on the device and the installed SD card. The SD card screen lets you eject or format a card.

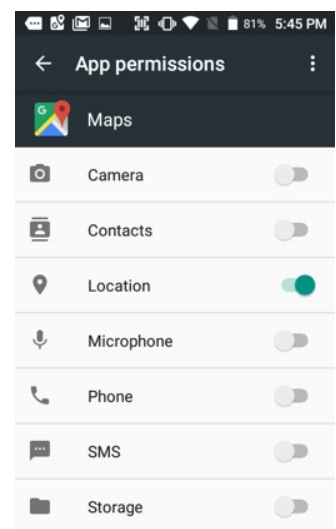
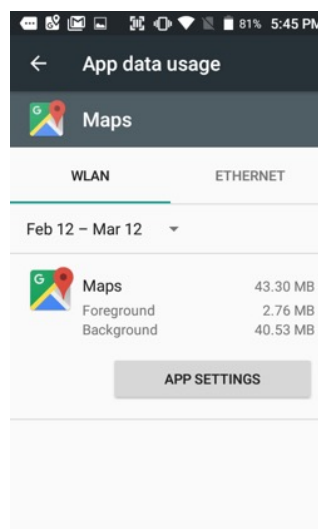
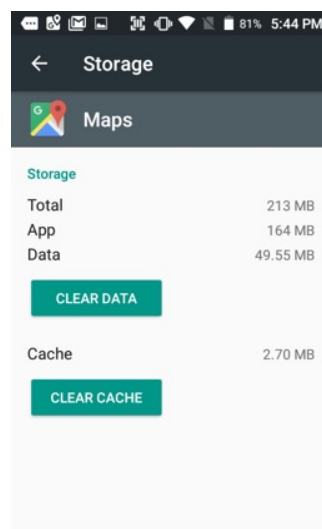
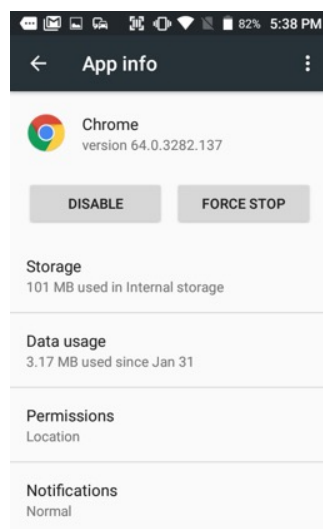
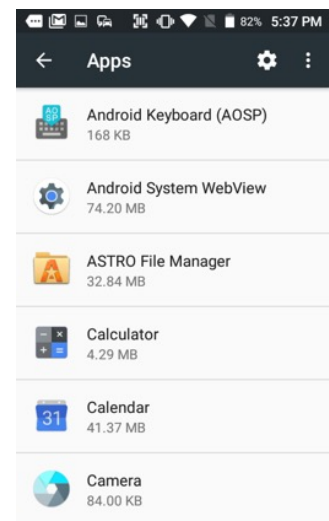
### Apps

Touch **Apps** from the **Settings** screen to view, and evaluate how applications installed on the terminal utilize memory and storage resources.

The App info screen contains detailed statistics on an app including the amount of storage or cache utilized, default launch settings, and access permissions granted to the app. Statistics useful when troubleshooting slow terminal performance, low memory issues, or an unresponsive application. The App info screen also provides access to perform the following actions:

- ☐ Force stop the app,
- ☐ Disable the app,
- ☐ Data usage, both for WiFi and WLAN
- ☐ App permissions,
- ☐ App notifications,
- ☐ Setting an app as a priority,
- ☐ Clear cache, or
- ☐ Clear any Launch by default settings assigned to the app.

To access the **App info** screen, touch the app name on the list displayed under the **Downloaded** tab on the **Settings > Apps** screen.



## Personal Settings

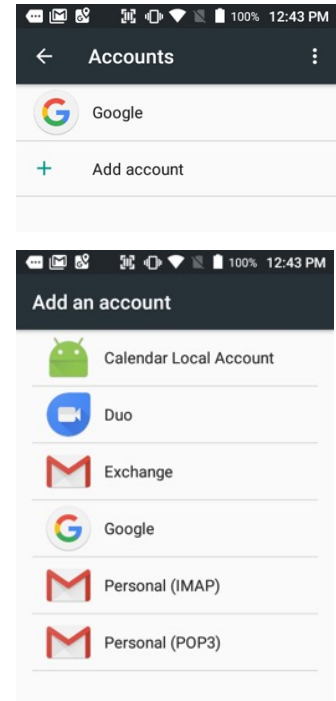
### Accounts

**Settings** > **Accounts** is where email accounts are set up. To add an account, tap **Add account**, then tap the type of account to add. Follow the on-screen instructions to enter the required information for the account type selected.

Depending on the type of account, you may need to provide a user name and password, select security settings, and configure data sync preferences during the setup.

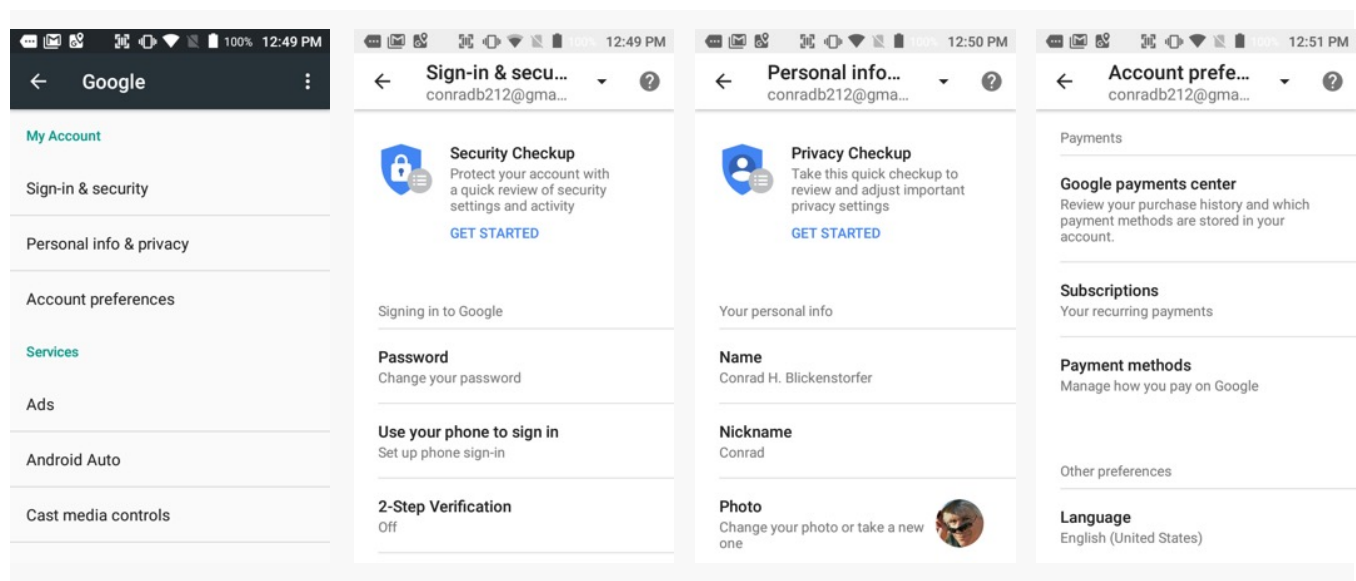
The account appears on the **Accounts list** when setup is complete. Depending on the settings you selected during the account configuration, your XT100 device may automatically start to sync account data (e.g., email, contacts, music and calendar, etc.).

To remove an account, go to **Settings** > **Accounts**. Tap the account you wish to delete. Press the Menu button at the right top of the screen and then select Remove account. Tap Remove account to confirm deletion.



### Google Account Settings

Some XT100 users may wish to have both a Google account and a corporate, work, business or private account. If so, make sure to carefully examine all Google account settings at **Settings** > **Accounts** > **Google**. Most of these settings are on the Google servers, and tapping on items to change them or view more information will generally get you to your online Google account.

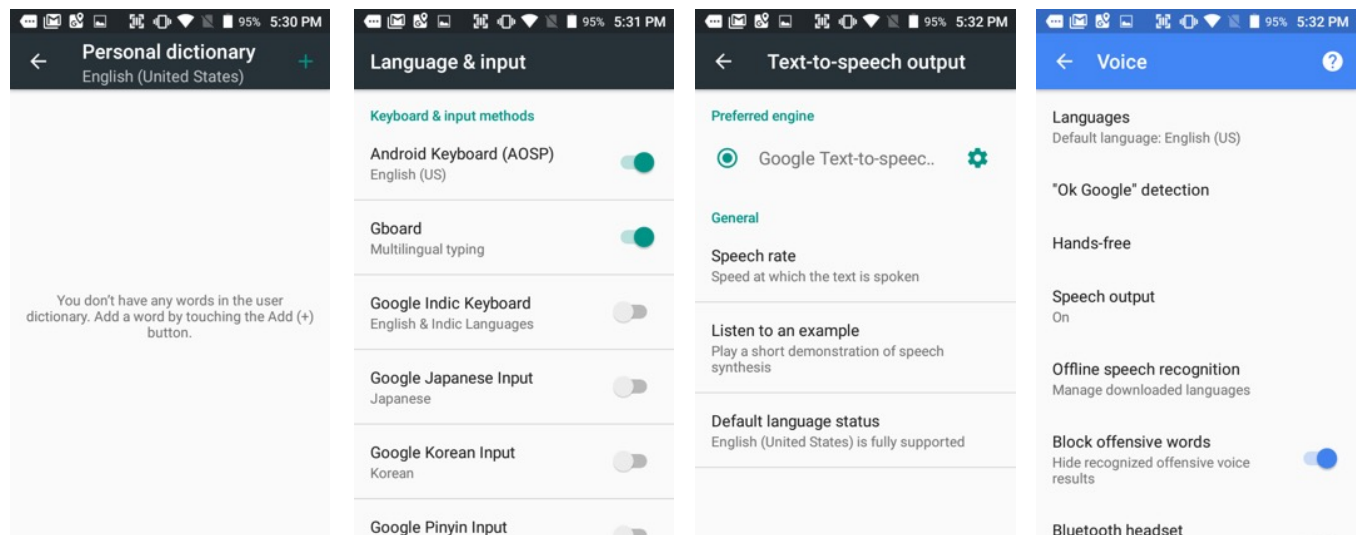
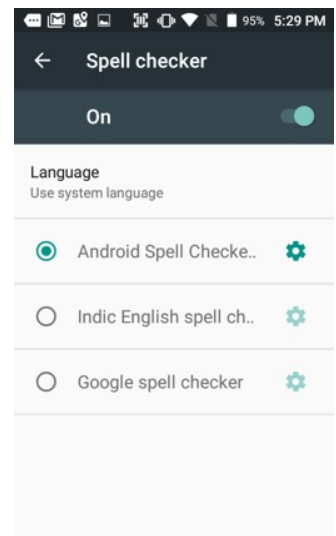
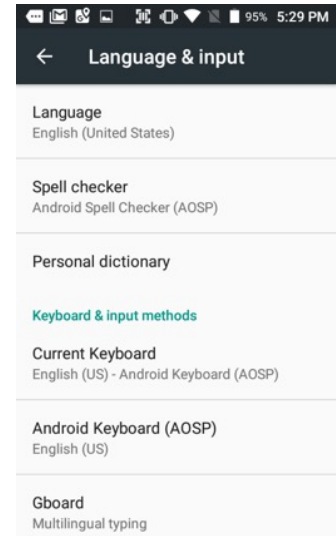


## Personal Settings (continued)

### Language & input

To configure and customize various language and input settings of your XT100, go to **Settings > Language & input**. Here you can set:

- ☐ **Language:** Select from a long list of available languages.
- ☐ **Spell checker:** Turn the Spell Checker on and off, select which one you wish to use, and allow or deny looking up of names in your contact list.
- ☐ **Personal Dictionary:** Here you can add, edit, or delete words from your optional personal dictionary.
- ☐ **Keyboard & Input Methods:** By default, the enhanced virtual keyboard appears when you open an application or select a field that requires text or numerical input. The content of the keyboard may vary depending on the selected default, the application in use, and the input field requirements.  
To modify the default method for entering text, go to **Settings > Language & input** and tap on **Current keyboard**. Here you can also configure and customize your keyboard.
- ☐ **Speech:** Here you can configure **Google Text-to-Speech**, including language, volume, intonation, how numbers are spoken, etc.
- ☐ **Voice:** Allows voice-type settings, including language, "Ok Google" detection, hands-free, speech output, offline speech recognition, offensive word blocking, and recording through a Bluetooth headset.
- ☐ **Mouse/Trackpad:** Adjusts the sensitivity and speed of the touch screen response to your finger swipe.





## System Settings

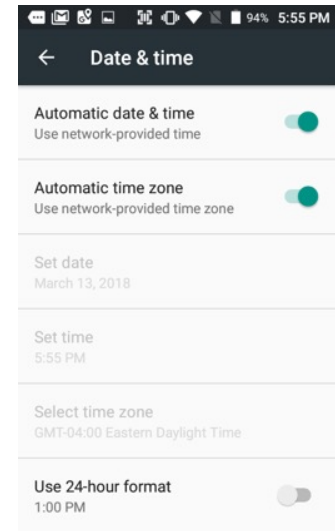
### Date & time

To set date and time, go to **Settings > System** and tap **Date & time**.

Here you can configure the date, time, time zone, time format, and date format.

You can set the device to synchronize the date and time using a network connection by checking the **Automatic date & time** box or you can manually enter the values by touching **Set date**, **Set Time**, or **Select Time zone** (note that if the Automatic option is checked, the Set date, Set time, and Select Time zone time menu options are grayed out).

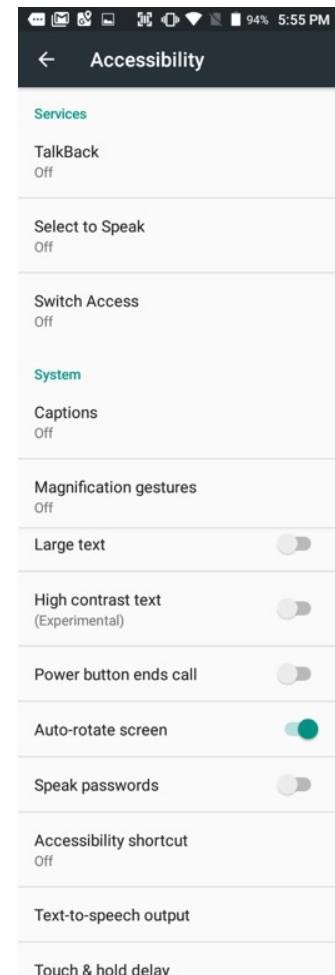
To modify how the time is displayed on the screen, check the **Use 24-hour format** box to switch from a 12-hour cycle to a 24-hour cycle. In a 24-hour time cycle, 1:00 pm displays as 13:00 pm.



### Accessibility

To configure features that make using the XT100 easier for people with certain physical disabilities, go to **Settings > System** and tap **Accessibility**. Services, system settings and display settings include:

- ☐ **TalkBack:** When on, provides spoken feedback such as describing what's been touched, selected or activated.
- ☐ **Select to Speak:** When on, you can tap single or multiple (drag to select) items to hear them read aloud.
- ☐ **Switch Access:** Enables the use of switches to select items, scroll, enter text, etc.
- ☐ **Captions:** When on, displays captions in various languages, sizes and formats in apps that support it.
- ☐ **Magnification gestures:** When on, triple tapping the screen zooms in and out. Allows panning while zoomed, as well as triple tap and hold to zoom into details.
- ☐ **Large text:** Increases text size (almost) everywhere. May come in handy for anyone needing reading glasses!
- ☐ **High contrast text:** When checked, tries to use higher contrast text styles.
- ☐ **Power button ends call:** When checked, makes it easier to hang up on a call by simply using the power button.
- ☐ **Auto-rotate screen:** When checked, makes it easier to hang up on a call by simply using the power button.
- ☐ **Speak passwords:** When checked, reads passwords out loud.
- ☐ **Accessibility shortcut:** When turned on, allows activating/unactivating all accessibility settings all at once.
- ☐ **Text-to-Speech output:** When checked, turns on text-to-speech and allows configuration of options.
- ☐ **Touch & hold delay:** Can be set to short, medium, or long.



## Wireless Network Configuration

### Introduction

#### **IMPORTANT NOTE!**

*Some wireless networks, especially those in public areas, are unsecured, i.e. they do not require a password in order to establish a network connection.*

Wireless local area networks (WLANs) allow XT100 rugged touch computers to send and receive information wirelessly within the range of the wireless network they are connected to at a given time. Wireless network connectivity may or may not include access to the Internet, depending on the network's mission and configuration.

A given physical area may have multiple wireless local area networks (WLANs), sometimes referred to as Wi-Fi hot spots, which the XT100 can see as it scans for available networks.

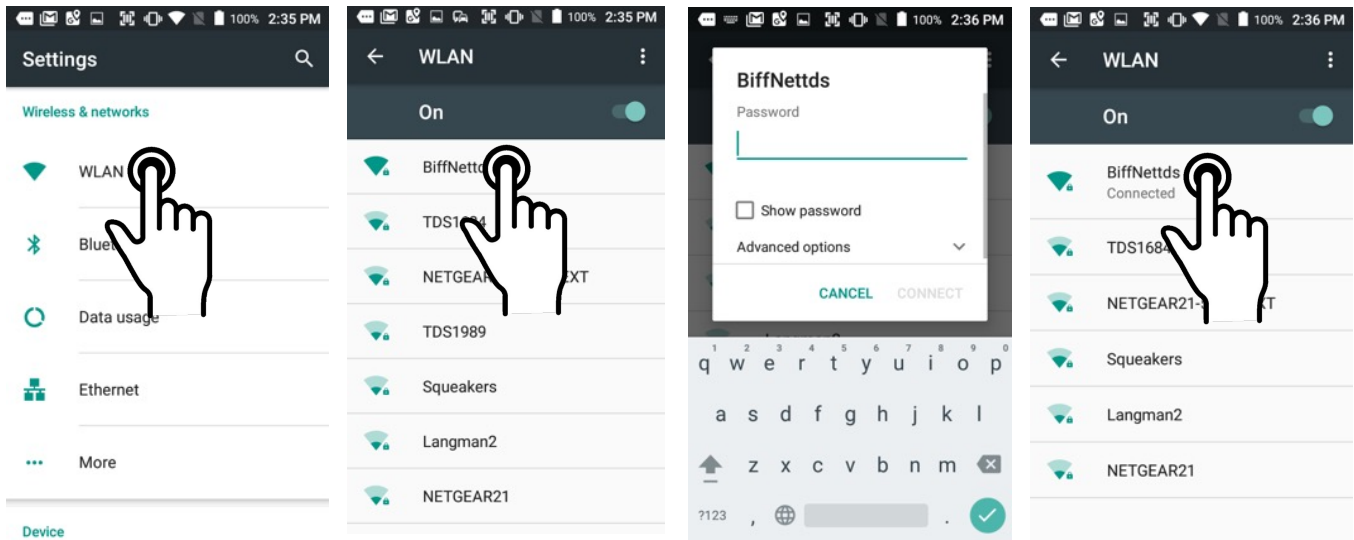
Typically, wireless local area networks are configured with a security scheme. Wireless devices connected to a wireless network must:

- A. Be configured for compatibility with the host wireless network's security requirements. These security requirements are necessary to prevent unauthorized access to the wireless network, and also to prevent damage to computers using the wireless network.
- B. Be granted access to the host wireless network through the use of a security code (password) established by the host wireless network's administrator to protect the network from unauthorized use. Public wireless networks may require both a login and a password for a connection.



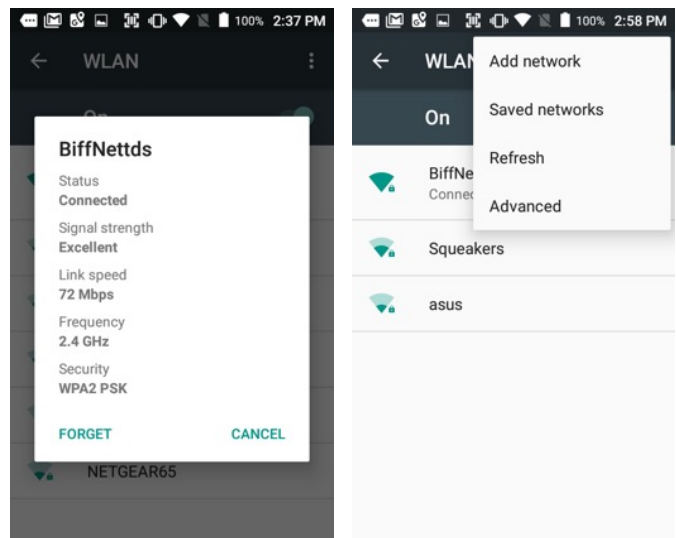
## Connecting the XT100 to a Wireless Local Area Network (WLAN)

To initially connect the XT100 to a wireless local area network, go to **Settings** > **Wireless & networks** > **WLAN**. Turn **WLAN networking** on. The XT100 will begin searching for available Wi-Fi networks. After a few seconds it will list what it has found, including the approximate signal strength and whether or not a network is secured by a password or not. Tap on your preferred network. Enter the password. The connection will be established. Upon successful completion, the network link will show up as **Connected**.



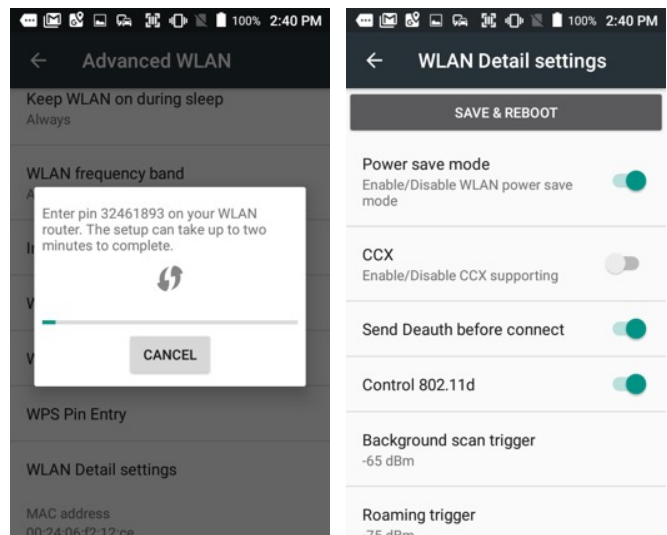
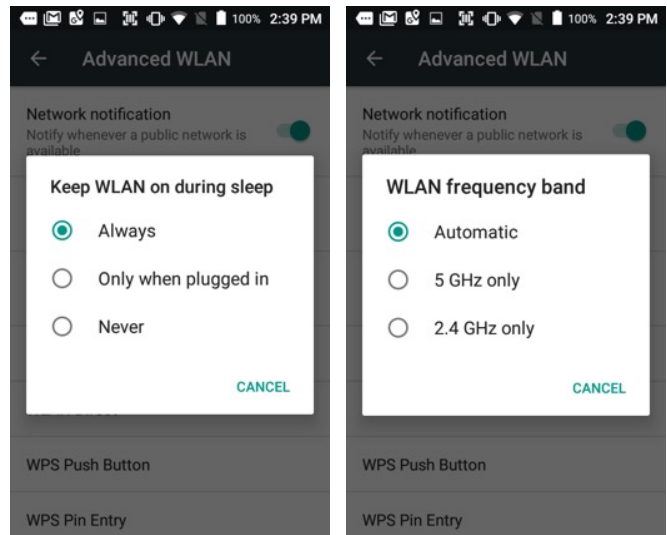
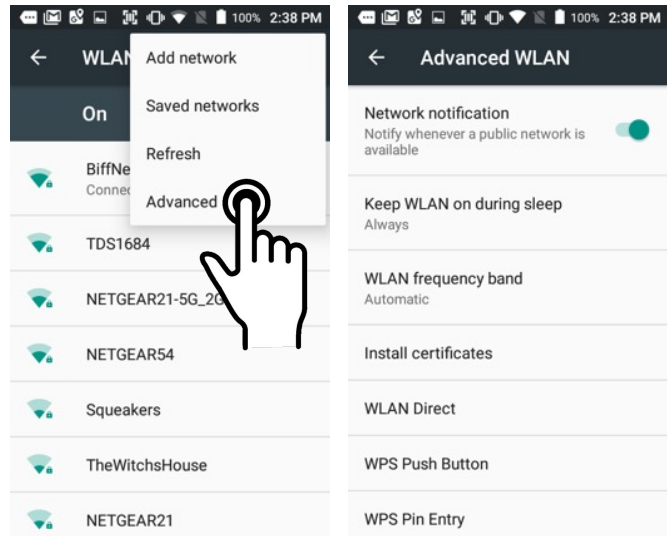
If you tap on the network you are connected to, a window pops up that shows information about the connection, including signal strength, link speed, frequency, and the type of security. Here you can also opt to **forget** this network, so that next time you come within range of it, the XT100 will not automatically connect.

In **Settings** > **Wireless & networks** > **WLAN**, you may also tap the options button on the upper righthand corner. This launches a pop-up from where you can add a network or bring up a list of already saved networks.



## Advanced Wi-Fi options

- **Network notification:** Turn notifications on or off whenever a public network becomes available.
- **Keep WLAN on during sleep:** Sets Wi-Fi status when the XT100 goes to sleep. It can be set to on, only on when the device is plugged in, or off.
- **Wi-Fi frequency band:** If your device only supports the 2.4GHz band it makes no sense to list 5GHz networks. Here you can set what to look for, or set it to automatic.
- **Install certificates:** Certificates use a cryptographic key to allow certain secure web connections. Certificates are saved on the device for activation on **Settings > Security**.
- **WLAN Direct:** Used for a peer-to-peer Wi-Fi connections that do not need a Wi-Fi wireless access point.
- **WPS Push Button:** Many routers have a WPS (Wi-Fi Protected Setup) button for easy device connection to a network.
- **WPS Pin Entry:** Some routers may offer WPS (Wi-Fi Protected Setup), but still require entry of a special PIN on the device.
- **Wi-Fi Detail settings:** These are some lesser used options, such as enabling the CCX (Cisco Compatible Extensions), enabling Wi-Fi power saver mode, letting Wi-Fi handle 802.11d geographical regulations, and setting the roaming trigger level (signal at which the device starts looking for another access point).



## Bluetooth

### ***Introduction***

Bluetooth is a popular PAN (Personal Area Network) technology used for short-range wireless communication. Devices with Class 2 Bluetooth capabilities, such as the Janam XT100, can send and/or receive information over distances of approximately 10 meters (30 feet).

Unlike older infrared technology, Bluetooth does not rely upon uninterrupted line-of-sight between devices that need to exchange information. As a result, you can send information to or receive information from another Bluetooth-capable device even if the two devices are located in different rooms, as long as they are within range.

#### **Bluetooth can be used to:**

- Enjoy the convenience and productivity of a wireless headset.
- Send or receive information such as files, appointments, tasks and contact cards between Bluetooth-capable devices.
- Print from the XT100 to Bluetooth-enabled printers.
- 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.

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 XT100 rugged touch computer. Please note that complex or custom installations may require additional expertise from Janam's technical support team and/or the manufacturer of the device to be paired.

#### **Bluetooth Partnerships:**

A Bluetooth partnership (often referred to as a pairing) is, as it relates to this chapter, a relationship created between the XT100 and another Bluetooth-capable device to securely exchange information or provide a Bluetooth function. Creating a partnership involves (A) one Bluetooth device being instructed to discover other Bluetooth devices that have been authorized to be visible and within its range, and (B) entering the same Bluetooth Passcode on both devices. Once a partnership is created, the then partnered (or paired) devices need only have Bluetooth turned on and be within range to function. Already partnered Bluetooth devices do not need to be made visible.

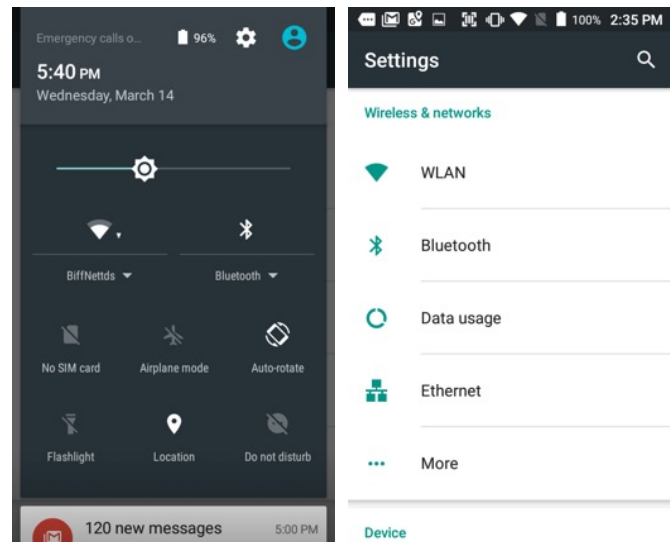
Once partnered, the devices can exchange information without re-entering the Passcode.

## Bluetooth Concepts

Bluetooth does not have to be on in order for the XT100 to function. In fact, since the Bluetooth radio consumes power, it should be turned off when it is not needed. You can see that Bluetooth is active when the small **Bluetooth icon** is visible in the **status bar** on top of the **home screen**. Swiping down from the top of the XT100 screen reveals an extended view where Bluetooth can be turned on or off. In the example shown below, the Bluetooth tile is lit up, which means Bluetooth is on.

Note that in Bluetooth terminology, there is a difference between “**paired**” and “**connected**.” Paired means that a Bluetooth relationship has been established between two devices, and they know each other. Connected means the devices have an active connection.

Depending on the type of device, a connection may be established automatically once already paired devices are within range (like a Bluetooth keyboard for a desktop computer). For other paired devices it may make more sense to manually connect them as needed (like for file transfer between devices).

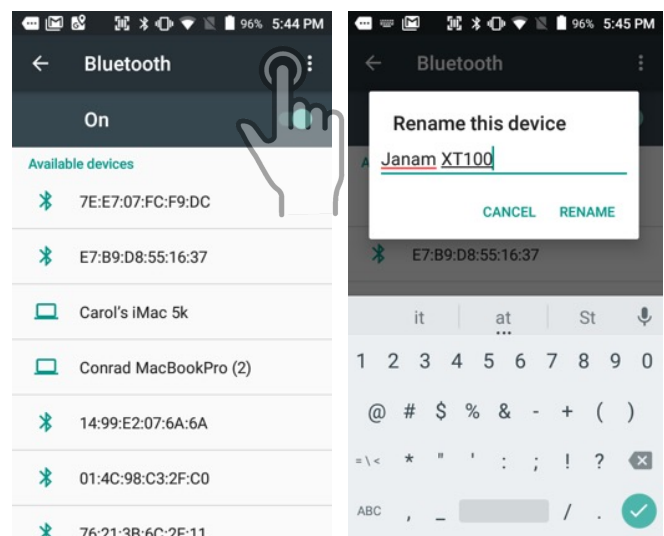


Bluetooth connections can have different capabilities, such as sending or receiving files, providing certain information, providing certain types of security, or connecting to certain sensors. Services can work one way or both ways.

## Turning Bluetooth On and Discoverable

In order for the XT100 to establish a Bluetooth connection, it needs to be **discoverable**, i.e. Bluetooth must be on and other Bluetooth devices must be able to “discover” it as a connection candidate. To make the XT100 discoverable, go to **Settings** > **Bluetooth** and turn Bluetooth status on. After a few seconds, the screen will start filling with suitable devices that also have Bluetooth on and are set to be discoverable.

Note that it’s not always easy to determine the nature of discovered devices. In the example shown to the right, two are listed only by the MAC (Media Access Control) hardware address. To keep the XT100 from showing up with such a code or serial number, rename it to something descriptive (like “Janam XT100”)!



## Bluetooth Pairing

Due to the large number of Bluetooth enabled devices there are really no universal pairing procedures. Pairing your smartphone with your car may be very different from pairing your XT100 with a desktop PC or portable printer. And pairing with a device with a display will be different than pairing something that does not have a display, like headphones.

The example to the right shows pairing the XT100 with a desktop Apple MacBook. Go to **Settings > Bluetooth**, turn Bluetooth on, and wait until the Mac shows up as a device that can be paired, then **Tap to Pair**.

In this combination, the XT100 then receives a pairing request from the Mac, which you accept. And in this instance, a unique **6-digit Passkey number** is generated so that you know you're pairing with the device you intended to pair.

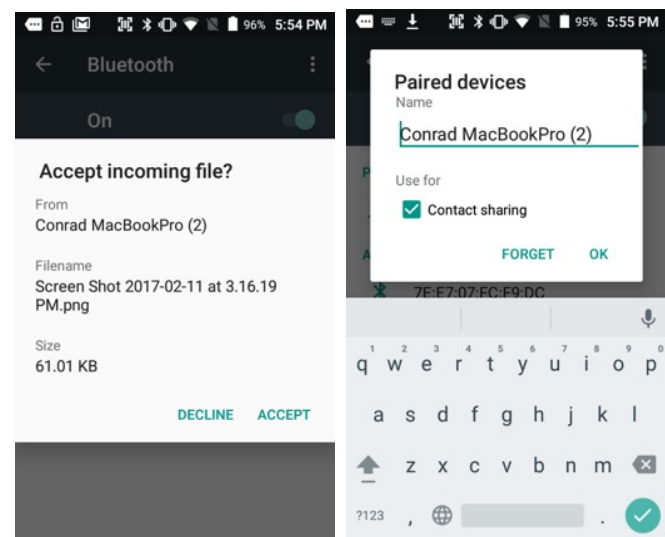
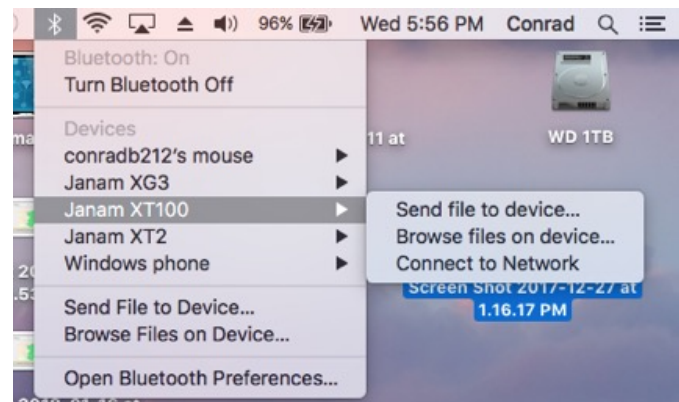
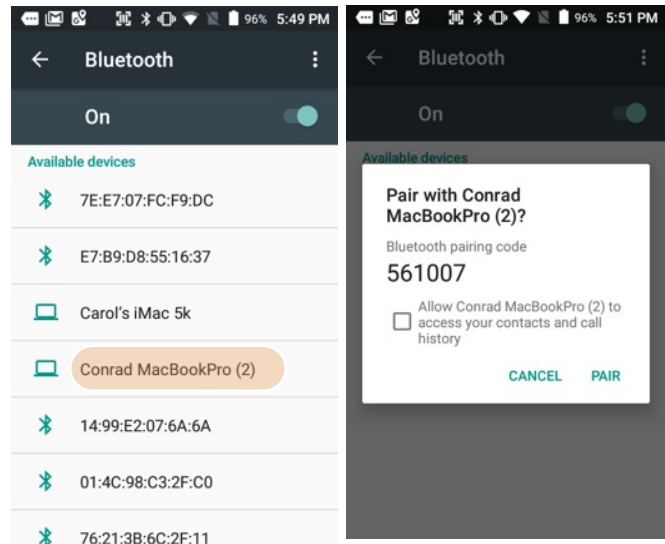
If the number is the same on both devices, accept the pairing request on both the XT100 and the iMac, and the two devices will be paired.

Paired devices will remain on the XT100's list. There is no need to pair the same devices again. They will stay paired until you tap and hold a paired connection on the XT100 and select **delete** on the resulting popup.

### Available Bluetooth Services

As stated above, Bluetooth "services" between two connected devices vary. In this case, the pairing between the XT100 and the MacBook allows the MacBook to send files to the XT100, and the Mac can use the XT100's cell connection to connect to the Internet.

The Mac side is capable of browsing files on the connected XT100, but Bluetooth on the XT100 does not provide that service in the other direction. It is only used for contact sharing.





## Camera

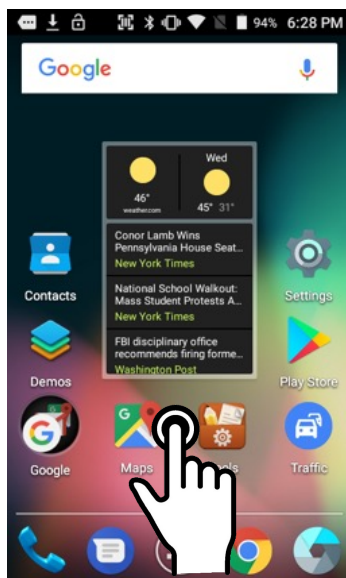
### Introduction

The XT100 rugged touch computer features a 13 megapixel CMOS rear-facing autofocus camera with user-controllable LED flash for capturing crisp still pictures and video clip recording. Both functions are useful for documentation of inventory locations, product damage, procedures and more. In addition, the XT100 incorporates a 2.0 megapixel front-facing still picture camera primarily intended for video conferencing and video calls.

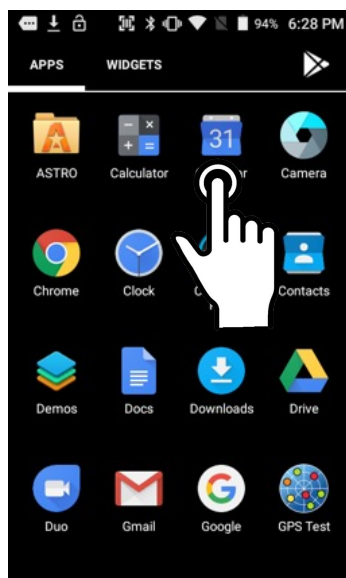
#### Different ways to activate the camera:

- Tap the **Camera** icon on the XT100 **Apps Screen**
- Tap the **Camera** icon on the XT100 **Home Screen** (if you placed a camera shortcut there)
- Tap the **All Apps** control on the **Home Screen** and then tap **Camera**
- Optional: set programmable hardware button to launch the camera (Use **Tools > Program Buttons** to assign launching the camera to the right-most hardware button)

From Start Screen



From Action Center



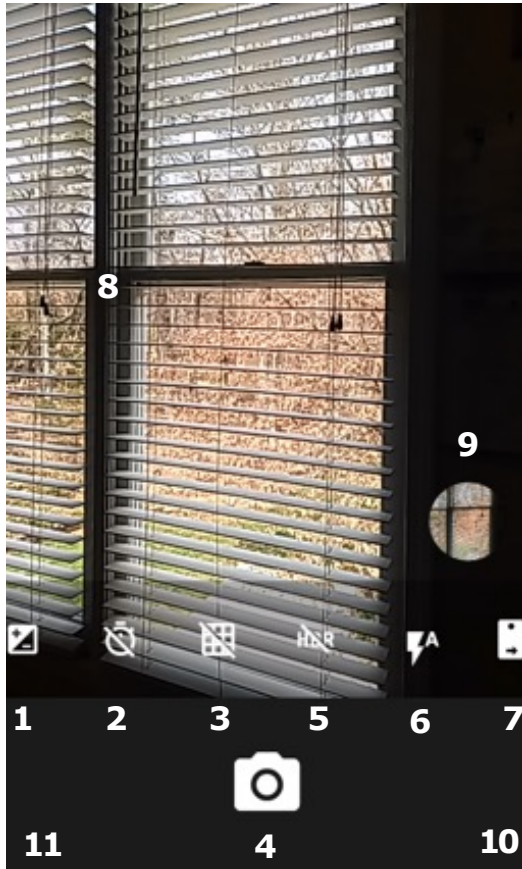
Buttons that can be programmed to use camera



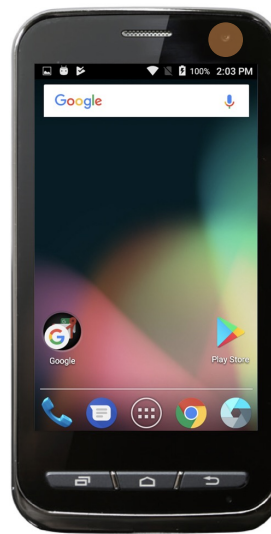
## Camera Controls Overview

All XT100 camera controls are on-screen. The camera can be used both in portrait or in landscape orientation.

Camera controls in portrait mode



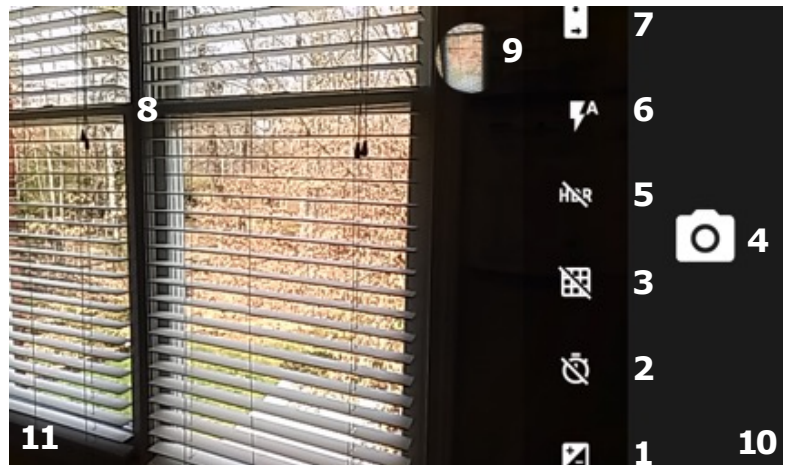
Front camera location



Rear camera location

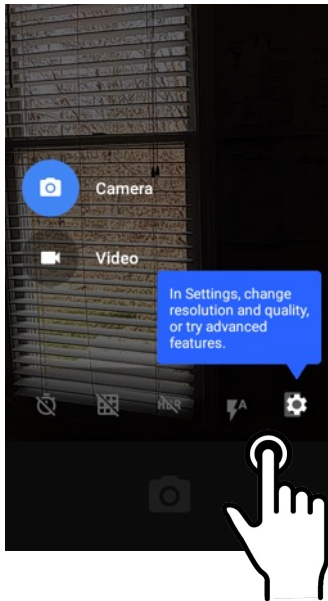


Camera controls in landscape mode



- 1 When set to manual, this allows for **Exposure Compensation** (-2 to +2 in 0.5 increments).
2. **Timer** control. Tap to cycle through off/3/10 seconds.
3. Toggles between **framing grid overlay** on and off.
4. **Shutter Release**
5. **HDR** (High Dynamic Range). Tap to toggle HDR on/off.
6. **Flash** for rear camera. Tap to cycle on/auto/off. In video mode, it turns LED light on/off.
7. **Camera selection**. Tap to toggle between front and rear camera.
8. Touch wherever you want the camera to focus.
9. When set to manual, this allows for **Exposure Compensation** (-2 to +2 in 0.5 increments).
10. Swipe left to bring up the **Gallery app** for photo editing.
11. Swipe right to bring up **camera** or **video** selection, and **Settings**.

## Camera Settings



When using the Camera app, swipe right anywhere on the screen to bring up the camera/video selection and the Settings button.

### Setting camera resolution

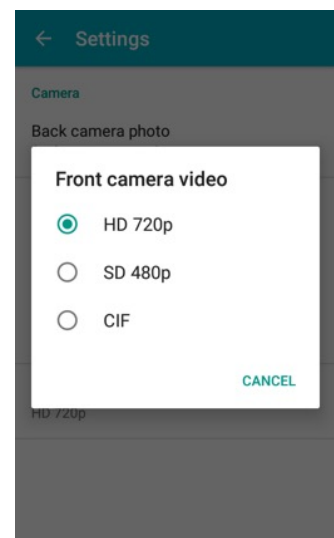
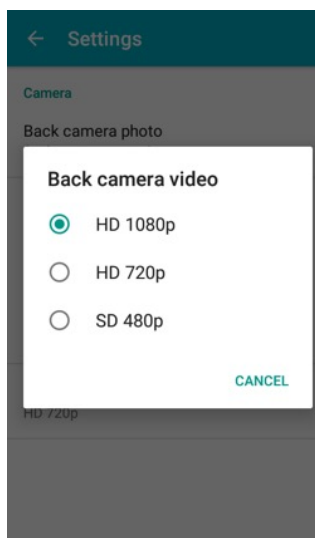
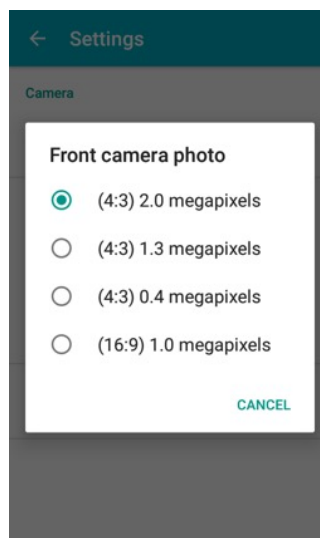
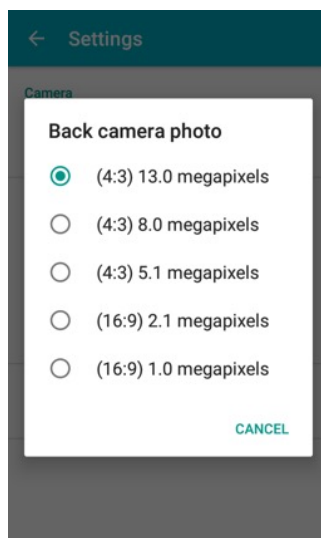
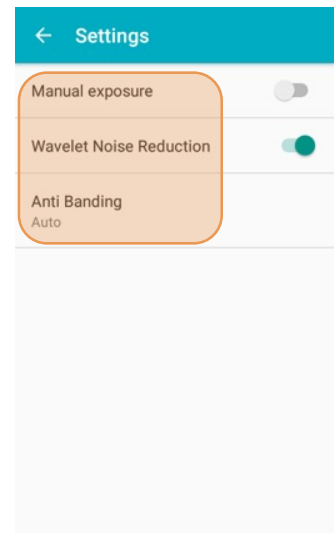
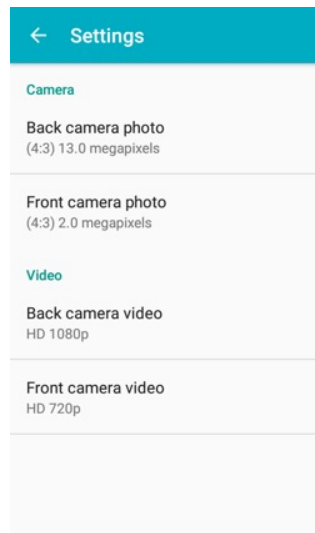
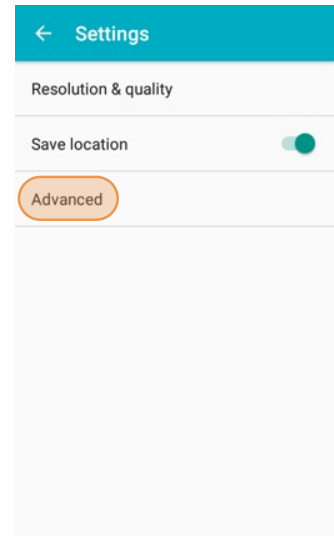
Image and video can be set separately for the front and rear cameras. The higher resolutions use the 4:3 aspect ratio, the lower ones use the 16:9 aspect ratio.

### Advanced settings

Advanced settings allows toggling **manual exposure** on and off. This enables setting exposure compensation

between -2.0 and +2.0 in 0.5 increments.

It also allows **Anti banding** (bands when taking a picture of a TV) to be set to automatic, or manually to 50 Hz, 60 Hz, or off. And turning **Wavelet Noise Reduction** on can improve picture quality.

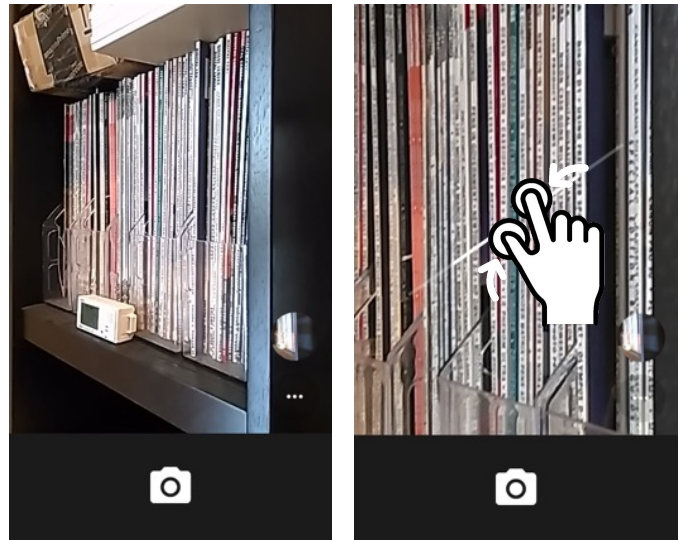




## Camera Zoom

Both of the XT100's cameras have digital zoom. To zoom in and out, touch with two fingers, then pinch them together or draw them apart. Alternatively, you can also touch and then drag the zoom slider at the bottom of the display.

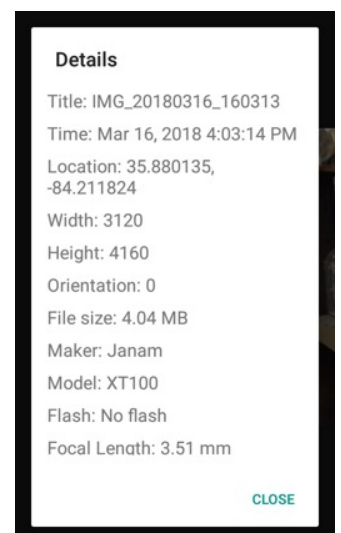
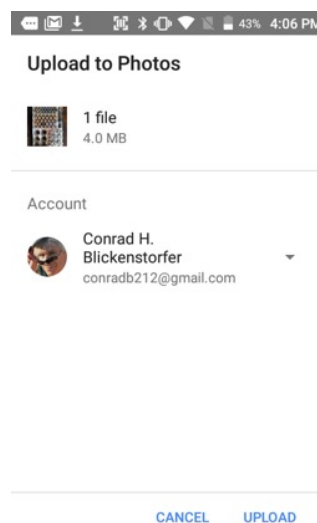
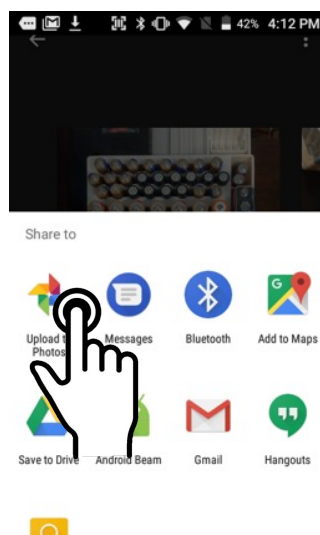
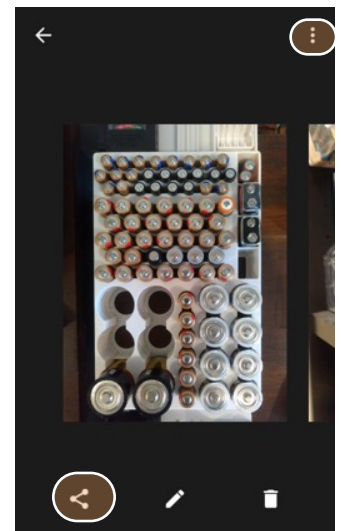
Note that there is a difference between digital and optical zoom. Digital zoom enlarges a part of the image, thus losing some sharpness. Optical zoom uses optics, thus retaining sharpness. The XT100 cameras use digital zoom.



## Editing Pictures

Swiping left when in the XT100's standard Android **Camera app** brings up the Android **Gallery app** and displays the last image taken. Tap on **:** and **Details** to get a list of very detailed information about the image. This data alone shows that both of the XT100 cameras can do a lot more than the basic camera app sports.

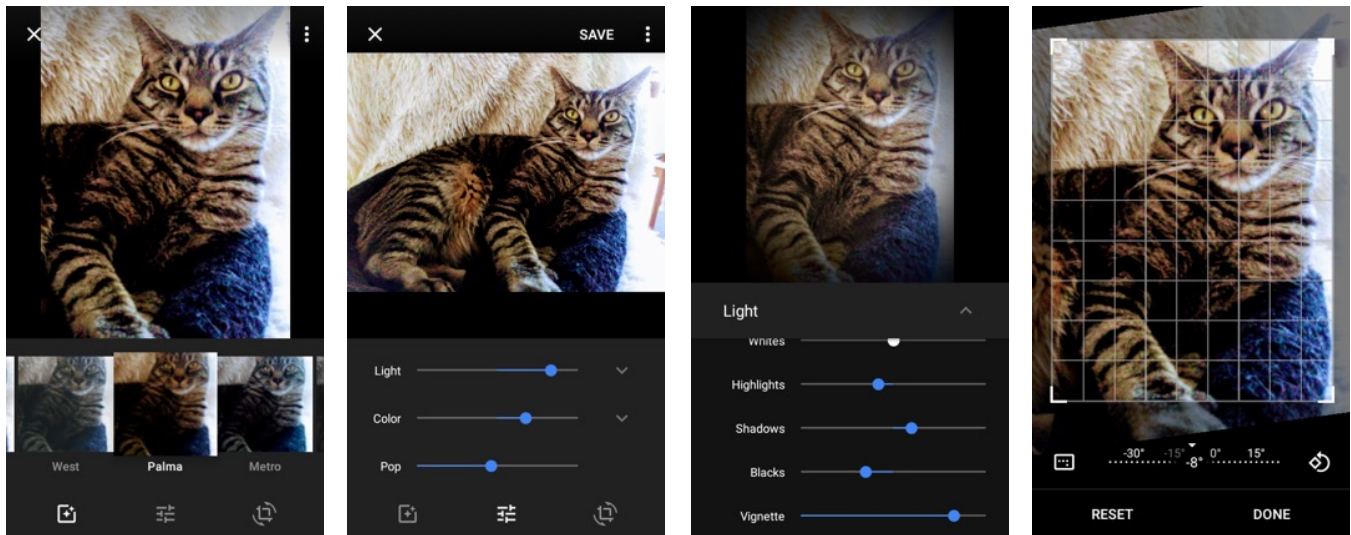
Tap the **share icon** in the Gallery, and you'll get a list of apps and services to send to or share images. The below example shows how to upload a picture to Google Photos.



## Editing Pictures with Photos

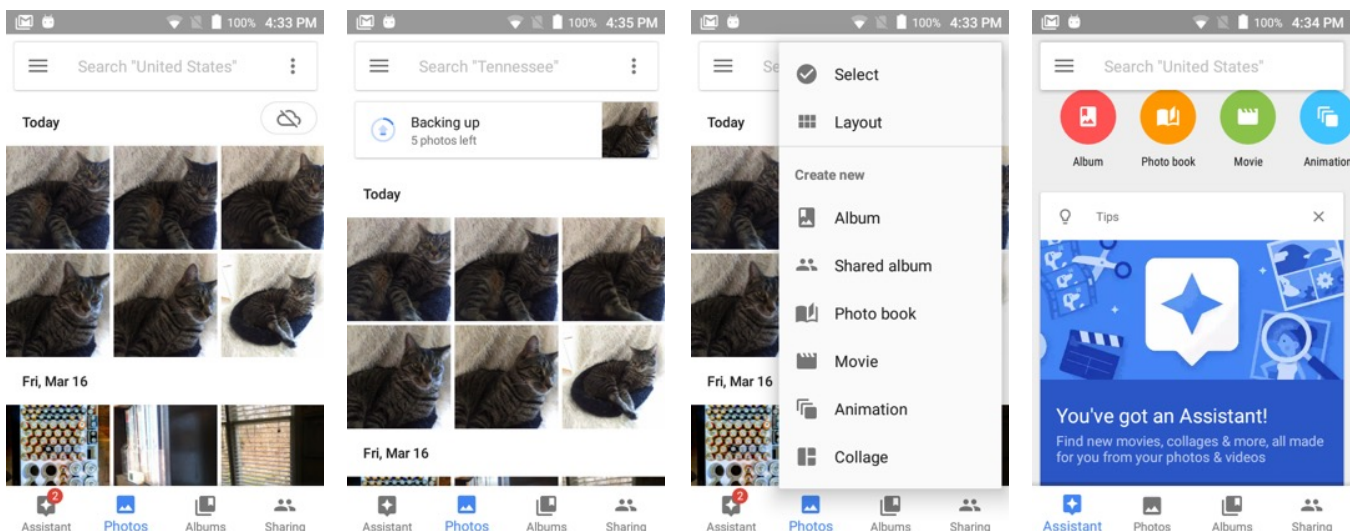
The Android **Photos** app has three function areas:

- ☐ Applying presets (such as B/W, vintage, punch, etc.) or a custom preset.
- ☐ Adjusting various light, color, and "pop."
- ☐ Cropping, rotating, aspect ratios, etc.



With the Android **Photos** app you can also:

- ☐ View and sort your pictures.
- ☐ Back up new pictures.
- ☐ Create albums, movies, animations, photo books, etc.
- ☐ Use an assistant to get a task done.



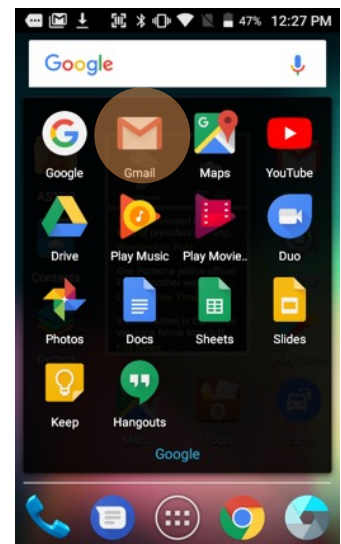
## Email

### Introduction

Like a smartphone, laptop or desktop PC, the XT100's email interface acts as a portal to an already existing email account with one of the commonly available email service providers such as Gmail, Microsoft Outlook, Yahoo, AOL or a private enterprise (corporate) network. This allows the XT100 to receive, read, respond to, and send emails.

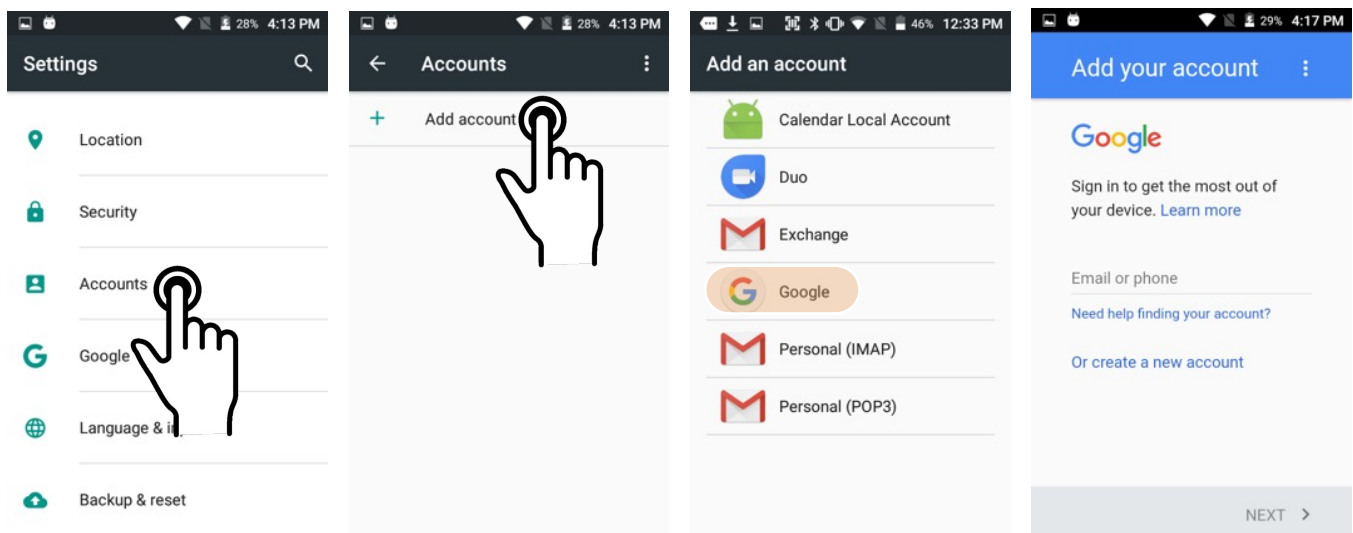
The **Google Gmail app** is the default Email app installed on the XT100 running Android version 6. The **Gmail app** can be used without an actual Google account. It simply serves as the XT100's email app that can accommodate a single email account or multiple accounts.

Before setting up an email account on the XT100, be sure that a core email address is active with an email service provider or within a private enterprise (corporate) network to which the XT100 user has access and authorization.



### Setting up Email

To add your email account(s) to the XT100, tap on **Settings > Accounts** on the Apps screen. For popular email service providers (like Gmail or Yahoo), entering your email address and password will be enough. Most users will start with setting up their Google account as shown below.



## Manual Email Setup

If your email provider isn't on the list of popular email service providers (like Gmail or Yahoo), or your email provider requires more during setup than just email address and password, you need to use the **Manual Setup** option.


### During Email Setup

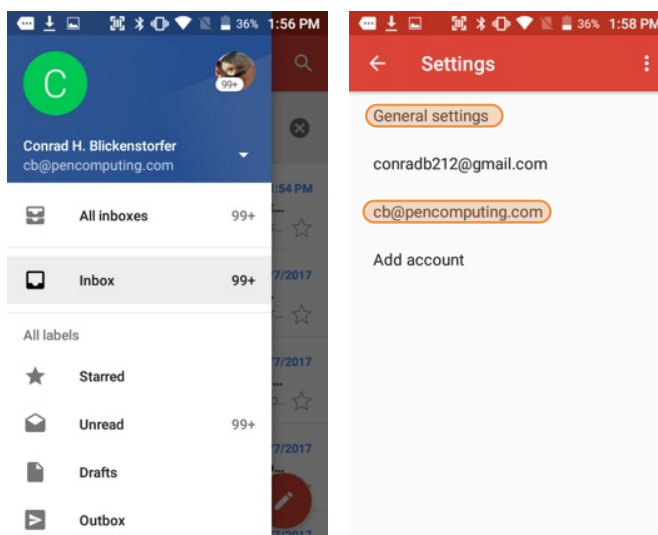
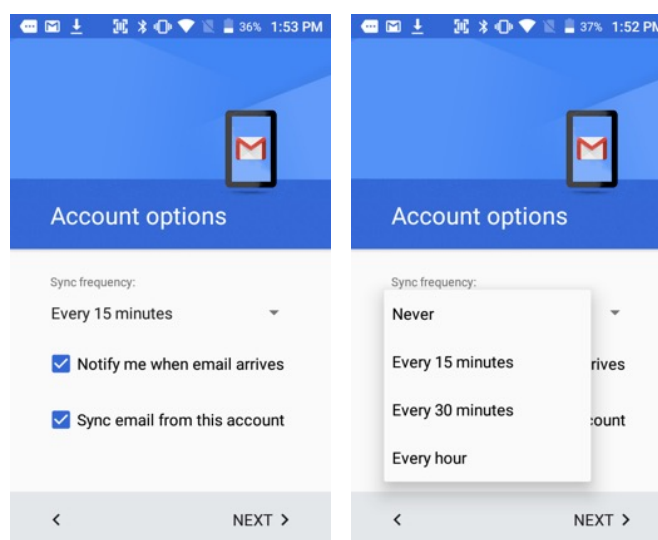
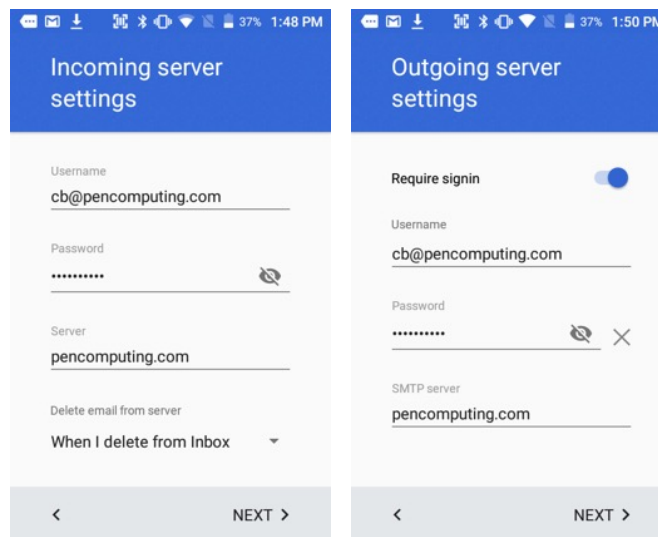
During email setup you will be asked how often you want your XT100 to check with your email provider and update email. "Never" means you'll do it manually.

Note that if you set up a Gmail account that you're also using on other devices (like a laptop or home computer), Google will send you an email inquiring if this new device is legit and if it's really you.

### General and Account Settings

There are two different types of settings in email. **General settings** applies to all of your email accounts. Account **Settings** can be different for each of your email accounts (if you have several).

To access, tap on  to bring up the mail menu, then select Settings. Here you can select either the **General settings**, or the **Settings** pertaining to just a specific account.





## General Email settings

In email, **General settings** apply to all of your email accounts. Most of these settings are self-explanatory: Archive or delete emails, group emails in conversations, swipe to delete a message, showing sender avatars, setting replying to all as default (!), auto-fit messages on the display, confirmations before sending and deleting messages, etc.

## Account-specific Email settings

Here you can set the background and accent colors for your email accounts.

## Signature

Business email usually benefits from a customized signature with name, title, company, etc. This is where it's set up.

## Quick responses

You can create a number of quick stock responses for when you don't have time to compose an email. Once set up, call up the quick response list, tap on a response, and it's inserted into the email.

## Data usage

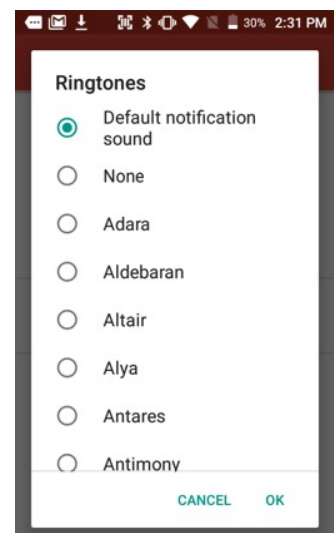
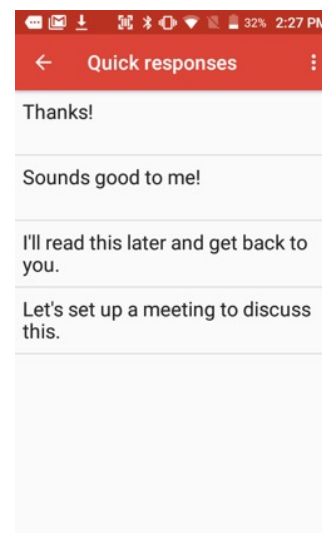
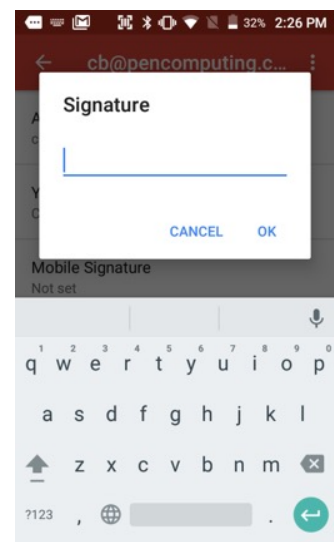
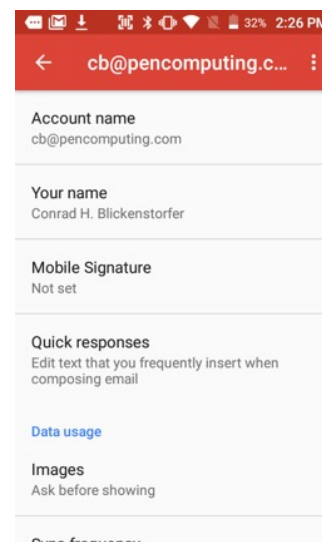
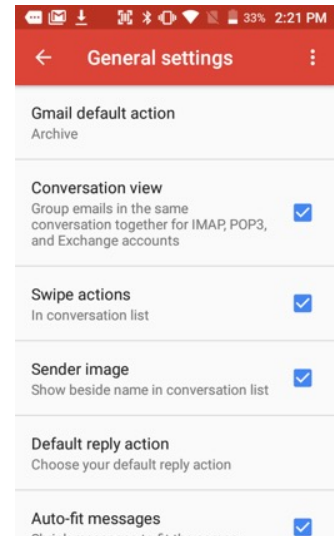
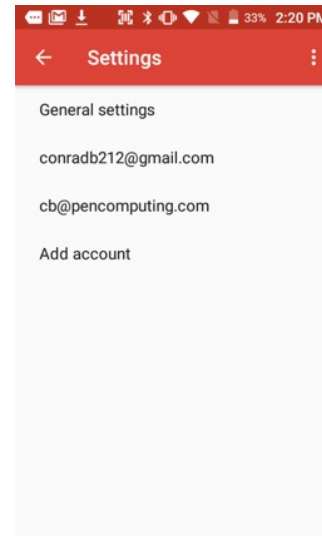
Email practices can affect data usage. This includes the frequency of syncing (every 15, 30, 60 minutes or never), asking before showing pictures, etc.

## Notification settings

Here you can set whether you want to be notified if new email arrives. You can choose a special ringtone, and whether there should be a vibrate alert for email.

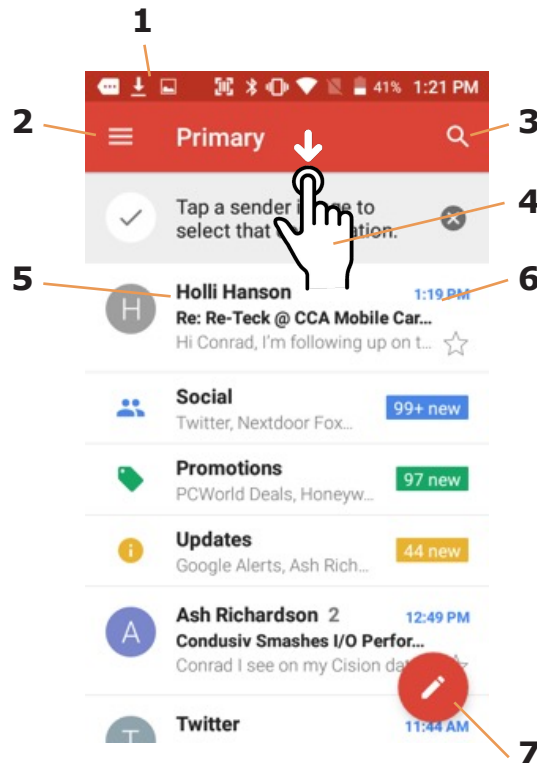
## Server settings

Incoming and outgoing server settings may change, and this is where it's done, including password changes for email.



## Email Inbox

This is what the stock Email Inbox looks like:



- 1 Status icons, same as on Home Screen
- 2 Tap to select which folder and account to use
- 3 Search email
- 4 Swipe down to check for new email
- 5 Email sender and title
- 6 Tap on individual emails to see full text
- 7 Compose a new email message

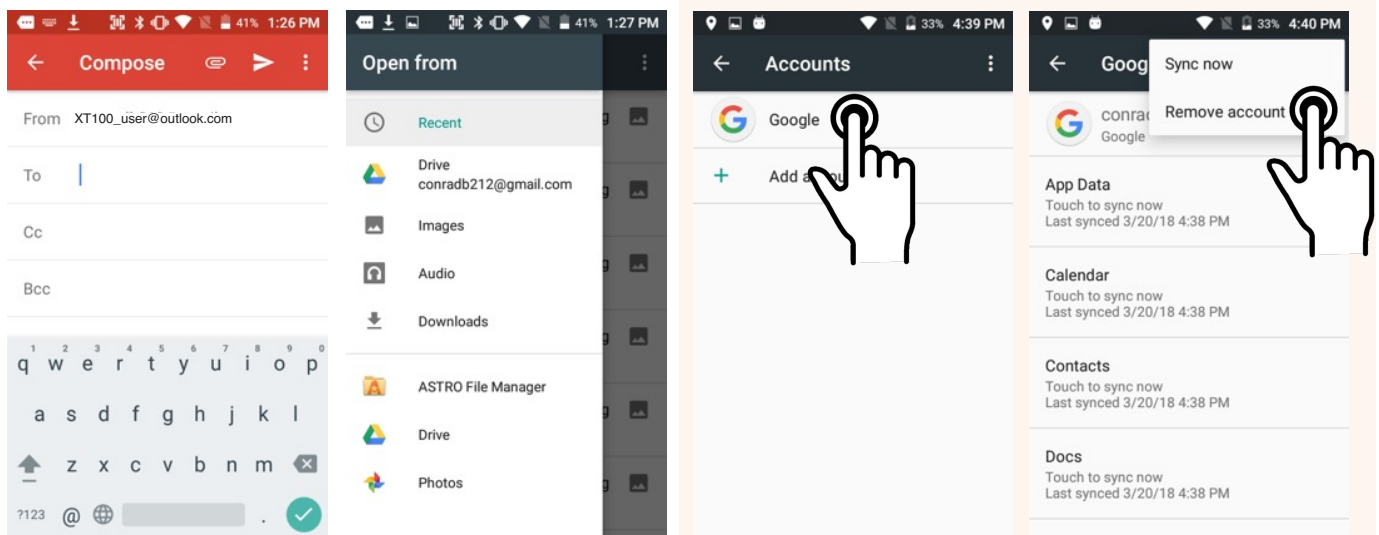
### Creating and Sending an Email:

From the Email Inbox, tap the **Pencil icon** (7) to launch a new email. Tap on **To:** to bring up the keyboard. Begin typing the email address. Tap down arrow to open CC and BCC fields.

Tap on the text area to begin typing (or dictating) your email. Tap the paperclip icon to add an **attachment** from a variety of sources. When done, hit the paper airplane icon to **Send**.

### Deleting an Email account:

To delete an email account, go to **Settings**, tap on **Accounts**, tap the desired account, make sure sync is off, tap account again, tap for popup, select Remove account.



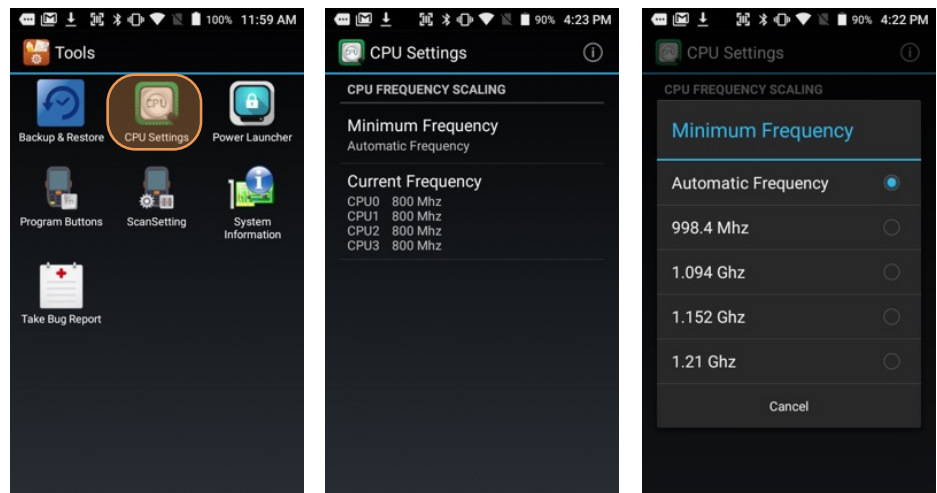


## Tools

One of the great strengths of the Android operating system is the wealth of tools, utilities and productivity apps readily available for free or at nominal cost from the Google Play Store or other sources. The XT100's Tools folder contains a few examples of such tools.

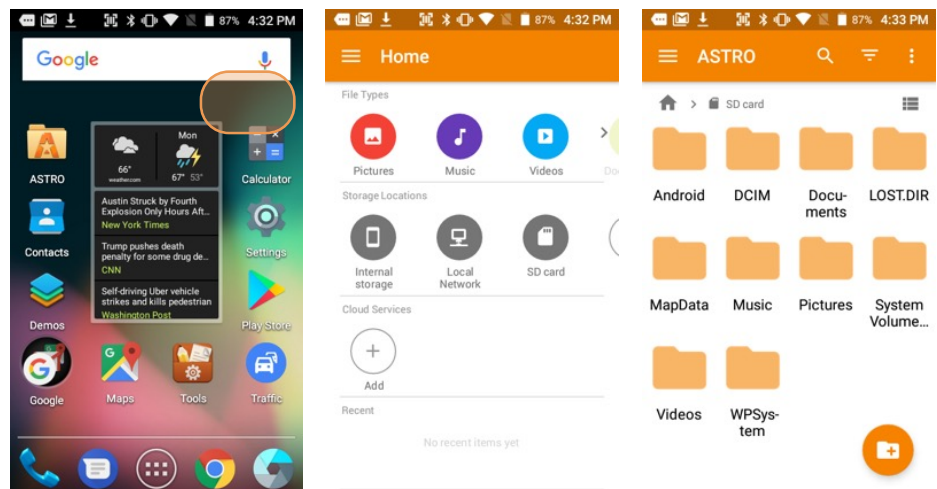
### CPU Setting

By default the XT100's CPU runs at an automatic minimum clock frequency for maximum battery life while still providing good performance. You have the option to change the CPU frequency as shown in the sample screens to the right. This may increase performance, but may also affect battery life.



### Astro File Manager

The XT100 comes with **Astro File Manager** to explore and manage files, zip and extract files, convert files, manage SD cards, and even clean up memory. Astro can also be used to create new folders, add and manage favorites, do searches, and automatically find all files of a certain type.

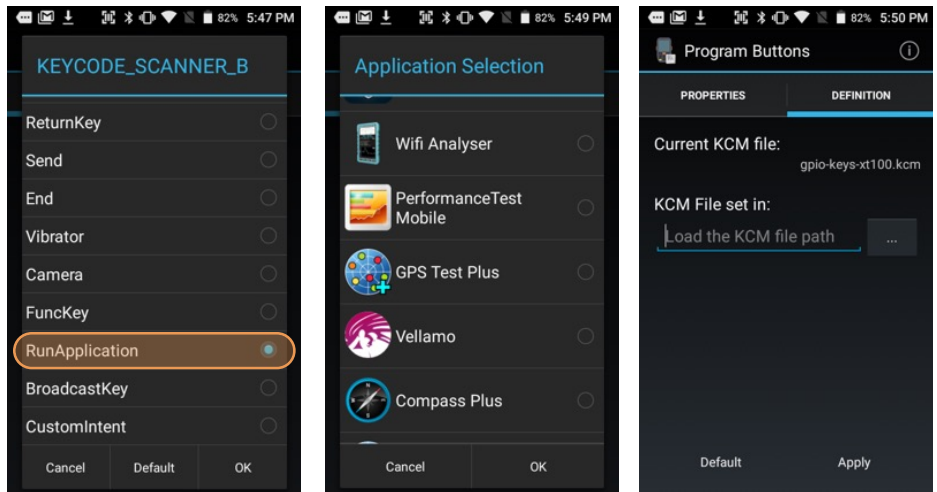
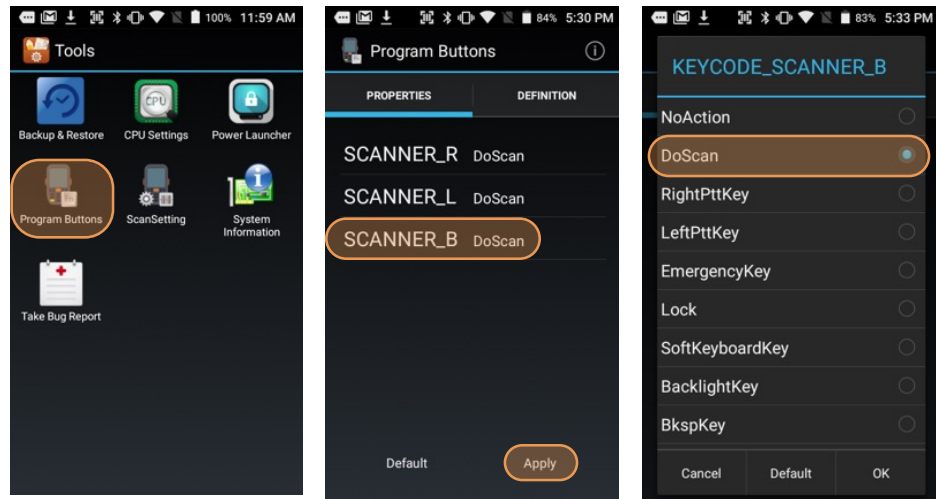


## Program buttons

With the Program Button tool you can change the setting of the left and right scan buttons. Select the button you want to change, choose its function (e.g. Camera, Soft-Keyboard, Send, etc.) from a selection of about 30 different functions. Then press **Apply** and **Save**, or **Cancel**. Program settings can be changed anytime.

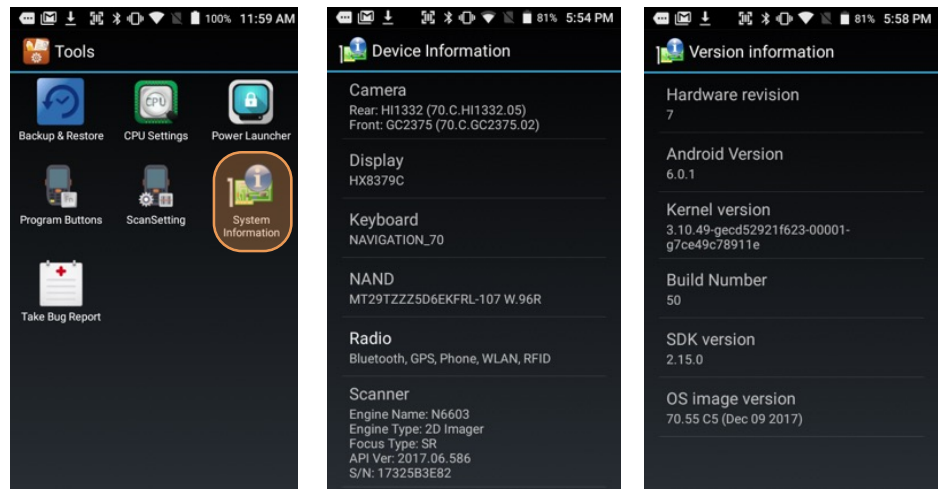
You can also make it so that pressing one of the program-mable keys launches an application. For that, scroll down and select **RunApplication**. This brings up a list of all available applications.

**BroadcastKey** and **CustomIntent** are primarily developer tools. Likewise, tapping the Definitions tab allows programmers to load an alternate KCM (Key Character Map) file.



## System information

System information provides detailed information about the XT100 hardware, OS, applications, firmware and drivers. Tap to drill down into any area.



## Barcode Scanning

### Using the Image Scanner Engine

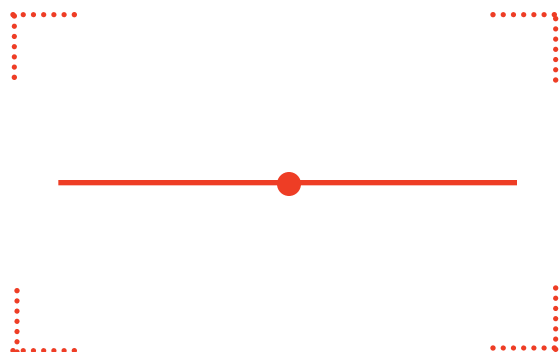
Janam's XT100 is available with an integrated 1D/2D barcode scanner to eliminate the challenges often associated with camera scanners or bulky sled attachments.

### Scanning with the XT100

The XT100 integrated barcode scan window is located on the top edge of the handheld computer.

When triggered via **onscreen control** or **one of the two scan buttons** highlighted in orange in the illustration to the right, the barcode scanner illuminates a red-dotted rectangular area with a solid red horizontal bar and a bright red scan dot in the center.

The bright, red aiming dot enables users to easily select a single barcode to capture in a field of barcodes.



**CAUTION!**  
Never stare directly into the barcode scan beam emitted from the barcode imager window!

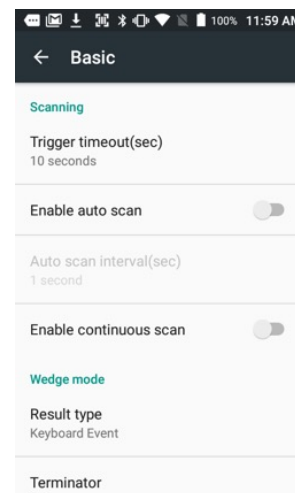
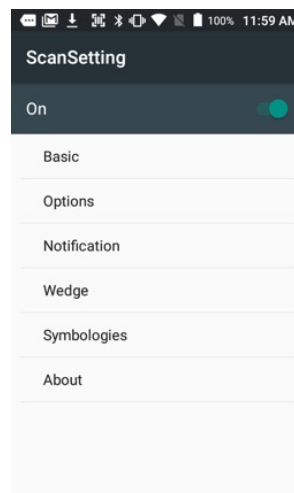
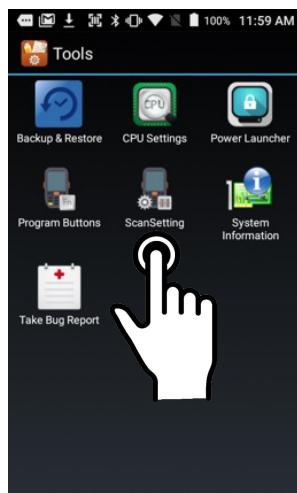


Never point the barcode beam emitted from the barcode imager window into the sightline of others!

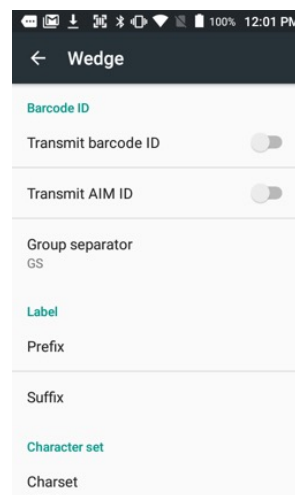
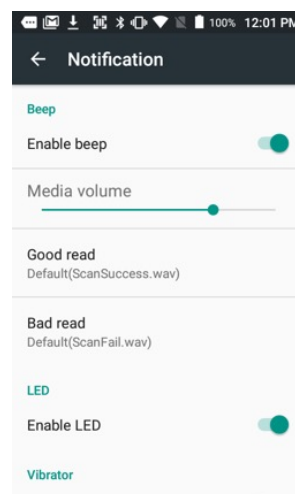
Damage to eyesight can result as a result of failure to adhere to these precautions.

## Scan Settings

Go **Tools > Scan Settings** to configure the XT100's scan engine and software. This is where you set how the scanner will work, how it will announce and communicate results, what all the scan operation settings should be and, most importantly, which of the numerous code symbologies the scanner should read.



| Tab          | Section  | Option   | Description  |
|--------------|--|--|--|
| Basic        | Scanning   | Trigger timeout (sec)  | Specifies the trigger time out in seconds. If a barcode is not decoded within the specified timeout, the default Notifier indicates that decoding is failed. |
|              |  | Enable Auto Scan   | Enable Auto Scan with specified interval.  |
|              |  | Auto Scan interval   | Set Auto Scan interval time.   |
|              | Wedge mode   | Enable Cont. Scan  | Enable Continuous Scan without any interval.   |
|              |  | Result Type  | Select Result Type :<br>User Message, Keyboard Event (default)<br>Clipboard, Intent Broadcast  |
|              |  | Terminator   | Select the desired barcode end method from the pull down list.<br>Values: None, Space, Tab, LF, Tab & LF   |
| Notification | Beep   | Enable Beep  | Set enable/disable plays audio sound.  |
|              |  | Media Volume   | Slider to set volume   |
|              |  | Good/bad read  | Set sound to indicate good/bad read.   |
|              | LED  | Enable LED   | Set enable/disable visual scan indicators.   |
|              |  | Enable Vibrator  | Set enable/disable vibrator operation.   |
|              |  | Good read  | Set vibration time after good read.  |
|              |  | Bad read   | Set vibration time after bad read.   |
| Wedge        | Barcode ID   | Transmit Barcode ID  | Enable to transmit predefined barcode ID.  |
|              |  | Transmit AIM ID  | Enable to transmit predefined AIM ID.  |
|              |  | Group separator  | Set to one of 30 codes (default is GS).  |
|              | Label  | Prefix   | Prefix sent prior to the decoded/received data.  |
|              |  | Suffix   | Suffix to be sent after decoded/received data.   |
|              | Character set  | Charset  | Select one of 14 character sets.   |
|              | Extend. wedge  | Enable   | Toggle to select extended wedge.   |
| Symbologies  | Select barcode types you want to read<br>There is "Enable All" and "Disable All" to enable/disable all symbologies |  |  |
| About        | Specifies Barcode  | engine type, Firmware revision, Decider revision, API revision |  |
|              | Factory Default  | Load Factory Default   | After modifying the current settings, if you wish to return to the factory defaults, tap the Load Factory Default button.                                    |



## Options

**Settings > Scan Settings > Options** sets:

**Enable Center Window** — Limits decoding to codes inside the center window.

**Center Window Tolerance** — Set tolerance from 0 to 100.

**Decode Mode** — This can be Standard (looks for any bar within range) or Quick Omni (looks only within the aiming pattern).

**Delay Before Decoding** — This can be set between instantly to one second in 1/10th of a second increments..

**Inverse 1D Mode** — Set to read regular codes only, inverse codes only, or auto-detect.

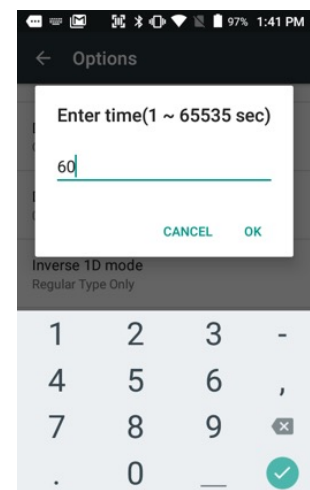
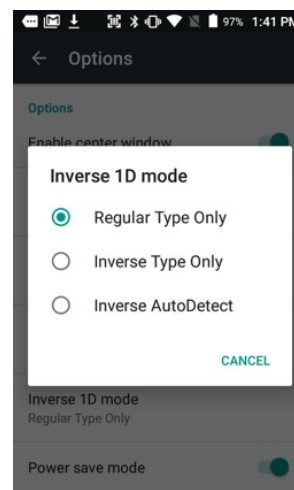
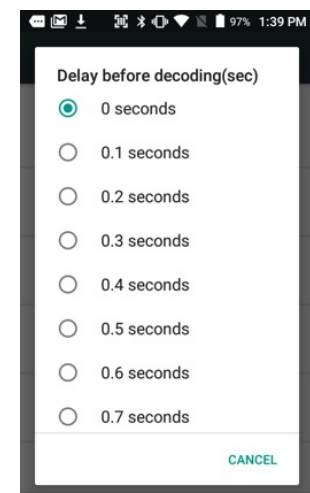
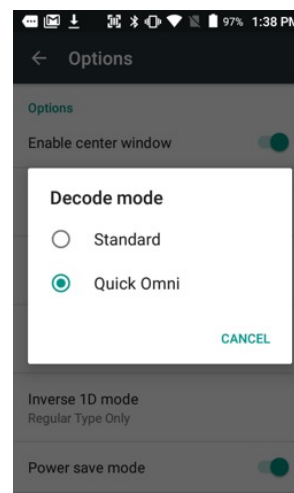
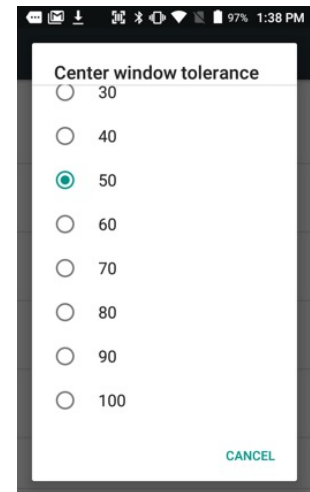
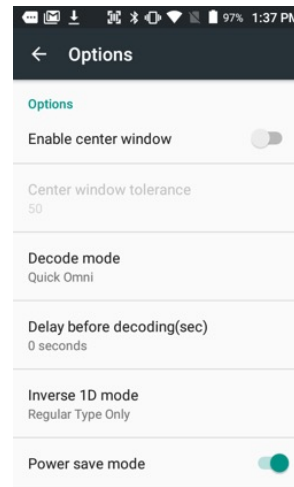
**Power Save mode** — Set Power Save mode on and off.

**Power Save Timeout** — Power Save Timeout can be set from 1 second to 65,535 seconds (18.2 hours).

**Enable Aimer** — Toggles scanning aimer on and off.

**Enable Illumination** — Toggles scanning white light illumination on and off.

Note that these settings can have great influence on both scan speed and scan decoding accuracy. For detailed technical information on the impact of redundancy, security and quiet zone levels, as well as other scan-related settings, please contact Janam Support.





## Symbologies

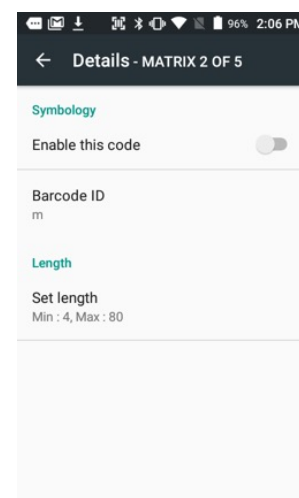
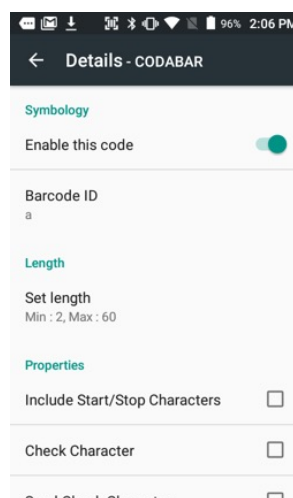
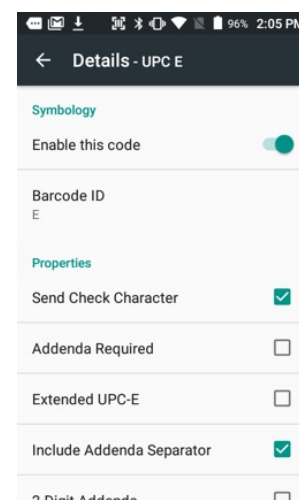
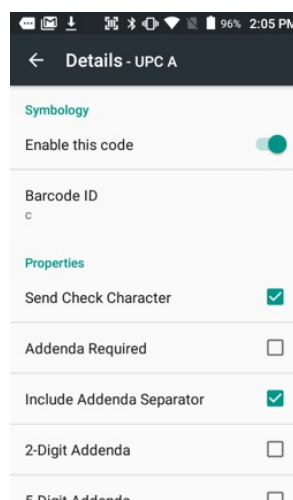
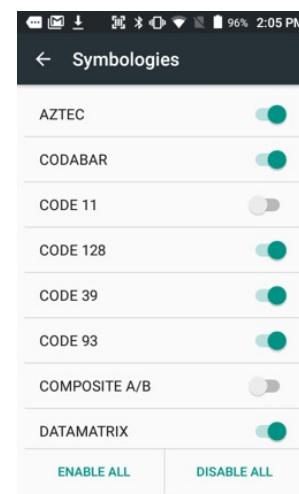
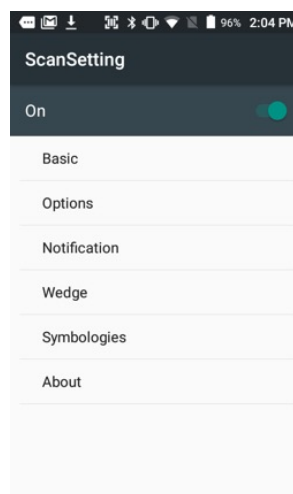
The XT100's scanner can read and decode virtually any 1D or 2D bar code in milliseconds.

**Settings > Scan Settings > Symbologies** shows more than 40 code types that are not only supported, but can additionally be configured with their own options and extensions (see options below).

Only turn on the code(s) that you are actually using at the time. This will speed up recognition and decoding time.

Below is the list of all 1D and 2D code types specifically supported by the XT100:

|                             | 1D | Linear | 2D | Matrix |
|-----------------------------|----|--------|----|--------|
| AUSTRALIA POST              |    | x      |    |        |
| AZTEC                       |    |        |    | x      |
| BRITISH POST(BPO)           |    |        |    |        |
| CANADIAN POST               |    |        |    |        |
| CHINA POST                  |    |        |    |        |
| CODABAR                     |    | x      |    |        |
| CODABLOCK F                 |    |        |    |        |
| CODE 11                     |    | x      |    |        |
| CODE 128                    |    | x      |    |        |
| CODE 32 PHARMA (PARAF)      |    | x      |    |        |
| CODE 39                     |    | x      |    |        |
| CODE 93                     |    | x      |    |        |
| COMPOSITE A/B               |    |        |    | x      |
| DATAMATRIX                  |    |        |    | x      |
| EAN13                       |    | x      |    |        |
| EAN8                        |    | x      |    |        |
| GS1 128 (EAN 5128)          |    | x      |    |        |
| HAN XIN                     |    |        |    | x      |
| INTERLEAVED 2 OF 5          |    | x      |    |        |
| ISBT 128                    |    | x      |    |        |
| JAPAN POSTAL                |    | x      |    |        |
| KOREAN 3 OF 5               |    |        |    |        |
| MATRIX 2 OF 5               |    | x      |    |        |
| MAXICODE                    |    |        |    | x      |
| MICRO PDF417                |    |        |    | x      |
| MSI                         |    | x      |    |        |
| NETHERLANDS KIX CODE        |    | x      |    |        |
| OCR                         |    |        |    |        |
| PDF417                      |    |        |    | x      |
| QR CODE                     |    |        |    | x      |
| REDUCED SPACE SYMBOLOGY     |    | x      |    |        |
| STRAIGHT 2 OF 5             |    | x      |    |        |
| STRAIGHT 2 OF 5 (IATA)      |    | x      |    |        |
| TCIF LINKED CODE 39 (TLC39) |    |        |    | x      |
| TELEPEN                     |    | x      |    |        |
| TRIOPTIC CODE 39            |    | x      |    |        |
| UCC COUPON                  |    | x      |    |        |
| UPC A                       |    | x      |    |        |
| UPC E1                      |    | x      |    |        |
| UPC E                       |    | x      |    |        |
| UPU FICS POSTAL             |    | x      |    |        |
| US PLANET                   |    | x      |    |        |
| US POSTNET                  |    | x      |    |        |
| USPS 4CB                    |    | x      |    |        |





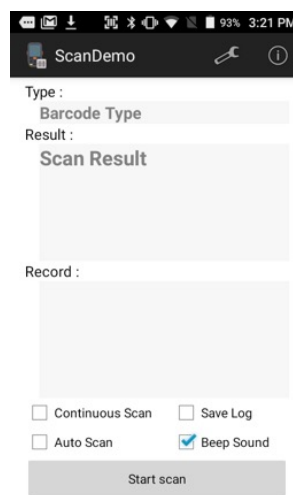
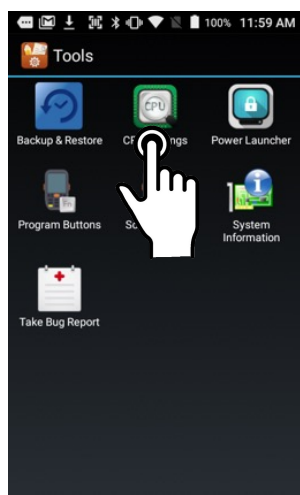
## Scan Demo App

The XT100 comes preloaded with the **Scan Demo** app that demonstrates scanning features of the device. Note that a special Scanner SDK is available for the development of custom scanning applications (inquire with your Janam sales representative).

Launch the **Scan Demo** from the **Demos Folder**. Position the XT100 over one of the **sample bar codes** on this page. A range of 4–10 inches (10–25 cm) from the bar code is recommended. To scan, either push one of the XT100's two scanner buttons or tap the **Scan Start** button on the screen. Aim the barcode imager beam at the target barcode. The aiming dot should be centered in the bar code to achieve quickest and most accurate decoding. When the bar code is successfully decoded, the terminal beeps, announcing either a good or a bad scan.

Upon a successful scan, the scanner decoder will report the symbology of the code as well as the scan data. It will also report the success/failure rate, as well as read time data and statistics.

good scan    failed scan



| Symbology/X-Dim    | Typical Range                 |
|--------------------|-------------------------------|
| 100% U.P.C.        | 46 mm – 419 mm (1.8" – 16.5") |
| 5 mil Code 39      | 64 mm - 163 mm (2.5" - 6.4")  |
| 10 mil Code 39     | 28 mm – 338 mm (1.1" – 13.3") |
| 6.7 mil PDF417     | 46 mm – 419 mm (1.8" – 16.5") |
| 10 mil Data Matrix | 53 mm – 203 mm (2.1" – 8.0")  |

Code 39



PDF 417

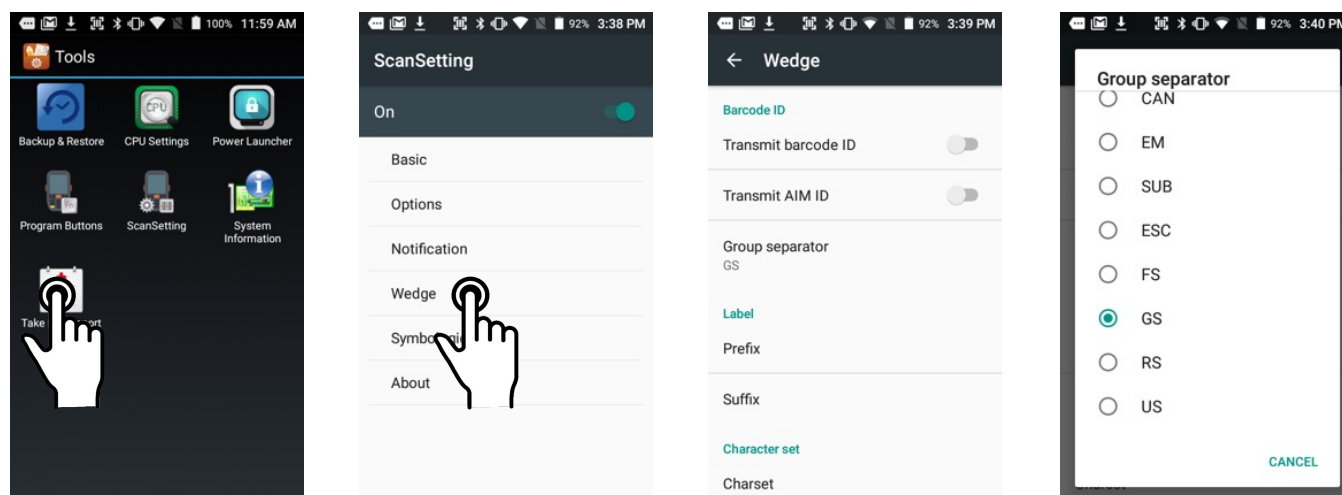


## Scan Wedge App

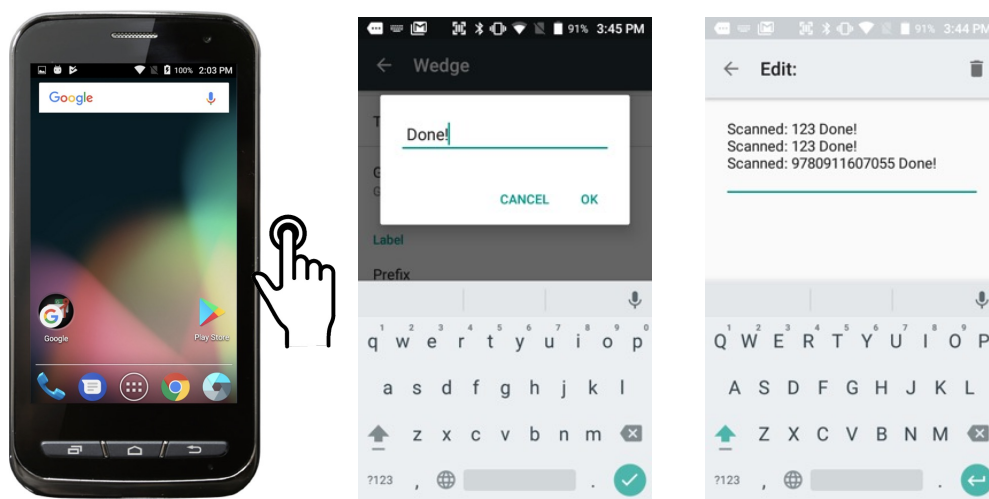
The XT100 also comes preloaded with the **Scan Wedge** application. When active, Scan Wedge runs in the background and can send scanned and decoded data directly into the currently active foreground application. For example, with Scan Wedge active, the XT100 can be used to scan barcode data directly into a Microsoft Word or Excel template, or any other app that accepts input data.

To activate **Scan Wedge**, go to **Scan Settings** and toggle the on/off switch to on. Under **Basic** you can enable **Auto Scan**, set the **Auto Scan Interval** in intervals between 0.25 and 10 seconds, or enable **Continuous Scan**. Under **Wedge** you can specify transmitting a **barcode ID**, an **AIM ID**, as well as a **Group Separator**, a **Prefix**, a **Suffix**, and a **Terminator**. These can be used to add some formatting to the scans, or bring them into a format suitable for subsequent processing. You can also toggle Transmit Barcode ID on and off, and specify a Group Separator.

**Enable extended wedge** allows creating and applying scan styles that can include actions and conditions. Contact your Janam representative for more information.



To the right are two examples of using **Scan Wedge** to scan barcode data right into any app that accepts text input (including **Word** or **Excel** files).



## Phone Functionality

### Introduction

The XT100, if equipped with an activated SIM card and cellular service, is a full-function smartphone in addition to a professional productivity tool.

### Phone screen

To make a call, tap the **phone icon** on the bottom right of the display. The dialpad comes up to allow typing in a phone number. Alternately, tapping the area above the dialpad brings up a box to type in a name or phone number, and another to redial a recent number.

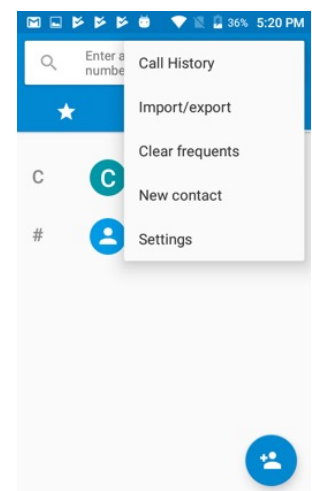
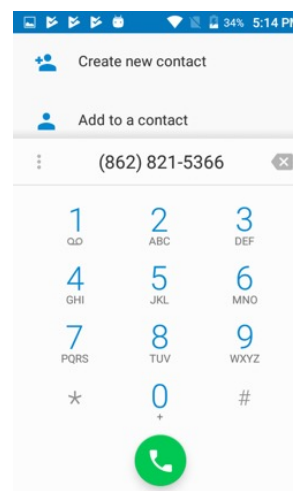
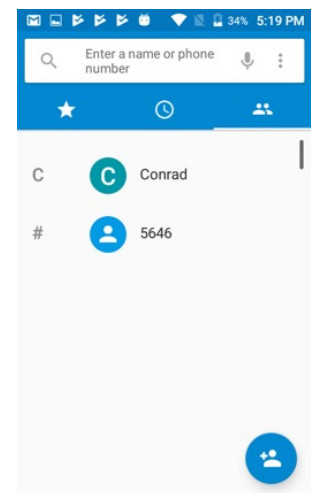
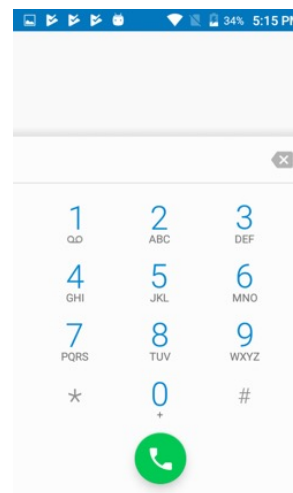
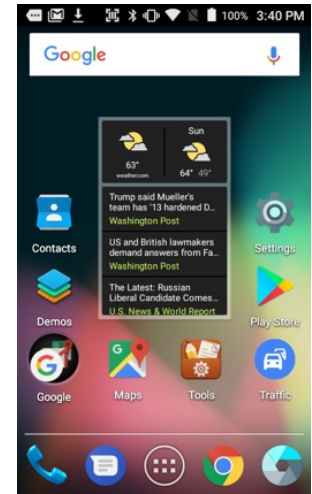
Below those two boxes are tabs for **Speed Dial**, **Recents**, and **Contacts**. You can select from **Recents**, and **Contacts**.

**Speed Dial** is where you add important and frequently used phone contacts.

**Recents** shows calls made, calls received, and voice mail. Tapping on a listing will initiate a call. Tapping on the people icon to the left of a listing opens up more detail depending on the type of the listing.

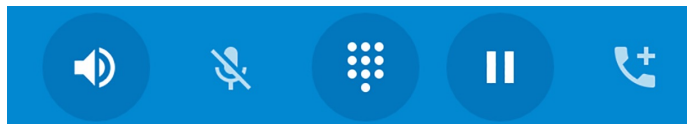
**Contacts** shows phone contacts. These can be created on the device, or synchronized with Gmail contacts or other contact lists. Tap the **options icon** and then **Import/export** for a list of ways to manage contacts. The **options** menu also handles call history, clearing frequents, adding contacts, and Settings.

At any time, tapping the **Phone dial** icon returns to the standard dial layout.



## During Call Features

During a phone call, you can tap on a variety of standard phone features to add a call, mute the conversation, put the caller on hold, put the caller on speaker phone, and bring up the phone dial. Grayed out options are not available while a call is in progress.



## Answering a Call

When a call comes in, the XT100 brings up the phone screen, showing either the number or (if known) the identity of the caller.

You then have the option to answer the call (**swipe right**), reject it (**swipe left**), or respond with a quick text message (**swipe up**).

Text messages can be selected from a list of canned messages, or you can quickly type one.

To edit your quick responses, open the Phone app, tap the three dot options button in the upper right corner of the screen, tap **Settings**, tap **General settings**, then tap **Quick responses**. You'll see a list of the canned quick responses. To change these, simply tap them, then enter a new quick response when prompted. If you like your new quick response, go ahead and tap OK.

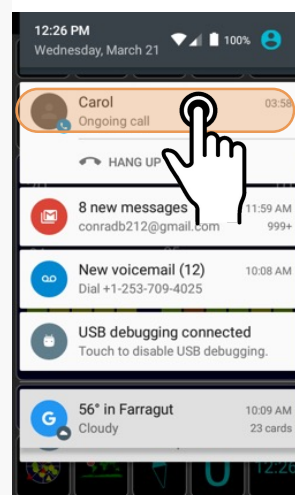
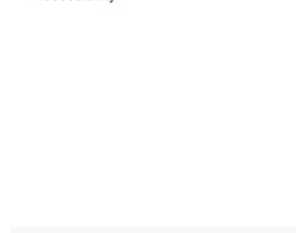
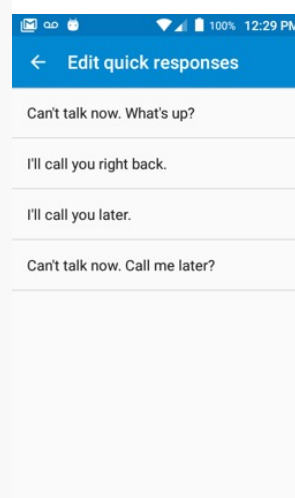
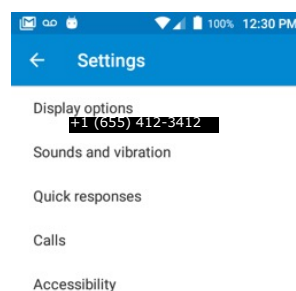
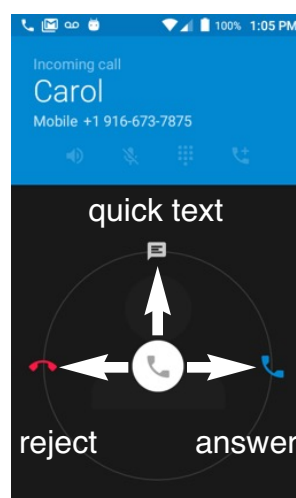
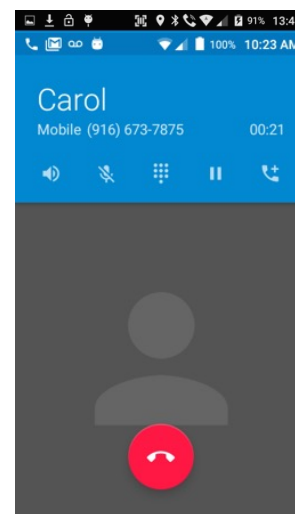
## Settings

Phone options can be accessed by tapping the three dot options icon on the upper right hand of the Phone apps Speed Dial, Recents, or Contacts main screen. There are **Display Options** (sort order, name format), **Sounds and Vibration**, **Quick Responses**, **Calls** (voice mail, call forwarding, auto answer, etc.), and **Accessibility**.

## Using Apps During a Call

Depending on your carrier, during a call you may be able to launch another app to look up information while the call is going on, and then return to the phone call.

To do this, simply launch the desired application. To return to it, swipe down from the top of the display to reveal the action center. The call is listed there. Tap on it to return to the call.



## GPS

### ***Introduction***

Janam's XT100 includes Qualcomm's "Snapdragon" MSM8916 CPU with IZat Gen 8 support for concurrent GPS, BeiDou and GLONASS.

Unlike separate GPS modules, IZat is built into the processor itself and uses a combination of positioning, Wi-Fi, and cellular signals for triangulation.

In addition, IZat can access data from device sensors such as accelerometers, gyroscopes or an e-compass. Software apps take advantage of those capabilities to optimize positioning and even provide indoor mapping.



### **XT100 GNSS Support**

The Janam XT100 provides high-sensitivity positioning both in standalone "GPS" mode where it receives data from satellites directly, as well as in "A-GPS" (Assisted GPS) mode where satellite data is related via cellular and Wi-Fi networks. In general, direct GPS provides the most accurate positioning whereas A-GPS is less precise but quicker. The source of positioning data varies by app.

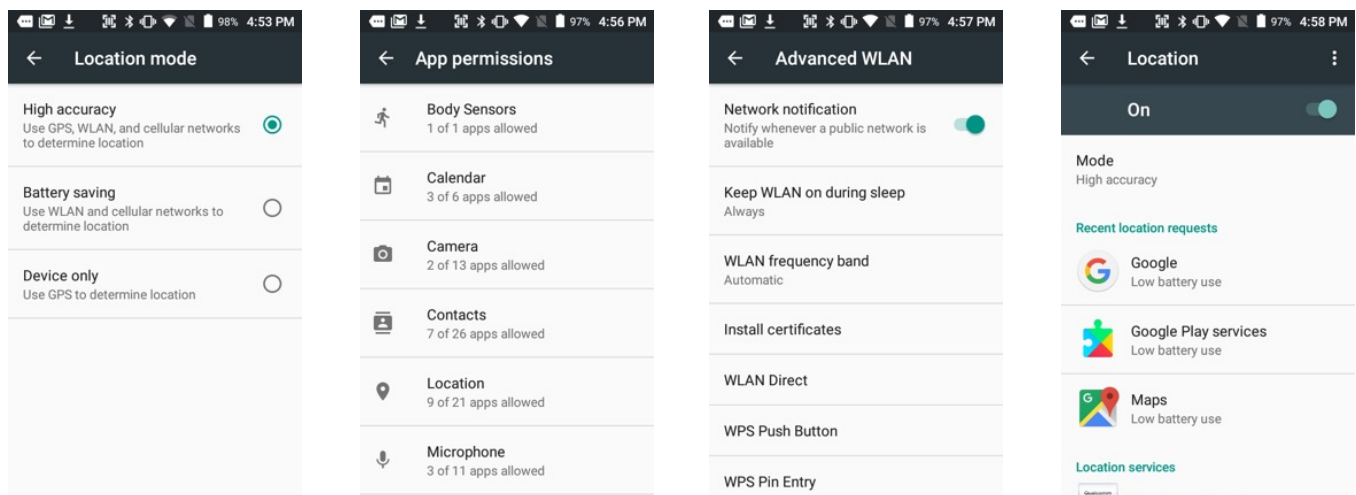


## GPS and Location Services

A large number of modern apps use global positioning data as part of their basic functionality. What that means is that GPS has become an inherent part of most computing devices. Maps depend on it, of course, but also search engines, voice assistants, cameras, weather, etc., all rely on it, let alone safety and security systems such as “electronic fences” or “find your device” apps.

GPS and location services have become intertwined. GPS can no longer just be turned on or off. Modern operating systems like Android increasingly regulate access via location and privacy settings, as well as by individual app. **Settings > Location** allows some battery savings by not using GPS to determine location. **Settings > Apps > Configure Apps > App Permissions** shows what permissions an app has.

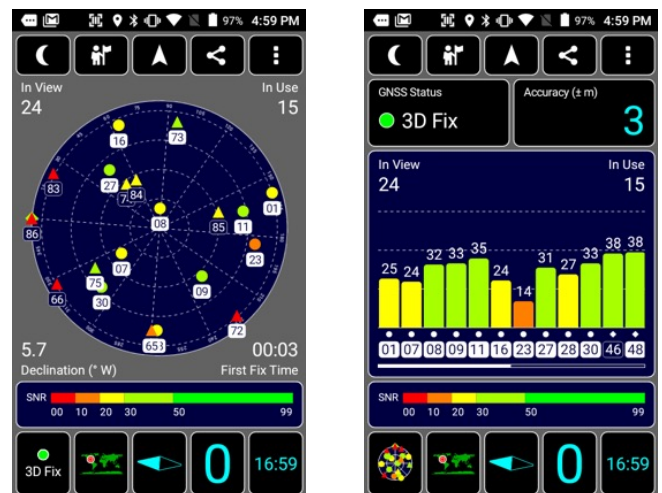
The images below shows some examples of screens relating to location services.



## Location Service by App

The way GPS and location services are used may be different from app to app. Before installation, most apps will request permission to use certain services. This may include use of Google location services, Wi-Fi, GPS, the XT100's own IZat functionality and more.

In the example to the right, the **GPS Test** app downloaded from the Google Play Store was given full location access.





## User Applications

### Google Play Store

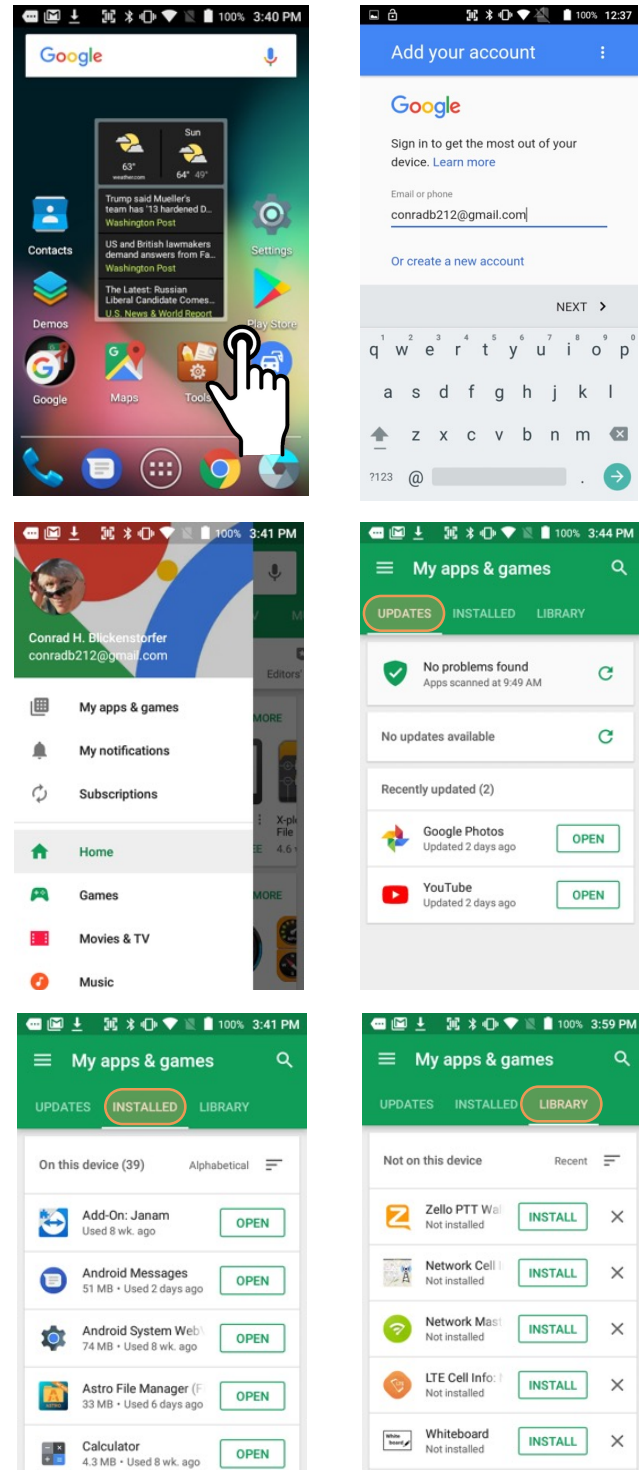
Applications can be obtained in the Google Play Store. To go to the **Play Store**, tap on the Store icon on the **Home Screen**, or locate the Store app in the **Apps Screen** and tap on it.

Note that due to Android's virtually exclusive focus on smartphones and small tablets, most apps are available for all Android devices. There are some exceptions where a processor, screen size, or Android version is not supported by an app. Note that in order to download/buy apps from the Google Play Store, you must have a Google account.

### My Apps & Games listing

The Google Play Store keeps track of all user purchases and downloads made on any Android platform while being logged in their Google account in **My Apps & Games**. This means that purchases made by a user for another Android device are downloadable to the XT100 as long as the purchased app supports the XT100's hardware and software.

You can elect to list **updates** information to apps you purchased, show apps **installed** on the device you're currently using (sorted alphabetical, last updated, last used, or size), or apps in your **library** of apps that are not installed on your device (sorted alphabetical or most recent).



## Google Play Store Settings

### General

#### Notifications

You can request notifications when an app update becomes available, and when apps were auto-updated.

#### Auto-update apps

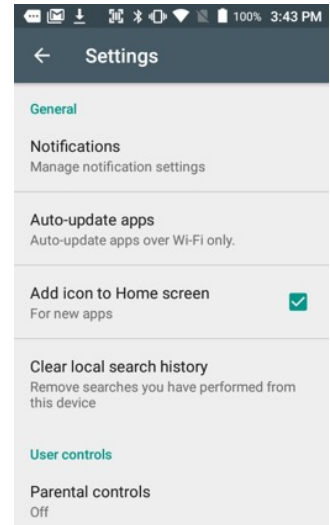
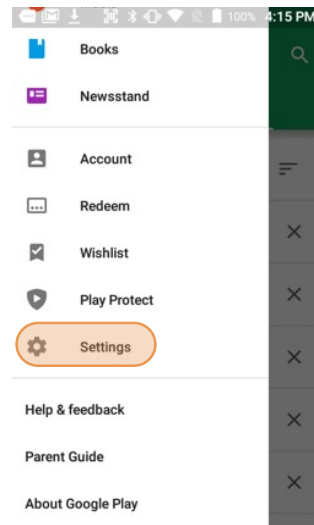
You toggle auto-update apps on/off, or only allow auto-update over Wi-Fi. You can opt to have new apps put an icon on the home screen. You can clear searches of the app store.

#### Add icon to Home screen

When clicked on, for new apps an icon will be automatically added to the home screen.

#### Clear local search history

Tapping removes all prior searches from this device.



### User Controls

#### Parental controls

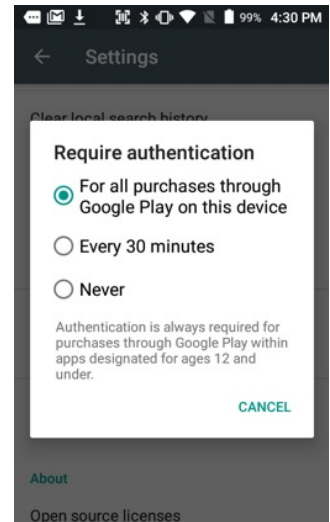
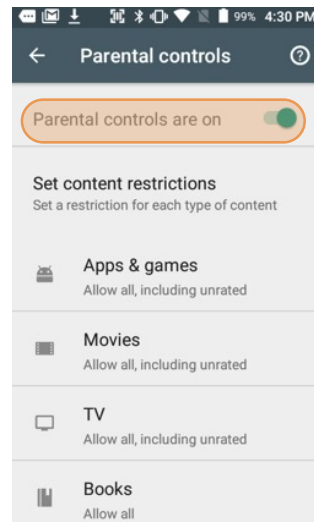
Toggling on brings up a parental controls setting screen.

#### Require authorization for purchases

Set authorization requirements to all purchases, every 30 minutes, or never.

#### Use apps without installation

Some apps can be used without actually installing them.



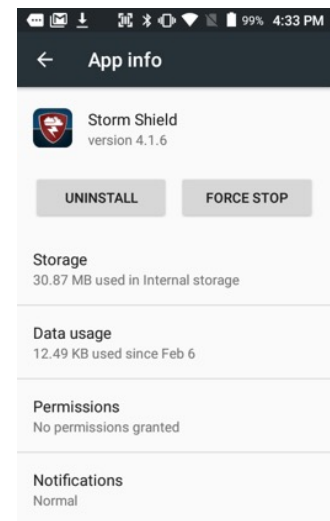
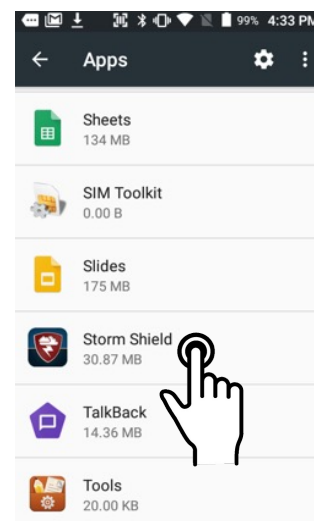
### Uninstalling Apps

Android apps can be uninstalled by going to **Settings > Apps**, then tap on the app to be uninstalled.

### Access and User Restrictions

Note that there are also developer settings and applications that allow control of what apps are available to users.

Android devices can be configured to run in "kiosk mode" with just a single application that is always active. This way, systems integrators or IT personnel can configure units for specific use and applications, eliminating the temptation that comes with a full load of consumer apps.



## FOTA Update

### Update via FOTA client

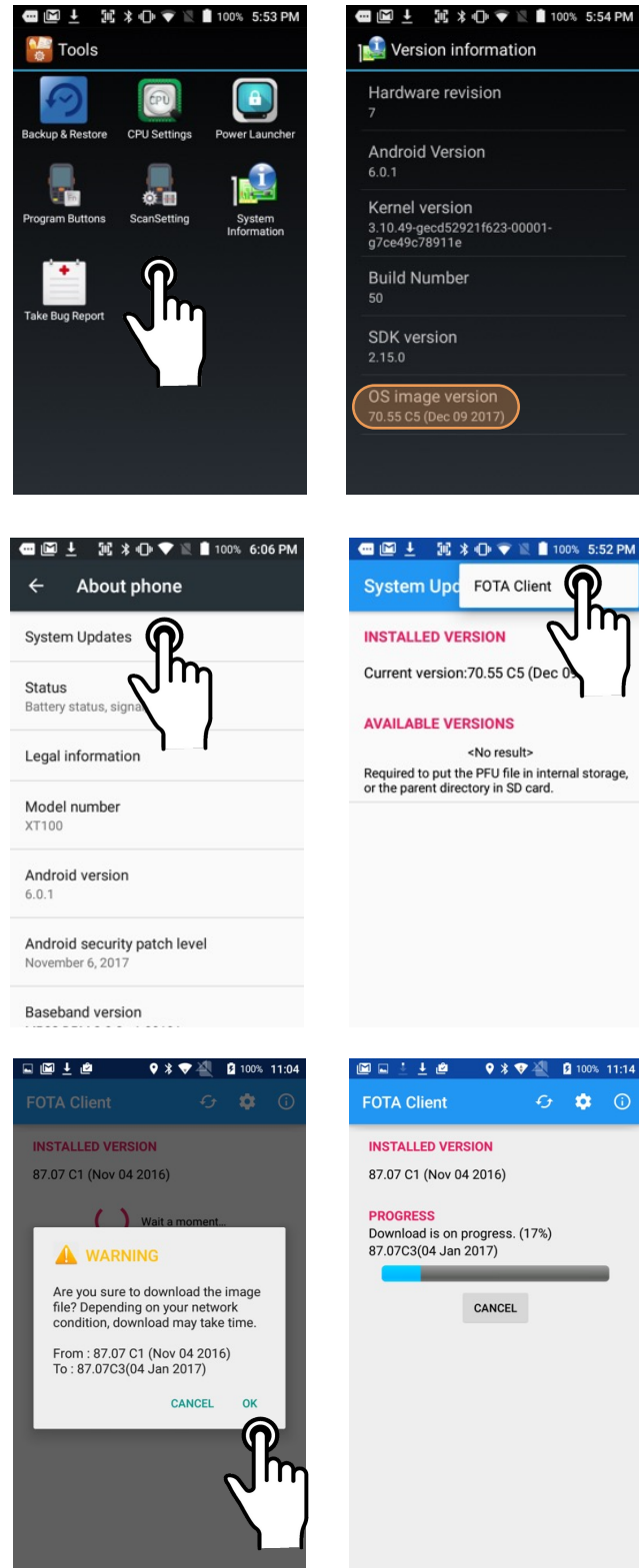
The Android version of the XT100 supports Firmware Over The Air (FOTA) starting with version 70.55 C5 of the OS image. To determine if your device OS supports this feature, please follow these steps:

Go to **Tools**, tap on **System Information**, then on **Version Information**. Here you can see which OS image version is currently installed. If your device OS image version is earlier than 70.55 C5, please update the OS image with the "Update from SD card" procedure first.

If your XT100 is on OS image version 70.55 C5 or later, go to **Settings** > **About phone**, and tap on **System updates**. Tap on the menu icon in the upper righthand corner of the screen. This will bring up the **FOTA client** pop-up. Tap on it.

The FOTA client will then check your current OS image version and check for available upgrade versions on the server. If one is found, there will be a warning on the display, asking if you really want to download the upgrade.

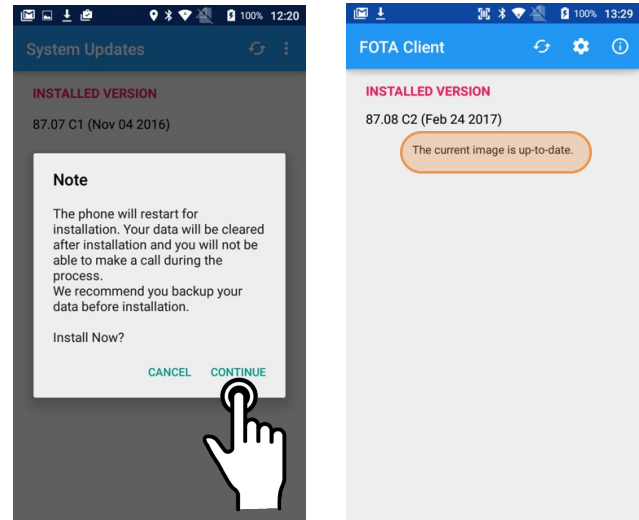
If you wish to proceed, tap OK and the download will start. Downloading the file will take several minutes.



### Update via FOTA client (continued)

Once the update file has been downloaded, a pop-up informs that there will be a restart, and also recommends backing up data (the update will not delete data).

If ready to proceed with the update, tap CONTINUE. The update will then be installed onto the XT100. When finished, the FOTA Client will display the newly installed version, and report whether this is now the latest version, or whether there are additional versions to download until the OS image on your device is completely up-to-date.



## Janam XT100 Specifications

|                                |  |
|--------------------------------|--|
| <b>TECHNICAL</b>               |  |
| Operating System               | Android 6.0.1 Marshmallow (CTS and GMS certified)  |
| Processor                      | Quad-core Qualcomm MSM8916 CPU @1.2GHz   |
| Memory                         | 2GB/16GB   |
| Expansion                      | User-accessible microSD card slot with SD and SDHC support   |
| Power                          | 3000mAh 3.8v rechargeable Li-ion battery   |
| <b>PHYSICAL</b>                |  |
| Dimensions                     | 5.35" L x 2.76" W x .69" D / 136mm L x 70mm W x 17mm D   |
| Weight                         | 7.5oz / 213g including battery   |
| Display                        | 4.3" WVGA (480x800) with Corning Gorilla Glass 3; exceptionally bright, outdoor viewable, optically bonded   |
| Touch Panel                    | Capacitive touch screen  |
| <b>ENVIRONMENTAL</b>           |  |
| Operating Temperature          | -4° to 140° F / -20° to 60° C  |
| Storage Temperature            | -13° to 158° F / -25° to 70° C   |
| Humidity                       | Non-condensing, 95%  |
| Drop                           | Multiple 4ft / 1.2m drops to steel per MIL-STD 810G  |
| Water & Dust                   | IP67   |
| Electro Static Discharge (ESD) | +/- 15kV air; +/- 8kV contact  |
| <b>INTERFACE FEATURES</b>      |  |
| Audio                          | 3.5mm headset jack; speaker; two microphones   |
| Alerts                         | Vibration; LED indicators  |
| Connectors                     | MicroUSB supports USB 2.0 High-Speed   |
| LED Indicators                 | Dual-color LED indicators  |
| External Buttons               | 3 Android hard keys (home; menu; back button), power, volume, 2 programmable   |
| <b>DATA CAPTURE</b>            |  |
| Imager                         | Honeywell N6603 2D Imager  |
| RFID/NFC                       | Reads ISO14443A; ISO14443B & ISO15693; MIFARE 1k/4k/ Plus; MIFARE UltraLight; MIFARE UltraLight C; MIFARE DESFire; MIFARE DESFire EV1 in the 13.56MHz range  |
| <b>WIRELESS COMMUNICATION</b>  |  |
| WWAN                           | EDGE/GPRS/GSM; UMTS/HSDPA/HSUPA/ HSPA/HSPA+; 4G LTE  |
| WLAN                           | Dual-band 802.11a/b/g/n/d/h/i/k/r/v  |
| Security                       | IEEE802.11; WEP; WPA/WPA2; PEAP/MSCHAPv2; EAP-TLS  |
| WPAN                           | Bluetooth Class 1 v4.1   |
| <b>MOBILE APPURTENANCES</b>    |  |
| Motion Sensor                  | Gyroscope; Accelerometer; Ambient light sensor; Proximity sensor, Digital Compass  |
| GPS                            | Qualcomm® IZat™: Gen 8 support for three bands concurrently (GPS, BeiDou and GLONASS or Galileo)   |
| Camera                         | 13.0MP color rear-facing autofocus camera with user-controllable LED flash and 2.0MP front-facing camera   |
| <b>ACCESSORIES</b>             |  |
|                                | Single-Slot USB Cradle Kit Four-Slot Cradle Kit Syncing/Charging Cradle Wireless Charging Pad Boot/Bumpers, Four-Slot Battery Charger, Single-Slot Ethernet Cradle Kit Power Adapter, Spare Battery, Nylon Holster, Operating Case |
| <b>SAFETY/REGULATORY</b>       |  |
| Safety                         | IEC 60950; EMC; RF; SAR; LED; Laser  |
| Radio                          | FCC; IC; GCF; CE   |
| Environment                    | RoHS and WEEE compliant  |



## Regulatory and Maintenance

### ***XT100 Rugged Touch Computer Regulatory Information***

Copyright 2018 Janam Technologies LLC. All rights reserved.

XT100 Rugged Touch Computer, Janam and the Janam logo are trademarks of Janam Technologies LLC. Other product and brand names may be trademarks or registered trademarks of their respective owners.


Janam Technologies LLC assumes no responsibility for any damage or loss resulting from the use of this guide. Janam Technologies LLC assumes no responsibility for any loss or claims by third parties which may arise through the use of this product. Janam Technologies LLC assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, dead battery or repairs.

Be sure to make backup copies of all important data on other media to protect against data loss.

Follow all usage, charging and maintenance guidelines in the Product User Guide. If you have questions, contact Janam. For a copy of the Product User Guide, visit the online Resource Center at [www.janam.com](http://www.janam.com).

Important: Please read the End User License Agreement with this product before using the device or 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 product information, visit [www.janam.com](http://www.janam.com) or call +1.877.JANAM.99

### ***Regulatory and Safety Approvals***


 The CE Mark on the product indicates that the system has been tested to and conforms with the provisions noted within the 2004/108/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.

Only use Janam approved and UL listed batteries and charging accessories.

### **FCC and Canadian Compliance**

 This device meets or exceeds all applicable standards and has been manufactured to the highest level of quality. To see the specific labels associated with RF terminals configurations, visit [www.janam.com](http://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.

**RF, regulatory and safety approvals****XT100 with WWAN, WLAN and Bluetooth**

| Parameter | Specification   |
|-----------|---|
| USA       | 47 CFR FCC Part 15, Subpart B, Class B • FCC Part 22, Subpart H • FCC Part 24, Subpart E • FCC Part 27, Subpart C, L • FCC Part 2 • FCC Part 15, Subpart C • FCC Part 15, Subpart E • FCC 06-96 • FCC 47 CFR Part 2   |
| Canada    | ICES-003:2012 Issue5, Class B; RSS-132, Issue 3, January 2013 • RSS-Gen Issue 3 December 2010 • RSS-133, Issue 6, January 2013 • RSS-139, Issue 2, February 2009 • RSS 210 Issue 8 (2010-12) • ANSI C63.10- 2009 • IC RSS-102 Issue 4:2010 • IEEE1528:2013 • IEC 62209-2:2010 • KDB 248227 D01 v01r02 • KDB 447498 D01 v05r02 • KDB941225 D01 v02 • KDB941225 D02 v02r02 • KDB941225 D03 v01 • KDB941225 D07 v01r01 |
| Europe    | EN 301 489-1 • EN 301 489-3 • EN 301 489-7 • EN 301 489-17 • EN 301 489-24 • EN 300328 • EN 301 893 • EN 300 440 • EN 301 908-1 • EN 301 908-2 • EN 301 511 • EN 302 291-1 • EN302291-2 • EN 50566 • EN 62209- 2 • EN 62479 • EN 50332 • EN 55022 • EN 55024 • EN61000-3-2 • EN 61000-3-3 • IEC 60950-1/A1:2009   |
| Australia | AS/NZS CISPR 22:2008, Class B • AS/NZS CISPR 22:2009 +A1:2010, Class B • AS/NZS 4268:2012 +A1:2013 • ARPANSA Radiation Protection Standard (Maximum Exposure Levels to Radiofrequency Fields -3 KHz to 300 GHz • ACA Radio communications(Electromagnetic Radiation – Human Exposure) Standard 2003 • IEC 62209-2:2010  |

**XT100 with WLAN and Bluetooth**

| Parameter | Specification  |
|-----------|--|
| USA       | 47 CFR FCC Part 15, Subpart B, Class B • FCC Part 15, Subpart C • FCC Part 15, Subpart E • FCC 47 CFR Part 2   |
| Canada    | ICES-003:2012 Issue5, Class B; RSS-210 Issue 8 (2010-12) • RSS-Gen Issue 3 (2010-12) • ANSI C63.10-2009 • IC RSS-102 Issue 4:2010 • IEEE1528:2013 • IEC 62209-2:2010 • KDB 248227 D01 v01r02 • KDB 447498 D01 v05r02 • KDB941225 D07v01r01                                     |
| Europe    | EN 301 489-1 • EN 301 489-3 • EN 301 489-17 • EN 300 328; EN 301 893 • EN 300 440 • EN 302 291-1 • EN 302 291-2 • EN 50566 • EN 62209- 2 • EN 62479 • EN 50332 • EN55022 • EN55024 • EN 61000-3-2; EN 61000- 3-3 • IEC 60950-1/A1:2009   |
| Australia | AS/NZS CISPR 22:2008, Class B • AS/NZS 4268:2012 +A1:2013 • ARPANSA Radiation Protection Standard (Maximum Exposure Levels to Radiofrequency Fields -3 KHz to 300 GHz) • ACA Radio communications(Electromagnetic Radiation – Human Exposure) Standard 2003 • IEC 62209-2:2010 |

**Compliance with Part 15 of FCC Rules**

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 into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

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 FCC local 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 specified by the manufacturer.

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

Cet appareil numérique de la Class B est conforme à la norme 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 transmitting antenna) that is installed outdoors is subject to licensing.

Hereby, Janam Technologies LLC declares that this product is in compliance with the essential requirements and other relevant provisions of Directive, 1999/5/EC. The equipment is intended for use throughout the European Community.

**Care and Cleaning of Terminals**

When needed, clean the screen with a clean, non-abrasive, lint-free cloth. The terminal can be cleaned with a damp cloth.

**Waste Electrical and Electronic Equipment 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 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 indicates that you should use the appropriate separate take-back systems for product disposal.

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

## **Battery Warning**

### **CAUTION:**

**Unit contains a removable, replaceable internal Lithium Ion battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, puncture or dispose of in fire or water.**

## **Battery Safety Guidelines**

Important instructions for service personnel only:

- Reorient or relocate the receiving antenna.
- Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- Replace only with the same or equivalent type recommended by the manufacturer.
- The battery must be recycled or disposed of properly.
- Use the battery only in the specified equipment.

## **Battery Charger Safety Guidelines**

- Use only the charger supplied with your device. Use of another type of charger will result in malfunction and/or danger.
- WARNING! To avoid the risk of electric shock, this device must only be connected to supply mains with protective earth.
- Do not use the charger in a high moisture environment. Never touch the charger when your hands or feet are wet.
- Allow adequate ventilation around the charger when using it to operate the device or charge the battery. Do not cover the charger with paper or other objects that will reduce cooling. Do not use the charger while it is inside a carrying case.
- Connect the charger to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the charger if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.
- To fully disengage the power to the unit, please disconnect the power cord from the AC inlet.



## Troubleshooting

Before contacting the service center, please review the instructions below:

- ☐ Please fully charge the battery for optimal operation.
- ☐ Avoid storing large amounts of data in your device as this may affect its performance.
- ☐ Use Factory data reset and the upgrade tool to perform device formatting or software upgrading (to reset factory data, go to "Settings", "Backup and reset". ALL User device data: contacts, photos, messages, files, and downloaded applications will be permanently lost. It is strongly advised to fully backup the device data and profiles before doing formatting or upgrading.

### **My device cannot be turned on or is frozen**

- ☐ When the device cannot be turned on, charge for at least 20 minutes to ensure the minimum battery power needed, then try to turn it on again.

### **My device has not responded for several minutes**

- ☐ Restart your device by pressing and holding the Power key for more than 7 seconds.

### **My device turns off by itself**

- ☐ Check that your screen is locked when you are not using your device.
- ☐ Check the battery charge level.

### **My device doesn't charge properly**

- ☐ Make sure you are using a Janam Technologies approved charger.
- ☐ Make sure that your battery is not completely discharged; if the battery is completely discharged, it may take around 20 minutes to display the battery charger indicator on the screen.
- ☐ Make sure charging is carried out under normal conditions (32°F to +104°F).
- ☐ When abroad, check that the voltage input is compatible.

### **My device cannot connect to a network or "No service" is displayed**

- ☐ Try connecting in another location.
- ☐ Verify the network coverage with your operator.
- ☐ Check with your operator that your SIM card is valid.
- ☐ Try selecting the available network(s) manually.
- ☐ Try connecting at a later time if the network is overloaded.

### **My device cannot connect to the Internet**

- ☐ Check that the IMEI number (press \*#06#) is the same as the one printed on your warranty card or box.
- ☐ Make sure that the internet access service of your SIM card is available.
- ☐ Check your device's Internet connecting settings.
- ☐ Make sure you are in a place with network coverage.

- ☐ Try connecting at a later time or another location.

#### **Invalid SIM card**

- ☐ Make sure the SIM card has been correctly inserted (see "Inserting or removing the SIM card").
- ☐ Make sure the chip on your SIM card is not damaged or scratched.
- ☐ Make sure the service of your SIM card is available.

#### **Unable to make outgoing calls**

- ☐ Make sure you have dialed a valid number.
- ☐ For international calls, check the country and area codes.
- ☐ Make sure your device is connected to a network, and the network is not overloaded or unavailable.
- ☐ Check your subscription status with your operator (credit, SIM card valid, etc.).
- ☐ Make sure you have not barred outgoing calls.
- ☐ Make sure that your device is not in flight mode.

#### **Unable to receive incoming calls**

- ☐ Make sure your device is switched on and connected to a network (check for overloaded or unavailable network).
- ☐ Check your subscription status with your operator (credit, SIM card valid, etc.).
- ☐ Make sure you have not forwarded incoming calls.
- ☐ Make sure that you have not barred certain calls.
- ☐ Make sure that your device is not in flight mode.

#### **The caller's name/number does not appear when a call is received**

- ☐ Check that you have subscribed to this service with your operator.
- ☐ Your caller has concealed his/her name or number.

#### **I cannot find my contacts**

- ☐ Make sure your SIM card is not broken.
- ☐ Make sure your SIM card is inserted properly.
- ☐ Import all contacts stored in SIM card to device.

#### **The sound quality of the call is poor**

- ☐ You can adjust the volume during a call by pressing the Volume Up/Down key.
- ☐ Check the network strength.
- ☐ Make sure that the receiver, connector or speaker on your device is clean.

#### **I am unable to use the features described in the manual**

- ☐ Check with your operator to make sure that your subscription includes this service.

#### **When I select a number from my contacts, the number cannot be dialed**

- ☐ Make sure that you have correctly recorded the number in your file.
- ☐ Make sure that you have selected the country prefix when calling a foreign country.

#### **I am unable to add a contact in my contacts**

- ☐ Make sure that your SIM card contacts are not full; delete some files or save the files in

the phone contacts (i.e. your professional or personal directories).

**My callers are unable to leave messages on my voicemail**

- ☐ Contact your network operator to check service availability.

**I cannot access my voicemail**

- ☐ Make sure your operator's voicemail number is correctly entered in "Voicemail number".
- ☐ Try later if the network is busy.

**I am unable to send and receive MMS**

- ☐ Check your device memory availability as it might be full.
- ☐ Contact your network operator to check service availability and check MMS parameters.
- ☐ Verify the server center number or your MMS profile with your operator.
- ☐ The server center may be busy, try again later.

**SIM card PIN locked**

- ☐ Contact your network operator to obtain the PUK code (Personal Unblocking Key).

**I am unable to connect my device to my computer**

- ☐ Make sure that you're using the cable included in the box.

**I am unable to download new files**

- ☐ Make sure there is sufficient device memory for your download.
- ☐ Select the microSD card as the location to store downloaded files.
- ☐ Check your subscription status with your operator.

**The device cannot be detected by others via Bluetooth**

- ☐ Make sure that Bluetooth is turned on and your device is visible to other users.
- ☐ Make sure that the two devices are within Bluetooth's detection range.

**How to make your battery last longer**

- ☐ Make sure you follow the complete charge time (minimum 3 hours).
- ☐ After a partial charge, the battery level indicator may not be exact. Wait for at least 20 minutes after removing the charger to obtain an exact indication.
- ☐ Adjust the brightness of screen as appropriate.
- ☐ Extend the email auto-check interval for as long as possible.
- ☐ Update news and weather information on manual demand, or increase their auto-check interval.
- ☐ Exit background-running applications if they are not being used for a long time.
- ☐ Deactivate Bluetooth, WLAN, or GPS when not in use.

**The device sometimes gets hot**

- ☐ This heating is a normal consequence of the CPU handling excessive data. Ending above actions will make your device return to normal temperatures.