

JANAM

XG200 User Manual



Technology at Work®

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Introduction

XG200 Rugged Mobile Computer

Janam's XG200 is optimized to meet the unique requirements of warehouses, distribution centers, loading docks and other environments where rugged, gun-shaped mobile computers are deployed. With its industry-leading design, super-fast processing speed and superior barcode scanning technology, the XG200 can significantly increase mobile worker productivity.

With its patented design, the XG200's 6300mAh battery is located inside the handle, delivering a device that is incomparably light and balanced in the hand, while also allowing users to quickly hot-swap a battery to eliminate downtime.

The XG200 delivers best-in-class scan speed, ultra-fast motion tolerance and excellent reading capability for poorly printed barcodes. Janam's XG200-ER model is one of only a few devices available with Honeywell's industry-leading EX25 near/far imager. With breakthrough auto-focus technology and class-leading barcode reading range, the XG200-ER offers unparalleled flexibility to read virtually any kind of 1D and 2D barcode, omni-directionally, from six inches out to more than 50 feet. It's technology at work™

Key Features

- Android 7 with Google Mobile Services (GMS)
- Brilliant 4.3-inch color display with Corning® Gorilla® Glass 3
- Sleek, stylish, lightweight design with battery positioned in handle
- 24-key numeric or 51-key alpha-numeric keypad
- Sealed to IP65 standard for protection against water and dust
- Superior 1D/2D barcode scanning
- Dual-band 802.11a/b/g/n/d/h/i/k/r/v Wi-Fi and Bluetooth Class 1 4.1 connectivity
- 3.63V 6300mAh Li-ion battery for extended-shift battery life
- Quad-core 1.2 GHz Qualcomm Snapdragon 410
- Multiple 6'/1.2m drops to concrete per MIL-STD 810G
- 2GB/16GB of built-in memory with expansion capability
- User-accessible microSD card slot with SD and SDHC support
- USB Type-C port

Hardware Overview



1. Scanner illuminator
2. Scanner
3. Scanner illuminator
4. LED indicator
5. Microphone
6. Speaker
7. Scanner trigger

8. Gun handle with battery
9. Battery lock
10. Battery twist top
11. Docking pogo pins
12. Alignment slot
13. Android Open Apps key
14. Android Home key

15. Android Back key
16. USB Type-C port
17. Gun handle with battery
18. Scanner trigger
19. Power key

Getting Started

Unpacking the XG200 Rugged Touch Computer

Make sure you have the following:

- XG200 Rugged Mobile Computer
- Stylus with Tether for XG200
- Screen protector for the XG200
- 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

XG200 SDK

The XG200 Software Development Kit enables programmers to develop applications for XG200 rugged mobile computers running the Android™ operating system. It contains details and instructions for developing applications that access the XG200 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 XG200 Rugged Mobile Computer

BATTERY SAFETY GUIDELINES

The XG200 has a user-accessible, rechargeable battery that fits into the handle of the computer. 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 website or contact JanamCare at 866-915-5311. Use only battery chargers approved for the XG200 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

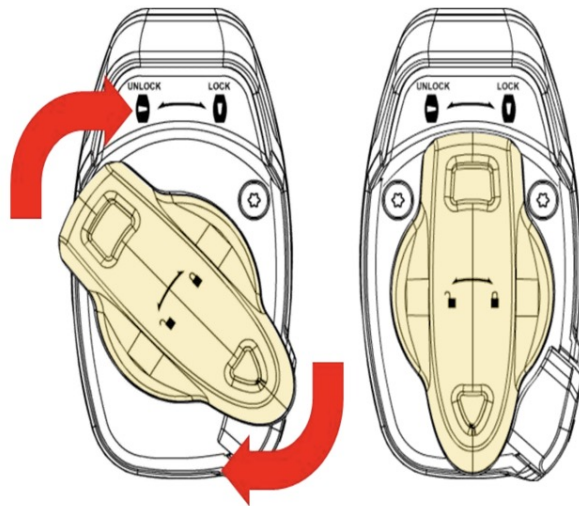
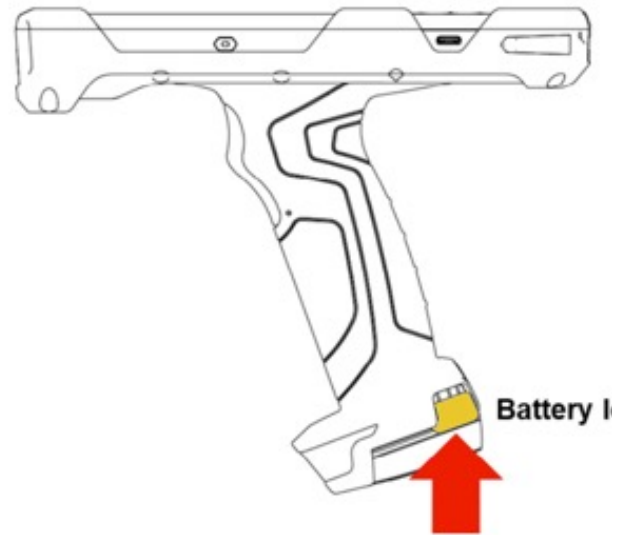
1. Do not use the equipment in or near areas in which sparks are likely or possible.
2. Do not let equipment's metal contacts and electrical sockets come in contact with metal objects.
3. For indoor use only. Do not expose the equipment to rain or any liquids.
4. Do not use or store the equipment in 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 and removing the XG200 battery

The XG200 battery is located in the gun handle of the computer.

To install the battery, insert it into the gun handle, align the tabs on the neck of the battery with the corresponding openings in the battery garage, and push the battery all the way into the compartment. Rotate the battery 1/4 turn clockwise until it audibly locks into place.

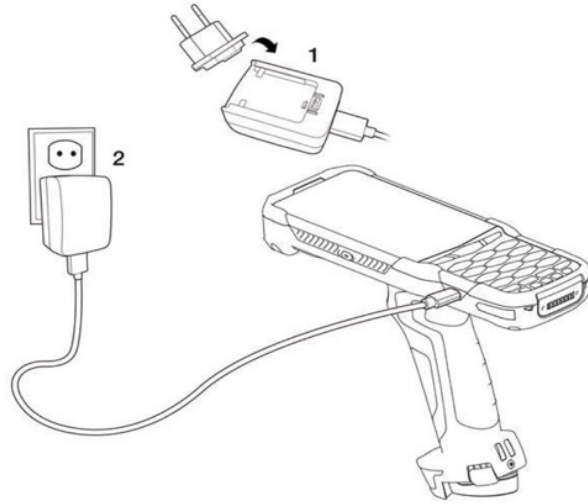
To remove the battery, depress the spring-loaded battery lock and rotate the battery neck 1/4 turn counter-clockwise. The battery can then be pulled out of its compartment.



Charging the XG200 battery

Charging with 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 XG200.
3. Plug in the AC/DC power supply. The XG200 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.



Charging with the (optional) **Cradle Kit**:

1. Insert the DC power plug into the DC power jack on the cradle. Insert the XG200 into the cradle.
2. Plug in the AC/DC power supply. The XG200 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.
3. The optional cradle kit has a separate charging slot for a second/spare battery. Both the battery in the XG200 and a second battery can be charged simultaneously.



XG200 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:

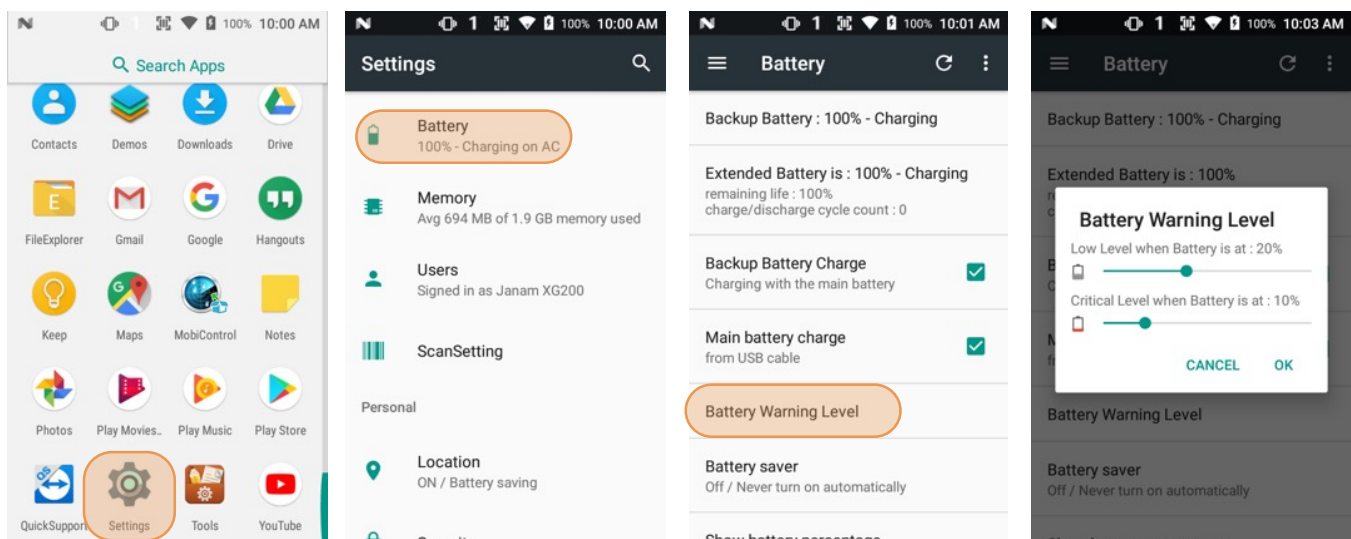
On the **home screen**, swipe down from the top to open status bar, then touch and hold **Battery** to get to **Battery screen**.

Or, from the **apps screen**, swipe up to get to the **Settings** 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.

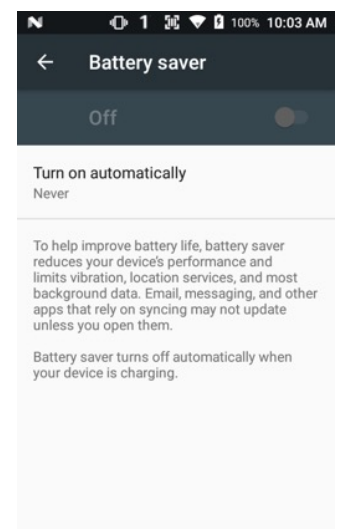
To view battery usage by application, tap on **Battery use**.

Here, you can also set the Battery Warning Level.



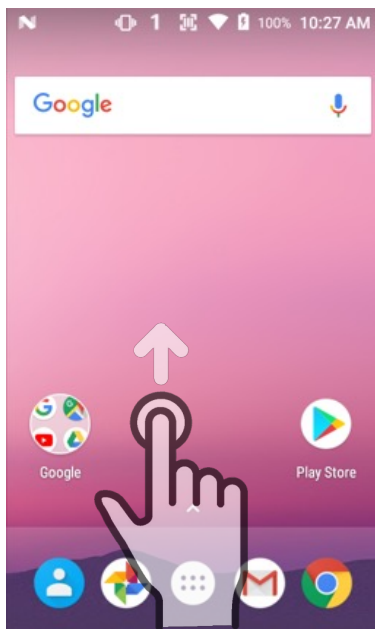
Tip — Whenever practical, you can conserve battery life by:

1. Using the AC adapter to plug the XG200 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.

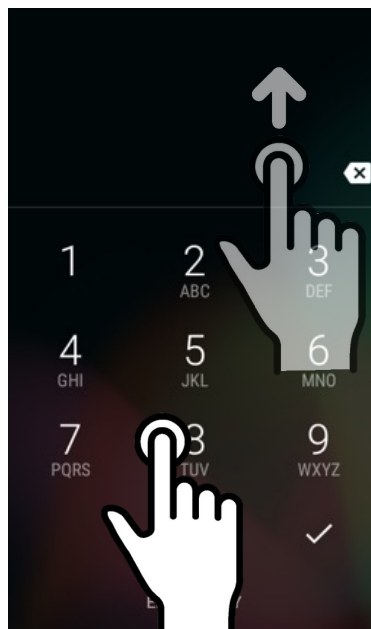


Turning the XG200 Rugged Mobile Computer On

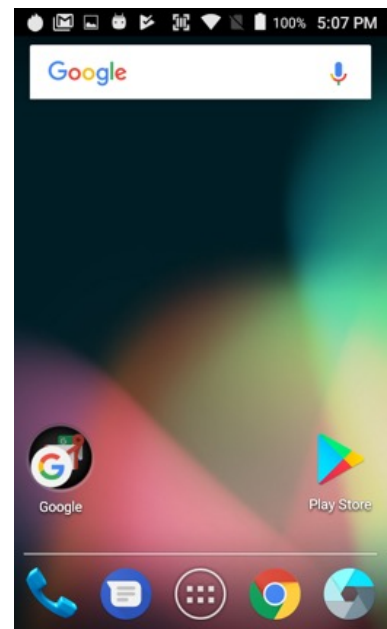
1. Press the **Power Key** (marked red in its center) on the left-hand side of the XG200.
 - If the XG200 is being powered on for the first time, follow the on-screen setup instructions.
 - When the XG200 is on, pressing the power button briefly will suspend operation until it is pushed again.
2. When powered on, an **unsecured** XG200 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 **home screen**. For information about securing the XG200 with a password or pin code, refer to Chapter 3.
3. When powered on, a **secured** XG200 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 **home screen**. For information about securing the XG200 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 XG200 Rugged Touch Computer Off

1. To simply put the XG200 display to sleep, just briefly press the **Power Key** (marked red in its center). The display will turn off. To turn the XG200 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 XG200 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 XG200 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 XG200 will reboot automatically.

Touch Screen Navigation

The XG200 uses capacitive multi-touch technology. Almost all of the XG200'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.



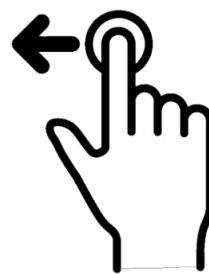
Touch

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 XG200 was designed to be used in portrait (vertical) orientation. However, many apps can also be used in landscape (horizontal) orientation. By default, the XG200'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 > Display**.













Lock Screen

When turned on, the XG200 first displays the Android **lock screen**. The lock screen shows the current time and date. If the XG200 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.

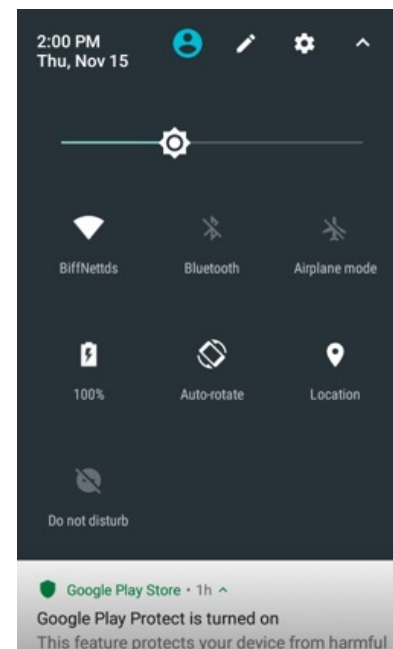
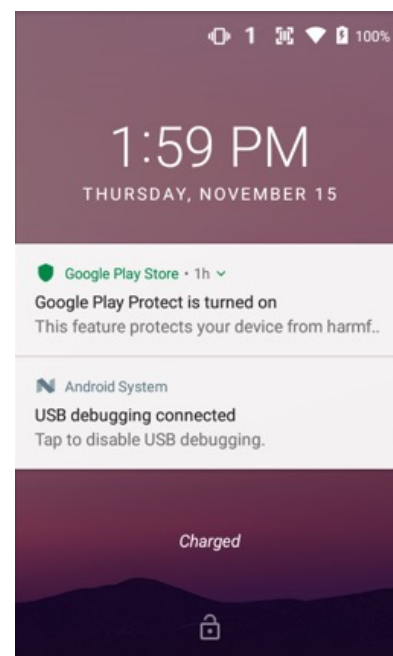
Below is a sample of the icons that may appear in the **status bar** of the **lock screen**, as well as what the icons indicate. Note that swiping down from the top of the lock screen reveals a screen with tiles that provide one-tap access to various important functions.

Status icons

	WLAN is on		Connected to a WLAN network
	Bluetooth is on		Connected to a Bluetooth device
	Battery is full		Battery is partially drained
	Battery is low		Battery is very low
	Battery is charging		
	GPS is on		Alarm is set
	Vibrate mode/ Mute		

Notification icons

	New Email		Connected to VPN network
	Upcoming event		Screenshot captured
	OTG device connected		
	File uploaded		File downloaded
	There are more notifications		Other input method available

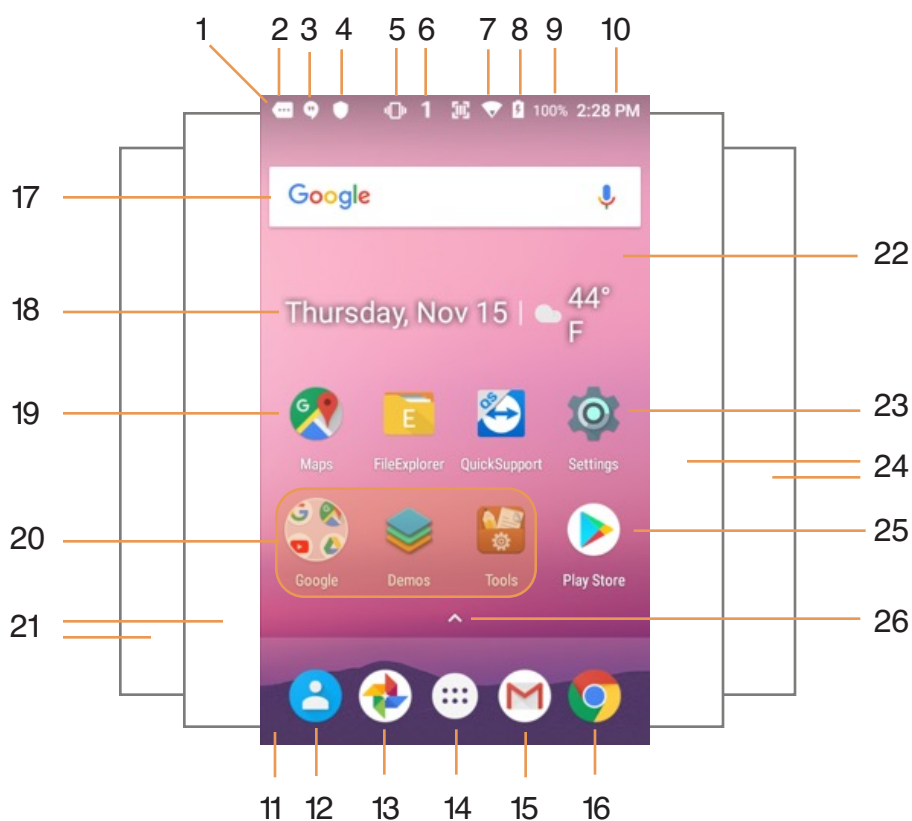


The Home Screen

In Android, the **home screen** is the launchpad for all of the XG200's most often used features and applications. The home screen can consist of multiple screens. The XG200 comes with just one home screen; additional ones can be added by holding and dragging home screen icons to the left or 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. Tapping and holding an icon may pop up additional functions. Widgets perform functions, like showing the time, weather, news, or act as shortcuts.



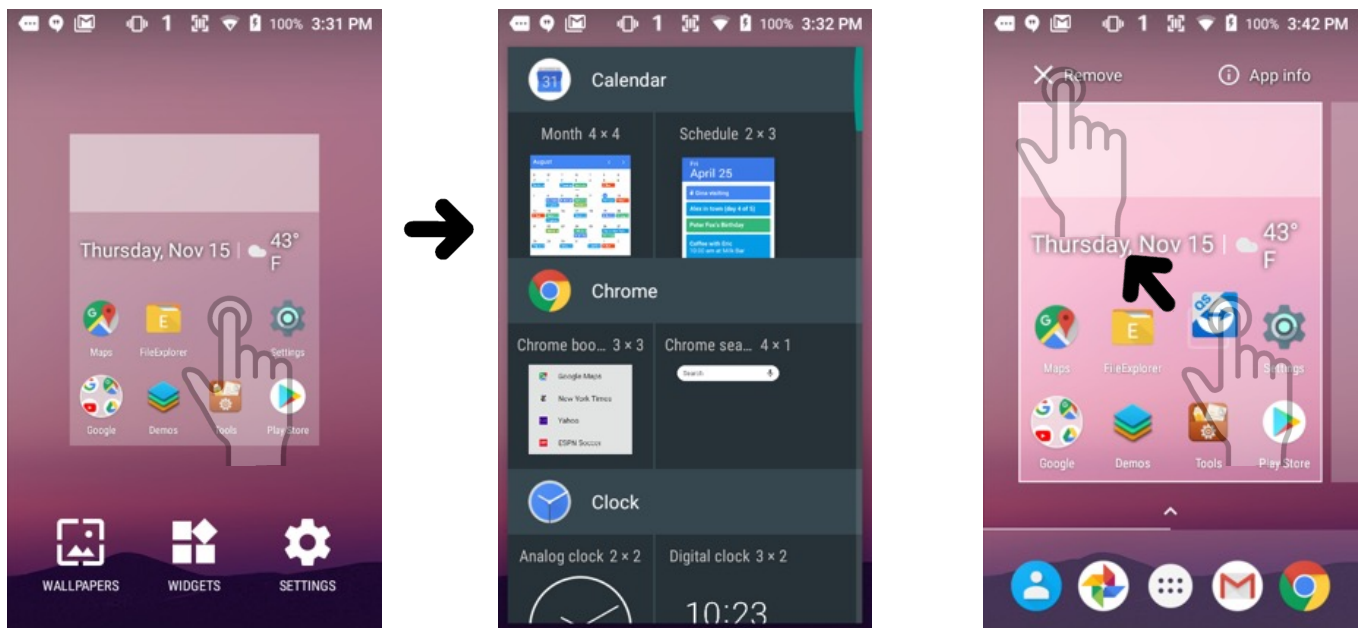
1. Status bar
2. Indicates more notifications
3. Indicates hangout invitations
4. Indicates Google Play Store is on
5. Indicates vibrate mode is on
6. Indicates keypad mode
7. Indicates WLAN on and strength
8. Indicates battery on charge
9. Indicates battery charge in %

10. Time of day
11. Favorites tray
12. Favorite app: Contacts
13. Favorite app: Photos
14. Application screen button
15. Favorite app: Mail
16. Favorite app: Chrome browser
17. Search bar widget
18. Date and weather widget

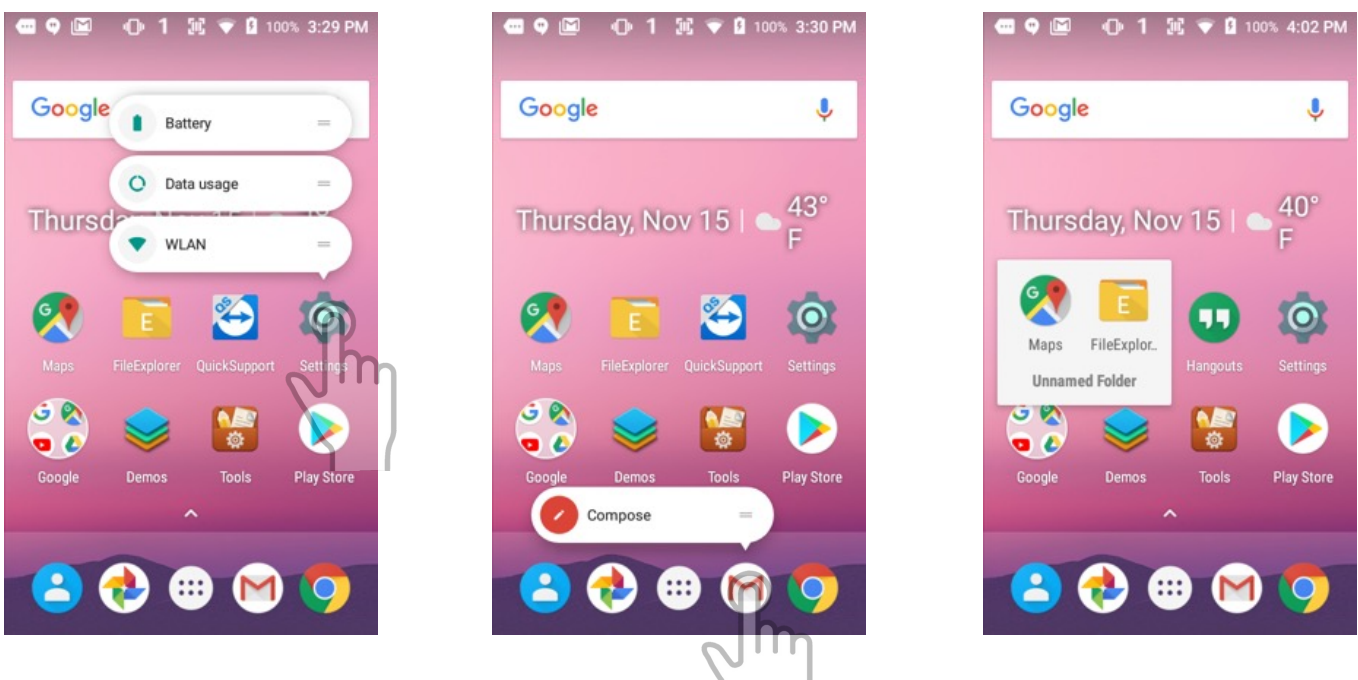
19. App icons
20. Icons can also open folders
21. Two more apps and widget pages
22. Exchangeable wallpaper
23. Launches Settings
24. Two more apps and widget pages
25. Launches Google Play Store
26. Drag up for App Screen

Home screen customization

The Android **home screen** can easily be customized. Tap and hold on an empty spot on the home screen and select from WALLPAPERS, WIDGETS, or SETTINGS. WALLPAPERS allows selection of different styles and pictures. WIDGETS brings up a variety of preprogrammed functions in different sizes that can be placed on the home screen. To remove a home screen icon or widget, tap and hold it, then drag it to "Remove." To get info on the item, tap, hold and drag it to "App info."



Tapping and holding some icons brings up function the app can perform. Icons can be folders. To create a folder, drag an icon onto another icon. You can also drag icons out of a folder. A folder with just one icon left in it will return to being an icon.



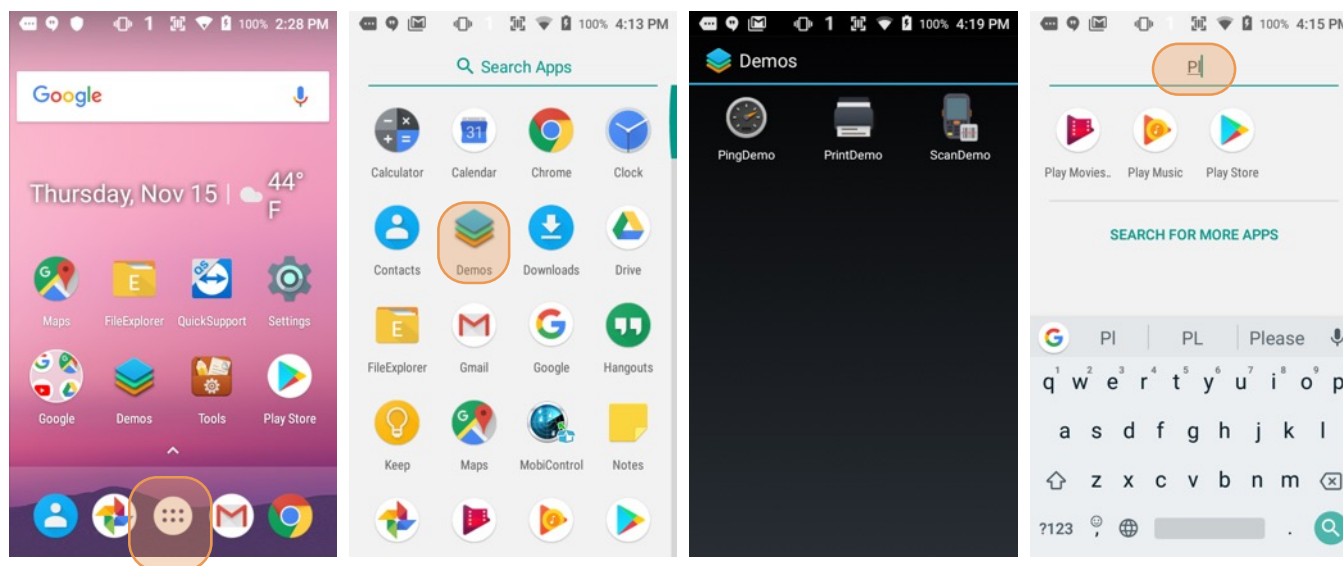
App Screen

While the Android **home screen** serves as the XG200'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.

To launch an application from the app screen, tap on it. If you have a lot of apps, swipe up to scroll down on the apps screens. You can also use **Search Apps** to locate apps.

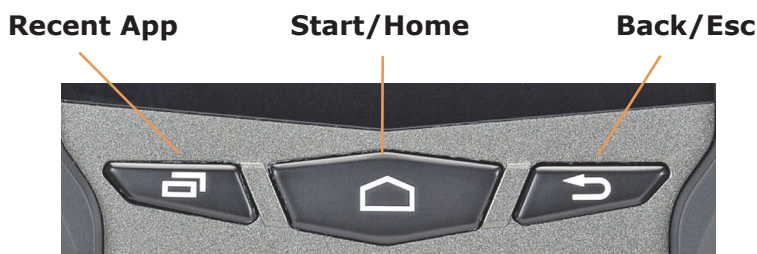
Some icons are folders. For example, tap on **Demos** to show all available demo apps.

From the apps screen, either press the physical **Home key** below the XG200's display to get back to the home screen, or tap and drag down from the **Search Apps** area.



Function Keys

The XG200 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.).



XG200 Setup

Backup, Restore, and Reset

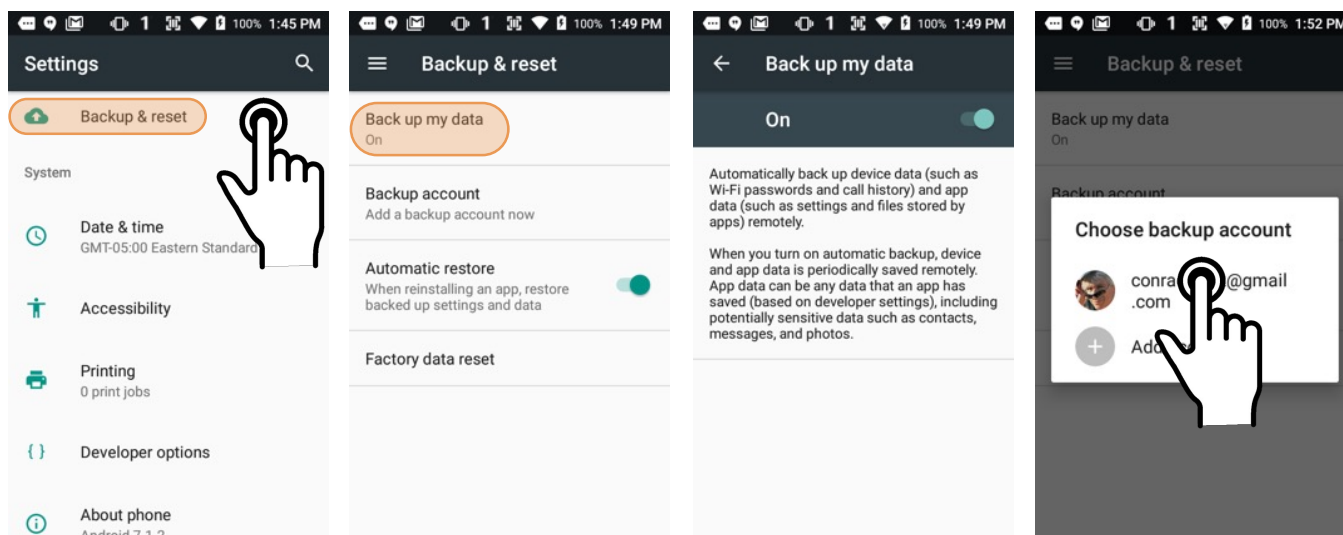
Android backup concept

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.

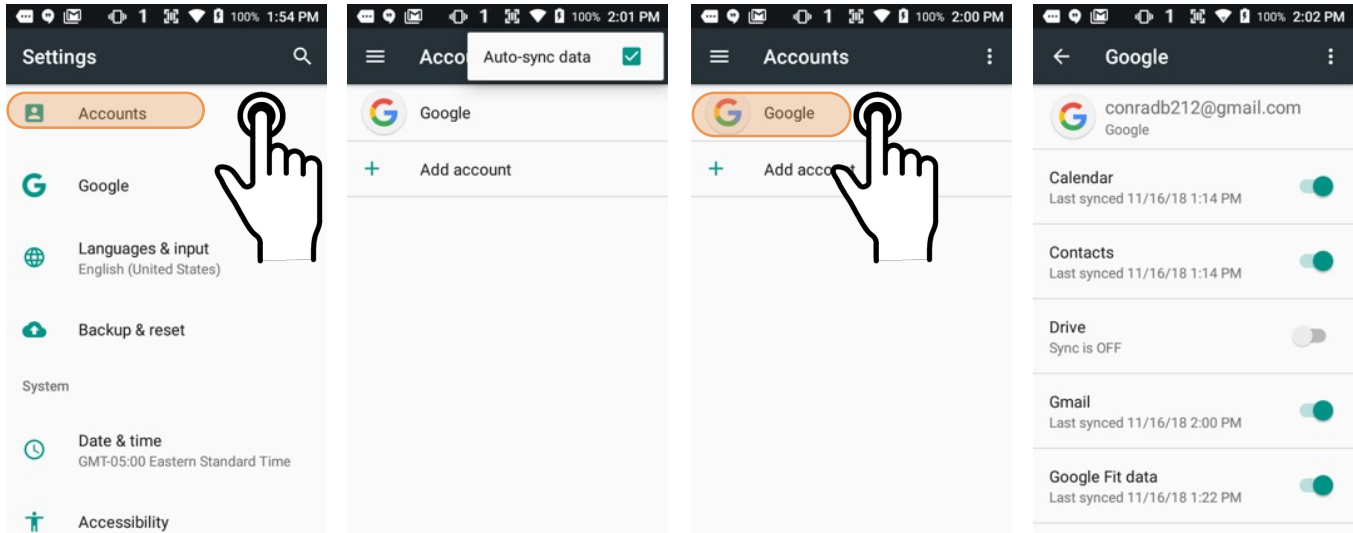
All of this can be restored in case of a failure, or when moving onto a new device. The idea here is to provide continuity rather than a total 1:1 full backup. It works like this:

Auto Backup for Apps

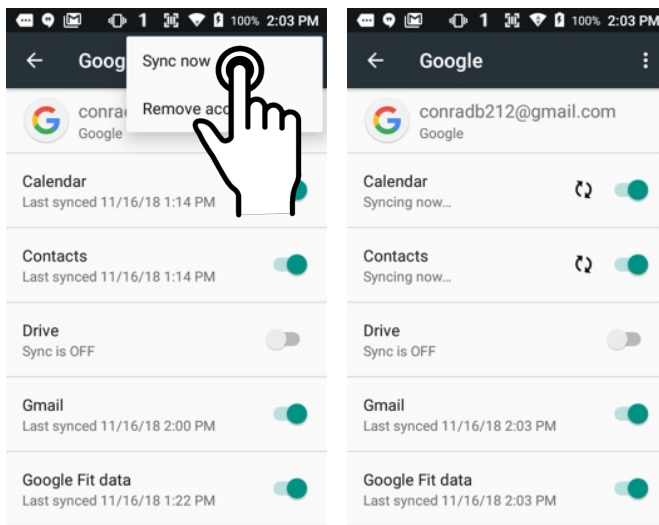
Android 7 allows backing up various settings and data to your account in the cloud transparently. This is enabled and set up in a two step process. First, enable the process in **Settings > Backup & Reset**. Then tap **Backup account** and choose an account.



Now you have to select a backup account. Go to **Settings** > **Accounts**. Decide whether you want **Auto-sync data** on or off. Then tap on an existing account (or add a new one and tap on that). The next screen lists all items that can be backed up. Select check everything you want to sync.



Once you are done selecting, you may to **Sync now**. This will start the backup/sync process. On this screen you can also remove a sync account.



Restoring the XG200

Data backed up to the cloud can be restored to a XG200 upon factory reset or onto a new XG200. Upon initial boot, there will be a “**Welcome to your XG200**” message, with the option of either setting the device up from scratch, or restoring data from another device or from the cloud. If cloud is selected, you must first get connected to a WLAN network. Once connected, the “**Bring your data from...**” screen again presents the option to a) copy data wirelessly from your old device, an iPhone device, or from the cloud. Selecting from the cloud will bring up the **Sign in** screen. Once signed in, if you have backed up data from more than one device, you will be asked “**Which device?**” you wish to restore apps and data from. Select the device to start the restore process.

Soft reset (“warm boot”)

A soft reset may be required 1) when the XG200 fails to respond, 2) after installing software applications that request a reboot, or 3) after changing to certain system settings. A soft reset reboots the XG200 without losing RAM data. It terminates all running applications, reloads the OS, and launches Autoinstall, which re-initializes any APK (Android Package Kit) files. To perform a Soft Reset:

1. Press the Power button for **3 seconds** and select the Reboot on the power menu.
2. When the reset is complete, the Android lock screen appears.

Hard reset (“cold boot”)

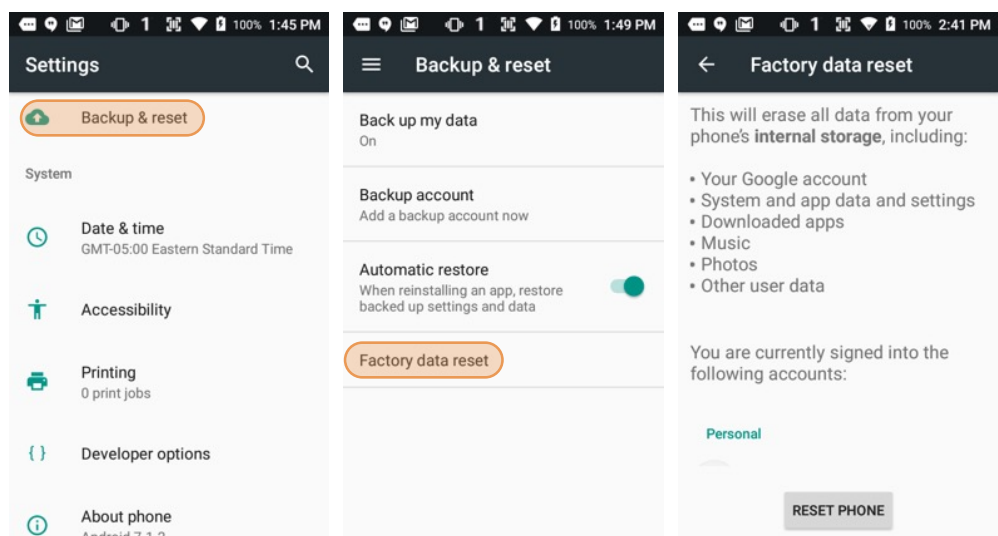
A hard reset erases all of the data and applications stored in the XG200’s RAM memory. It then reloads the OS, and launches Autoinstall, which re-initializes any APK (Android Package Kit) files. To perform a cold Reset:

1. Press the Power button for **8 seconds** until the XG200 begins rebooting.
2. When the reset is complete, the Android lock screen appears.

Resetting the XG200 to factory condition

Resetting the XG200 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 apps. In essence, the device is returned to factory condition.

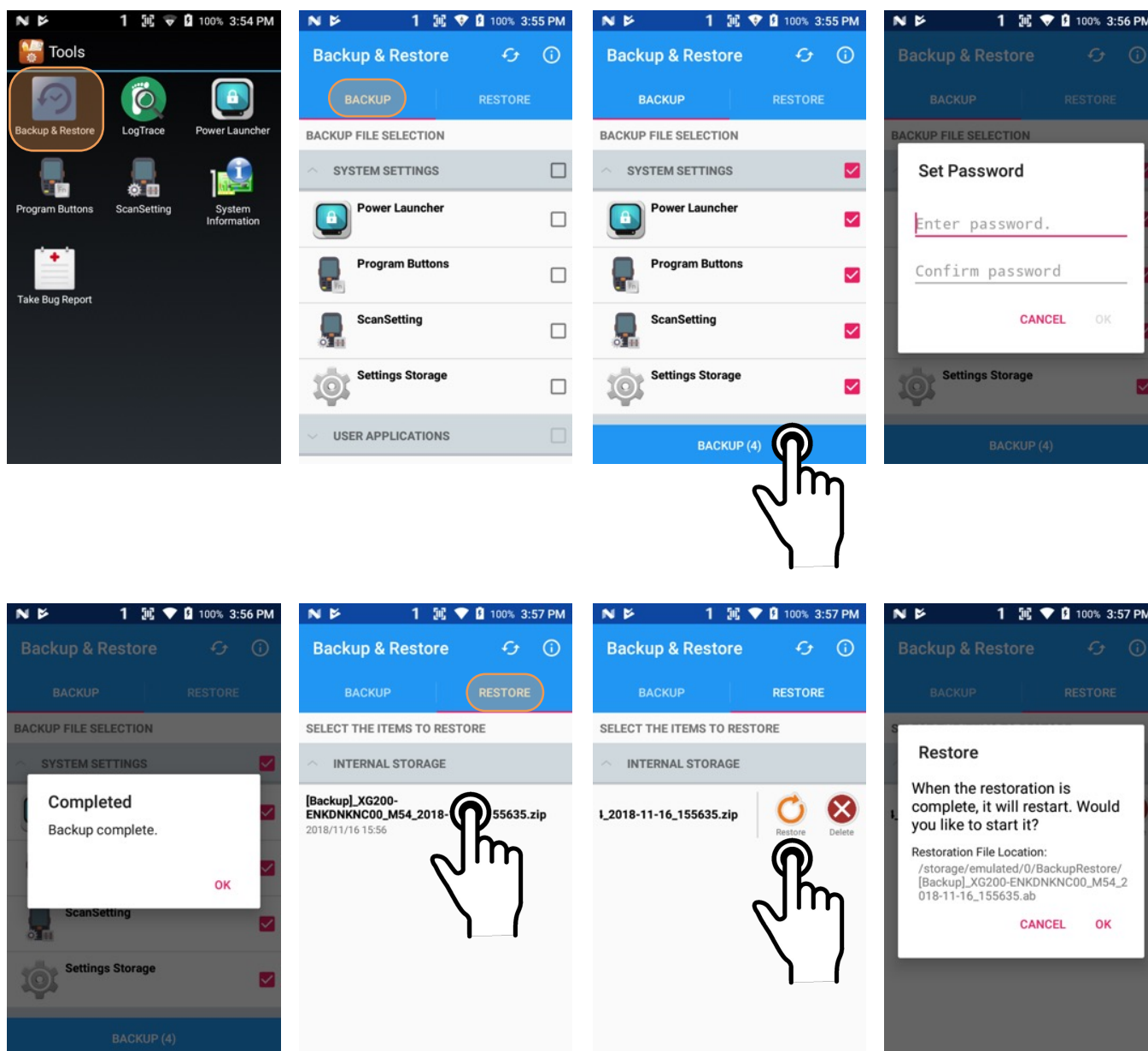
To perform a full reset, tap **Settings > Backup & Reset**, and then tap on **Factory data reset** at the bottom of the screen. This brings up a warning. To proceed, tap on **Reset phone**. You will be asked to supply your PIN, password, or pattern. Once erased, you may turn off the device, or opt to reboot and set it up from scratch or from a backup.



Using Direct Clone Backup & Restore

The XG200 comes with a separate Backup & Restore app that allows backing system settings and user applications. To use the app, go to the **app screen**, tap the **Tools** icon, and tap on the **Backup & Restore** app. Select which system settings and user applications you wish to backup. Click on Backup. You may assign a password to an individual backup. Since the XG200 does not have a storage card slot, the only backup location option is Internal Storage.

To restore a backup, go to the **app screen**, tap the **Tools** icon, and tap on the **Backup & Restore** app. Tap on the Restore tab, select which backup you wish to restore.



Security

Android Security

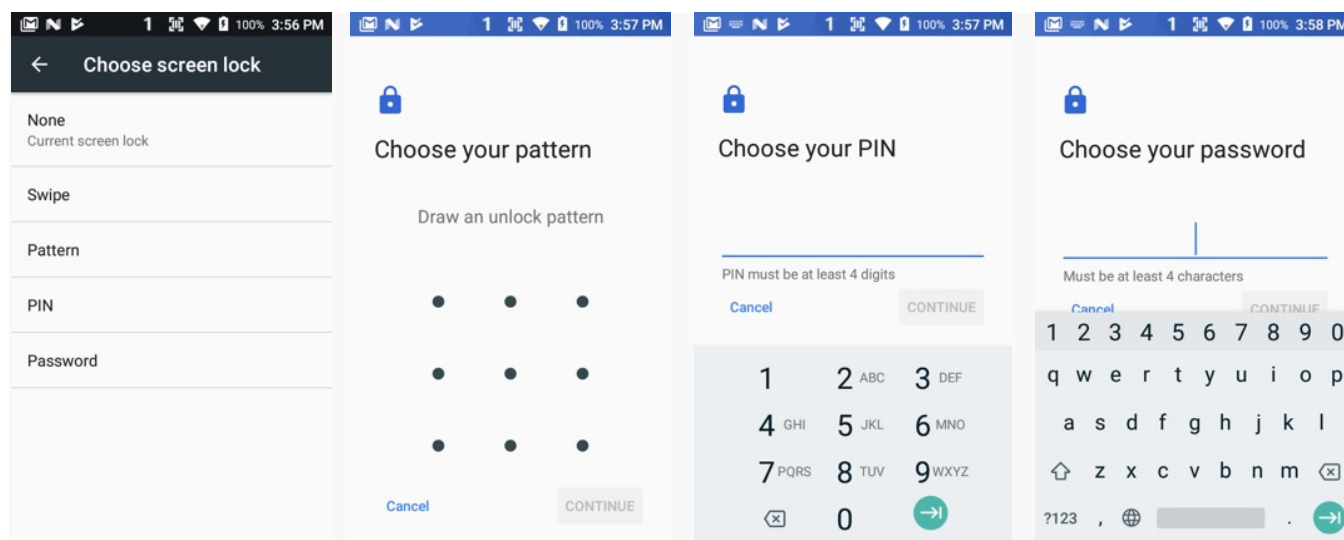
The Android operating system installed on the Janam XG200 can inherently provide a high degree of security, centering around these areas:

- ☐ **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
- ☐ **File-level encryption** for convenience and customization

Some of this security is implemented automatically, 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**. Note that each screen lock option can be set to apply for start-up as well as logging in.



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.

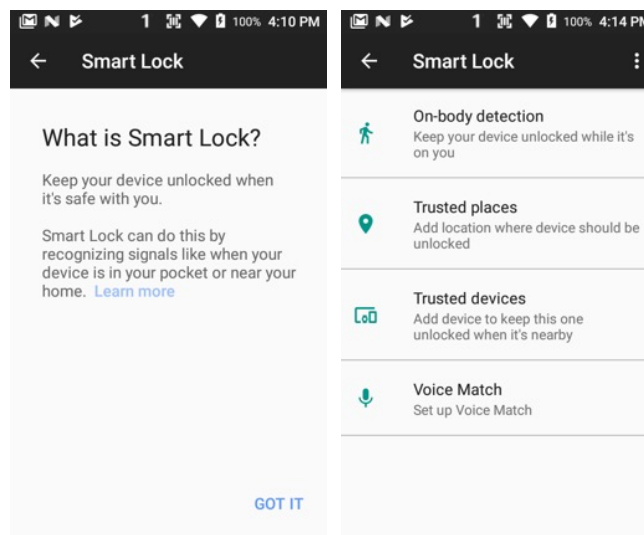
Additional Screen Security Settings

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

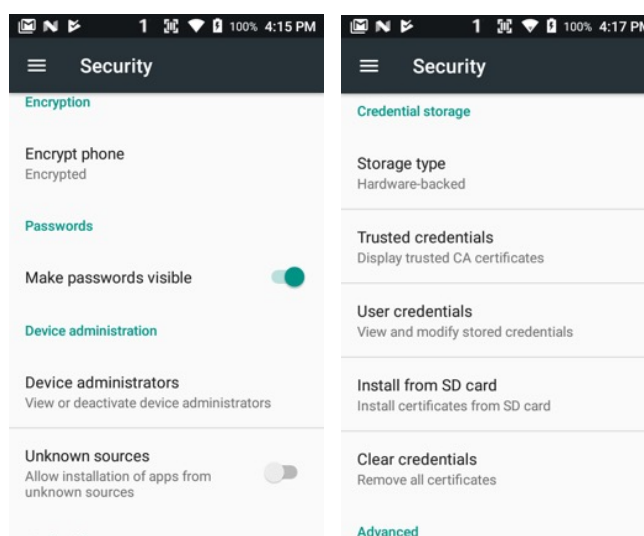
- ☐ **Automatically lock** (can be set from 5 seconds to 30 minutes)
- ☐ **Power button instant lock** (screen instantly locks when power button is pushed)
- ☐ **Lock screen message** (instant identification of device)

In addition, there is a SmartLock feature that locks your device depending on certain circumstances. This can make using your XG200 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)
- ☐ **Voice Match**
("Ok Google" detects your voice)
- ☐ **Encryption**
Android 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." **Screen pinning** allows locking the device to a single app. **Apps with usage access** lists local apps that monitor usage. Usage can be turned on or off.



Device Settings

The XG200 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 XG200 can use its **Adaptive brightness** to adjust the brightness level automatically.

The **Keyboard Backlight** can be turned on and off here.

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, cable connections, scan triggers, etc.).

Screen saver can be configured and set to clock, colors, or pictures).

Ambient display can wake the screen upon notifications.

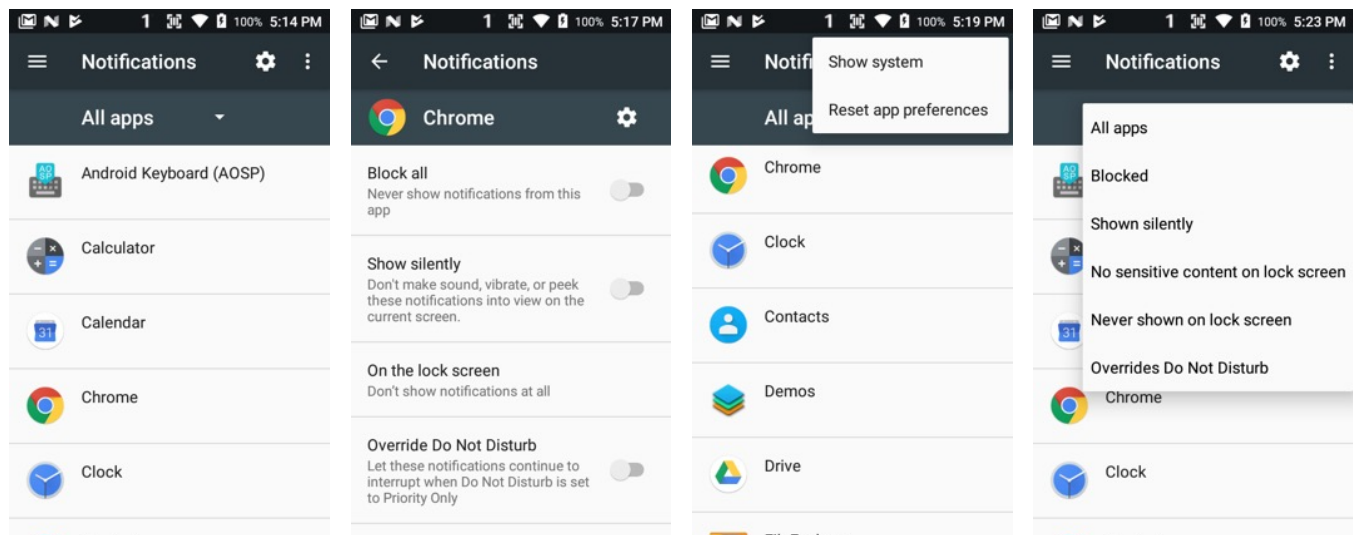
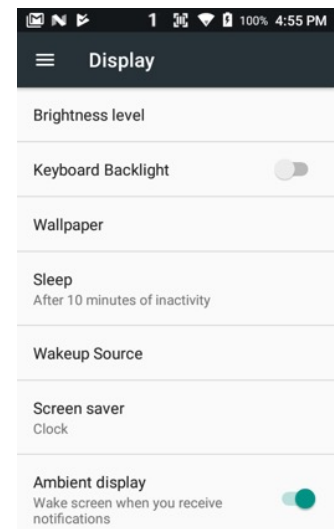
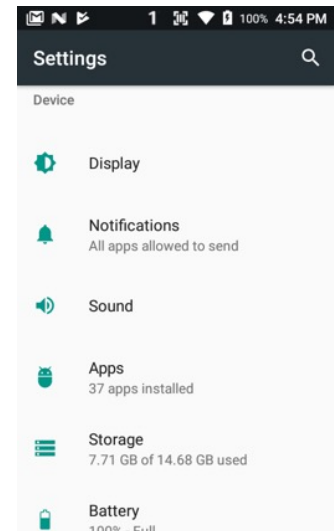
Font size can be set to one of four sizes.

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

Cast enables wireless display for use with ChromeCast.

Notification

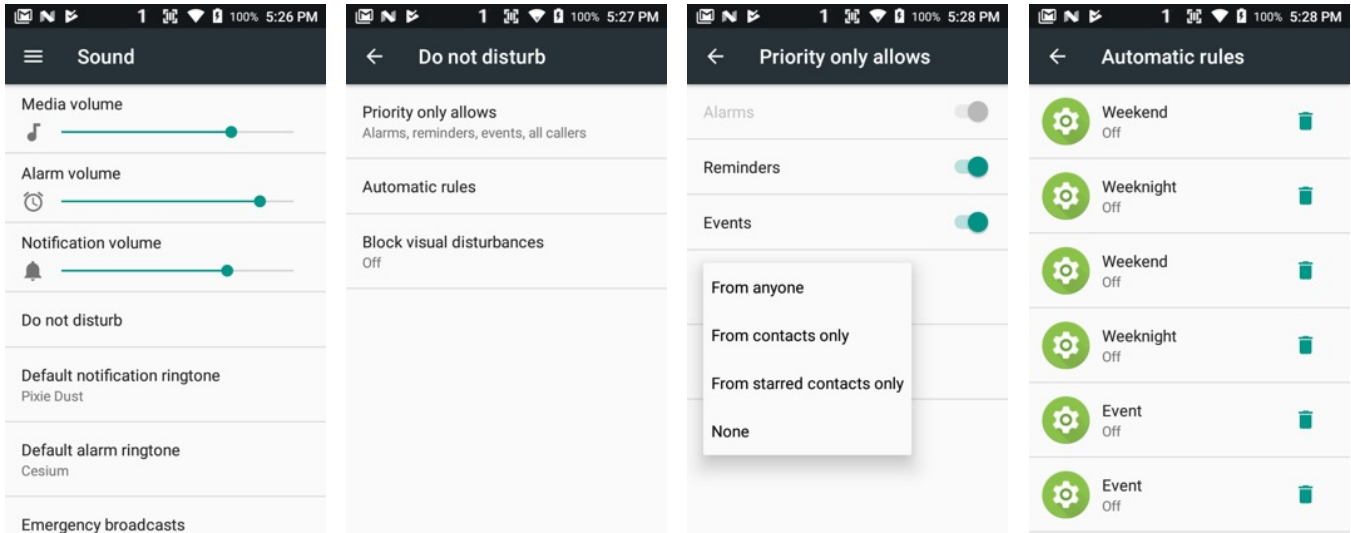
This brings up a list of apps that may generate notifications. Tap on each app to block or allow notifications, and if so, how. You can opt to show or hide system services, reset all app notification preferences, and you may filter the list of apps by notification setting (blocked, silent, conditional, etc.)



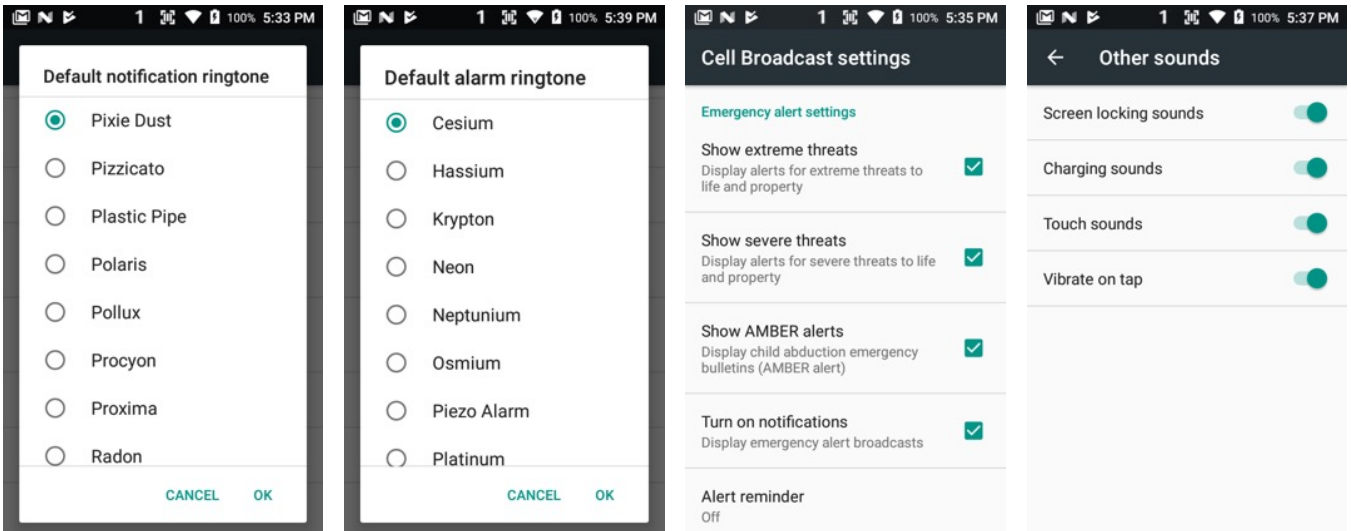
Device Settings (continued)

Sound

Allows setting of **volume of media, alarms,** and **notifications.** 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. You can also set **Automatic rules** for custom days and events.



You may set the default **notification** and **alarm ringtone.** You can also configure **Emergency broadcast** settings as well as **other sounds.**



Device Settings (continued)

Apps

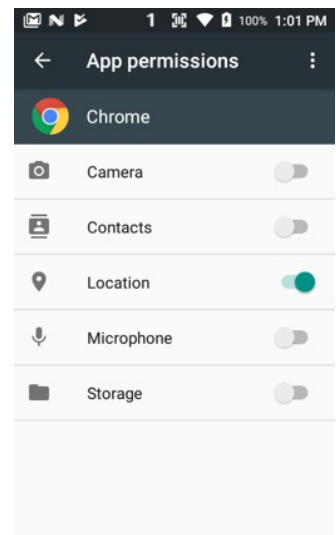
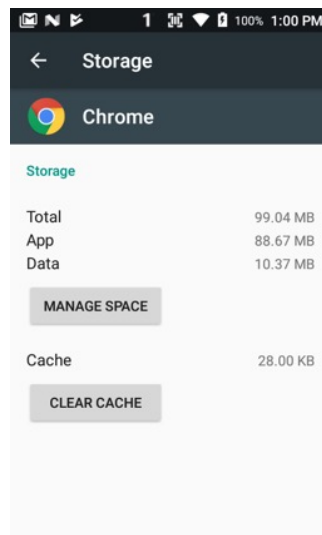
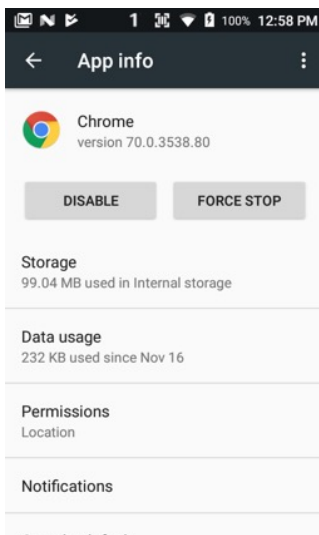
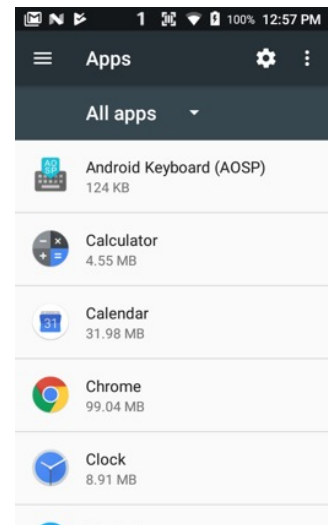
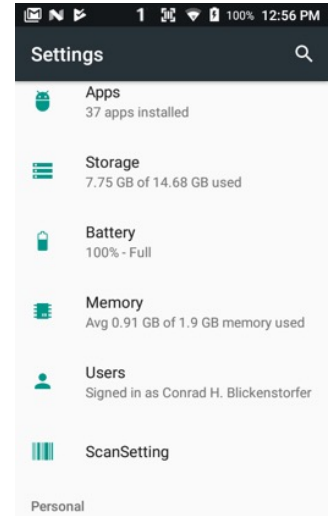
Touch **Apps** from the **Settings** screen to view, and evaluate how applications installed on the terminal utilize memory and storage resources.

Tapping the Menu Icon in the upper righthand of the screen lets you opt to list all apps, only enabled apps, or only disabled apps.

Tapping the Settings Icon lets you **Configure apps**.

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:

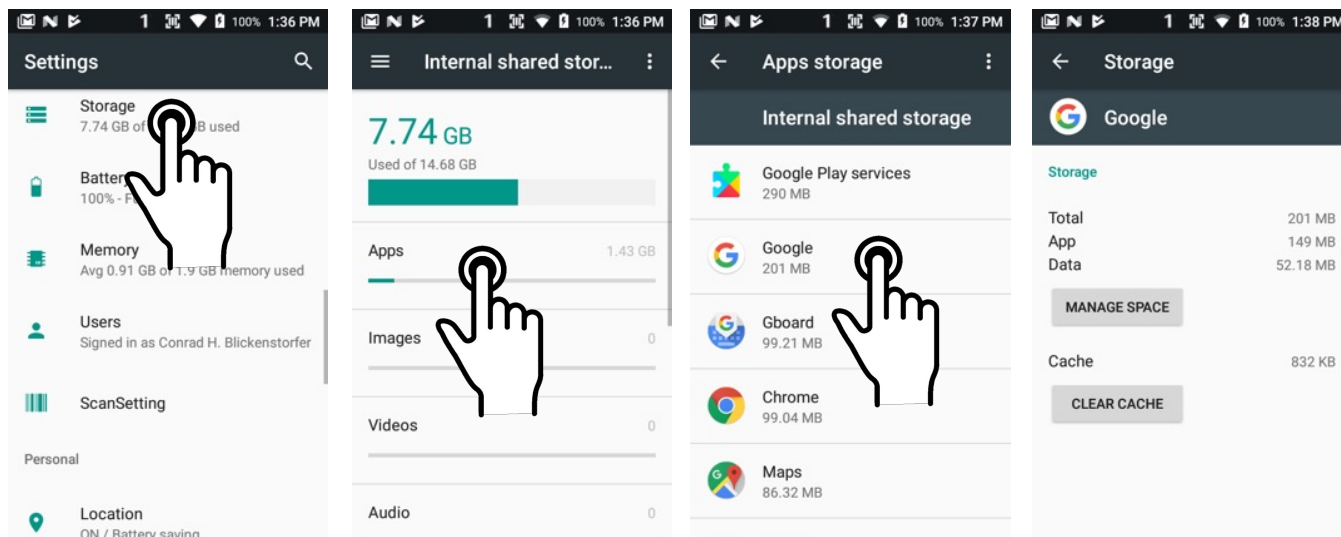
- ☐ Force stop the app,
- ☐ Disable the app,
- ☐ Data usage, both foreground and background
- ☐ App permissions,
- ☐ App notifications,
- ☐ Opening app by default,
- ☐ Battery usage since last full charge
- ☐ Memory usage
- ☐ App details.



Device Settings (continued)

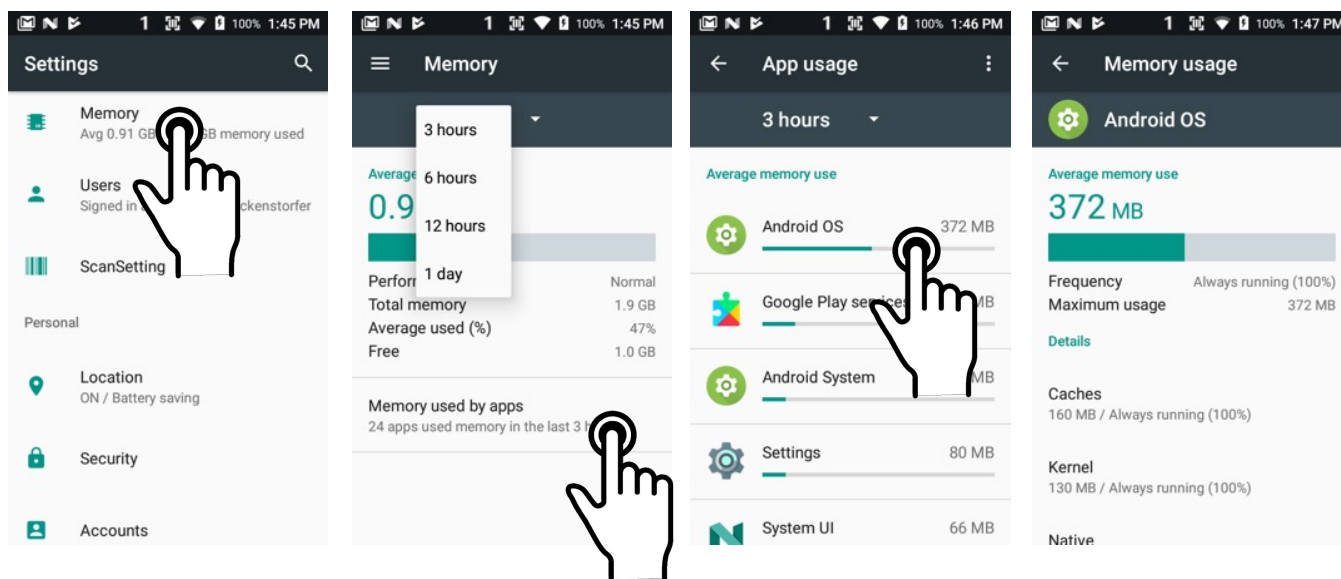
Storage

Touch **Storage** from the **Settings** screen to view use and space statistics for the internal storage on the XG200. Drill down to view storage used by app, clear data, or manage space.



Memory

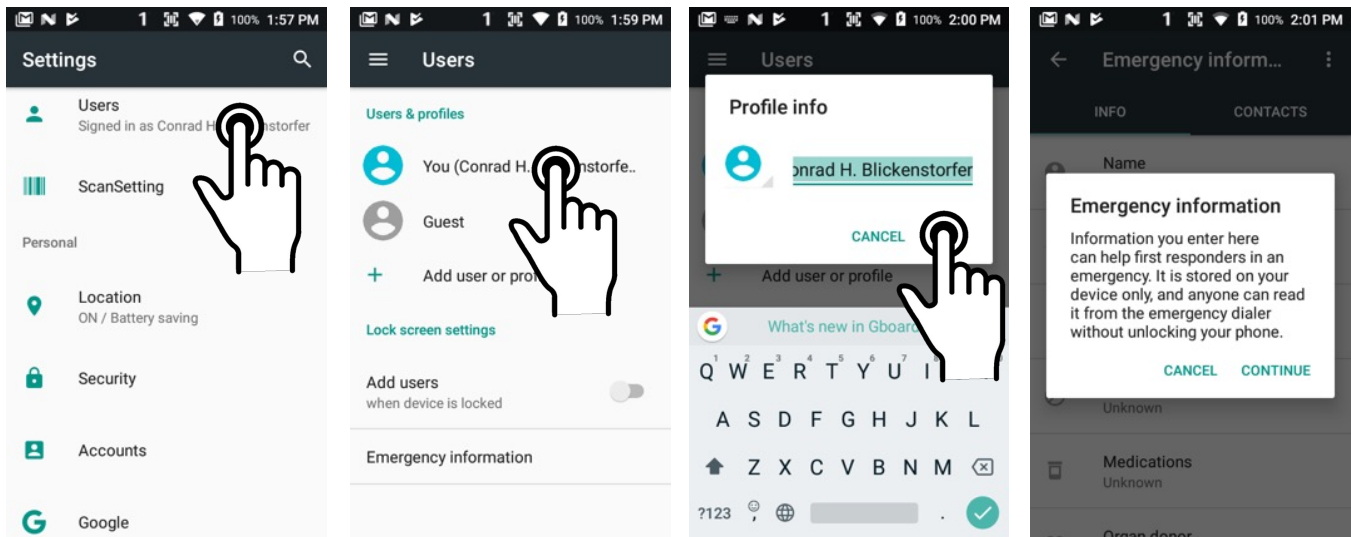
Touch **Memory** from the **Settings** screen to view the average RAM memory usage during the last 3, 6, 12, or 24 hours. You may also view the average RAM memory used by each application over the last 3, 6, 12, or 24 hours. This can help determining which apps use available RAM memory, manage those apps, and optimize systems performance.



Device Settings (continued)

Memory

Touch **Users** from the **Settings** screen to view the user profiles that have been entered on the device. Here you may change the name of a user, allow or disallow adding users when the device is locked, and also enter detailed emergency information.



Personal Settings

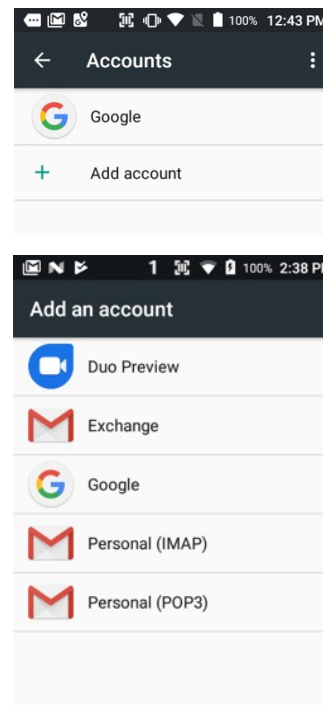
Accounts

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.

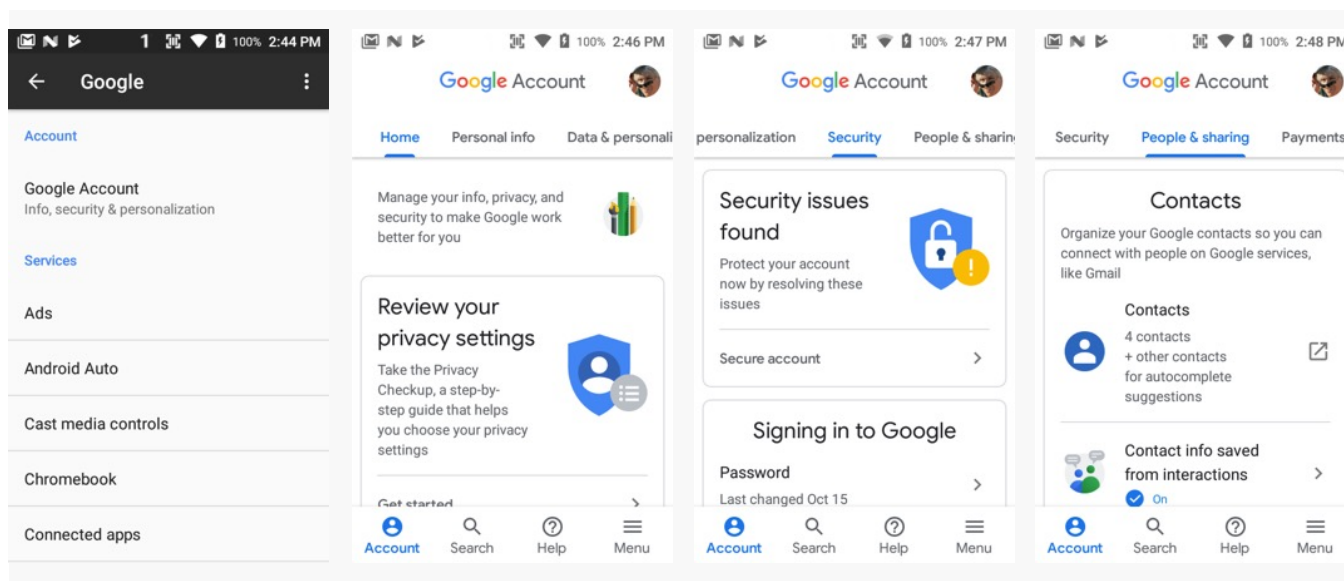
The account appears on the **Accounts list** when setup is complete. Depending on the settings you selected during the account configuration, your XG200 device may automatically start to sync account data (e.g., email, contacts, music and calendar, etc.).

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

Some XG200 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** > **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.

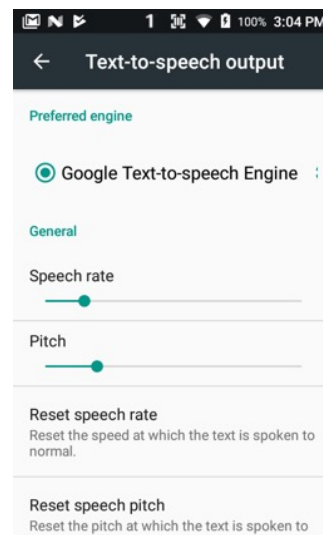
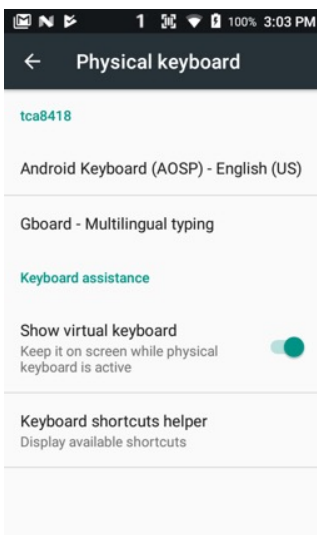
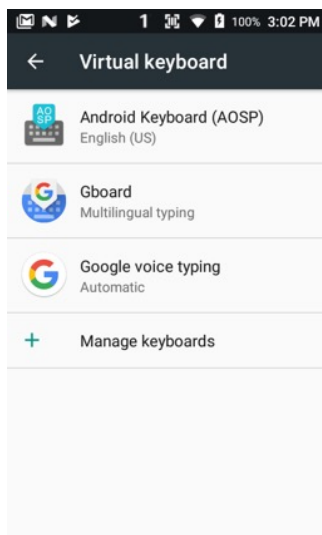
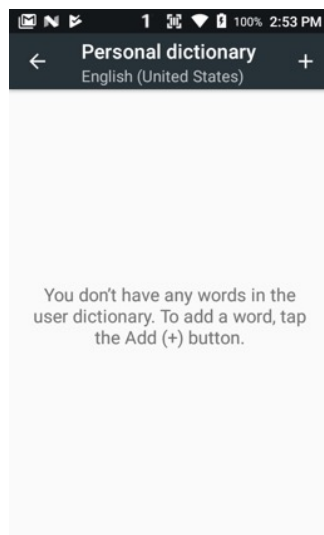
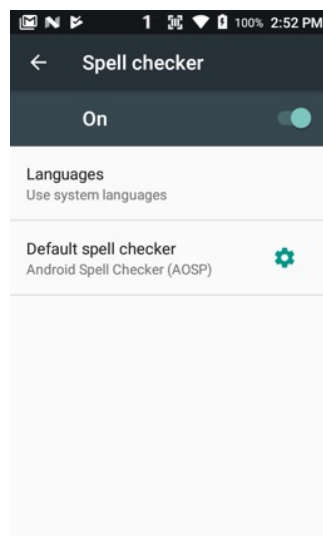
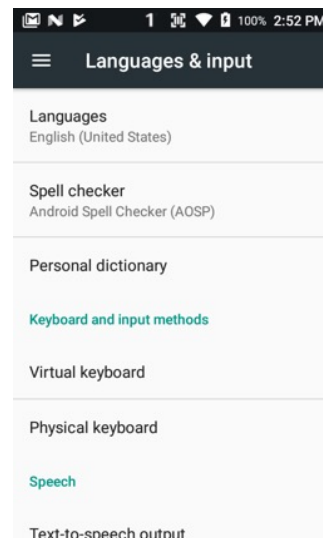


Personal Settings (continued)

Languages & input

To configure and customize various language and input settings of your XG200, go to **Settings > Languages & 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 keyboard operation, go to **Settings > Languages & input** and tap on **Virtual keyboard** or **Virtual keyboard**. Here you can also configure and customize your keyboard.
- ☐ **Speech:** Here you can configure **Text-to-Speech**, including language, speech rate, speech pitch, speech volume, intonation ("expressive," "somewhat expressive," "flat"), how numbers in dates are spoken, etc.
- ☐ **Mouse/Trackpad:** Adjusts the sensitivity and speed of the touch screen response to your finger swipe.



System Settings

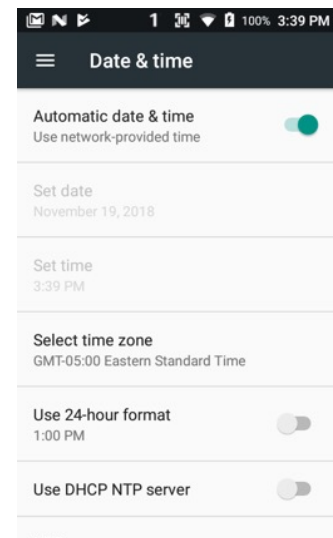
Date & time

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).

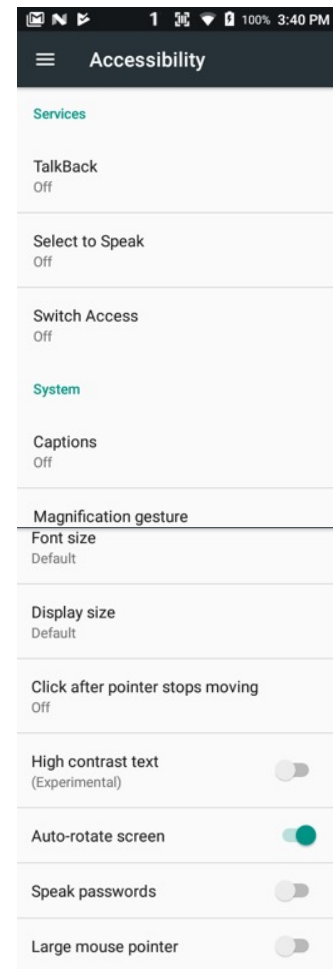
To modify how the time is displayed on the screen, check the **Use 24-hour format** box to switch from a 12-hour cycle to a 24-hour cycle. In a 24-hour time cycle, 1:00 pm displays as 13:00 pm. You may also opt to use an NTP (Network Time Protocol) server.



Accessibility

To configure features that make using the XG200 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.
- ☐ **Font size:** makes text smaller or larger in four size increments.
- ☐ **Display size:** makes items (such as talk bubbles) smaller or larger.
- ☐ **Click after pointer stops moving:** auto-click on or off.
- ☐ **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.
- ☐ **Large mouse pointer:** on or off.
- ☐ **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 XG200 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.

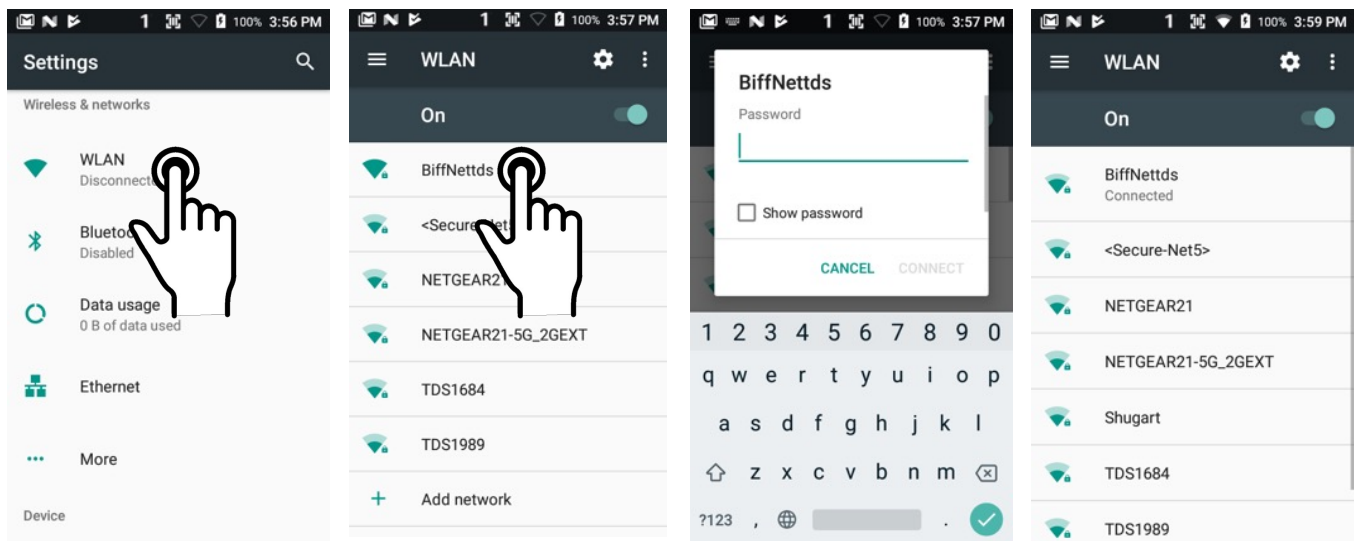
A given physical area may have multiple wireless local area networks (WLANs), sometimes referred to as Wi-Fi hot spots, which the XG200 can see as it scans for available networks.

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.

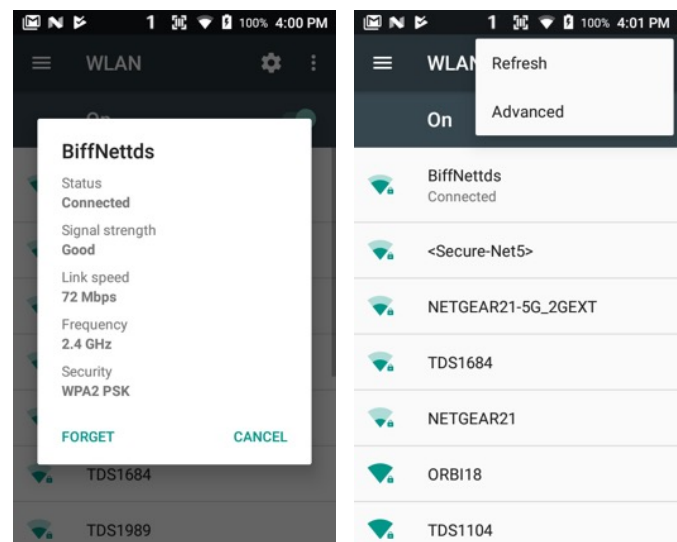
Connecting the XG200 to a Wireless Local Area Network (WLAN)

To initially connect the XG200 to a wireless local area network, go to **Settings** > **Wireless & networks** > **WLAN**. Turn **WLAN networking** on. The XG200 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**.



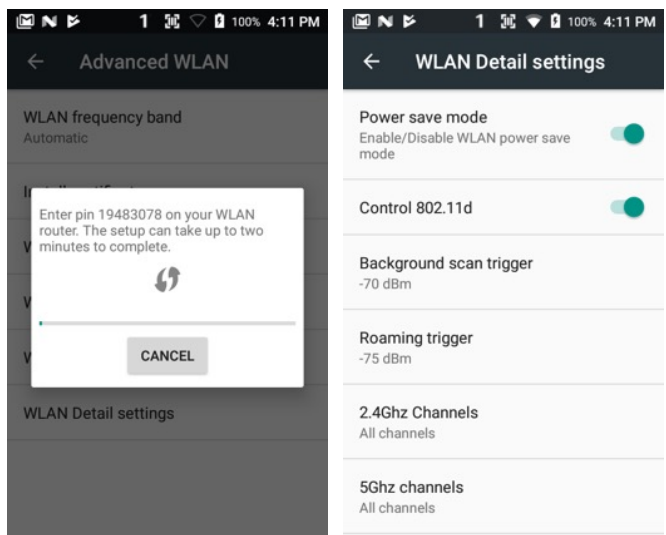
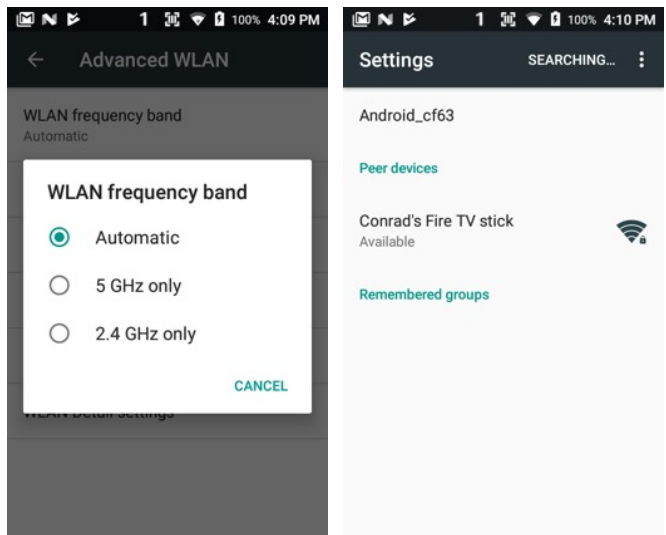
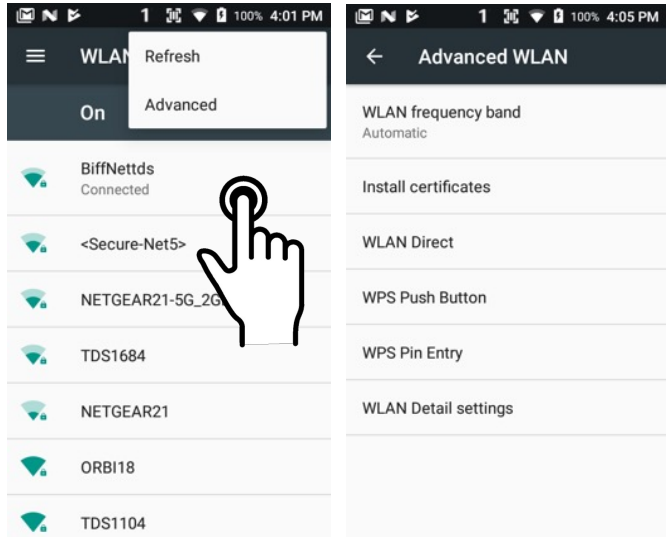
If you tap on the network you are connected to, a window pops up that shows information about the connection, including signal strength, link speed, frequency, and the type of security. Here you can also opt to **forget** this network, so that next time you come within range of it, the XG200 will not 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 **Refresh** the list of available networks or go to **Advanced** options.



Advanced WLAN options

- **WLAN 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 (WLAN Protected Setup) button for easy device connection to a network.
- **WPS Pin Entry:** Some routers may offer WPS (WLAN Protected Setup), but still require entry of a special PIN on the device.
- **WLAN Detail settings:** These are some lesser used options, such as enabling the CCX (Cisco Compatible Extensions), enabling WLAN power saver mode, letting WLAN 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 XG200, 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 XG200 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 XG200 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 XG200 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 XG200 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 XG200 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.

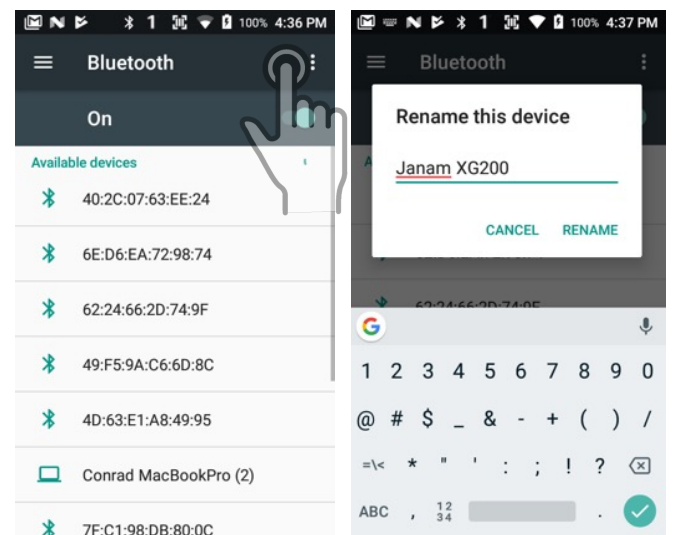
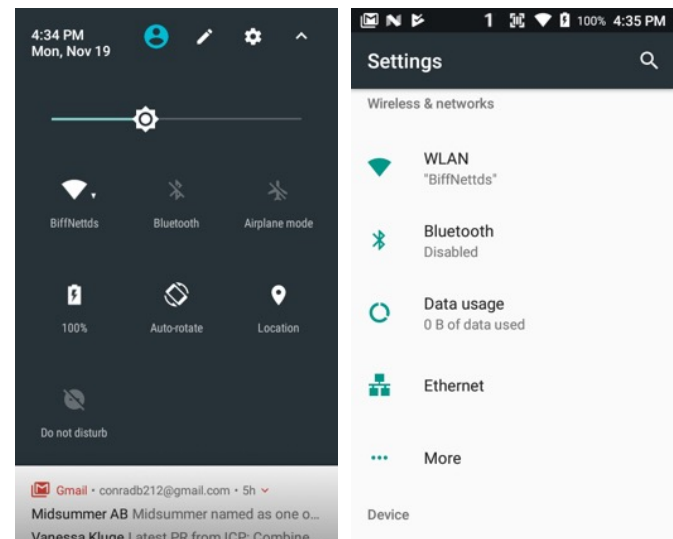
Depending on the type of device, a connection may be established automatically once already paired devices are within range (like a Bluetooth keyboard for a desktop computer). For other paired devices it may make more sense to manually connect them as needed (like for file transfer between devices).

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 XG200 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 XG200 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 XG200 from showing up with such a code or serial number, rename it to something descriptive (like “Janam XG200”)!



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 XG200 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 XG200 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 XG200 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.

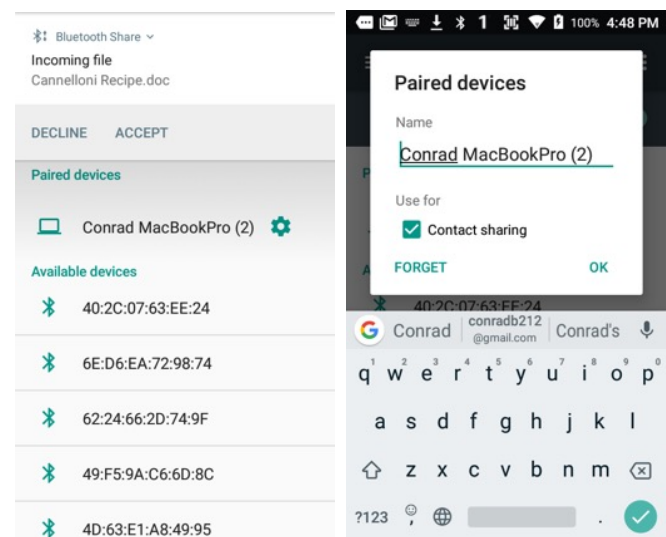
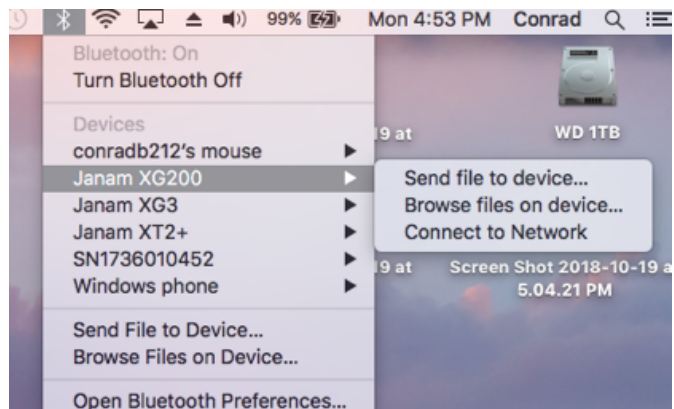
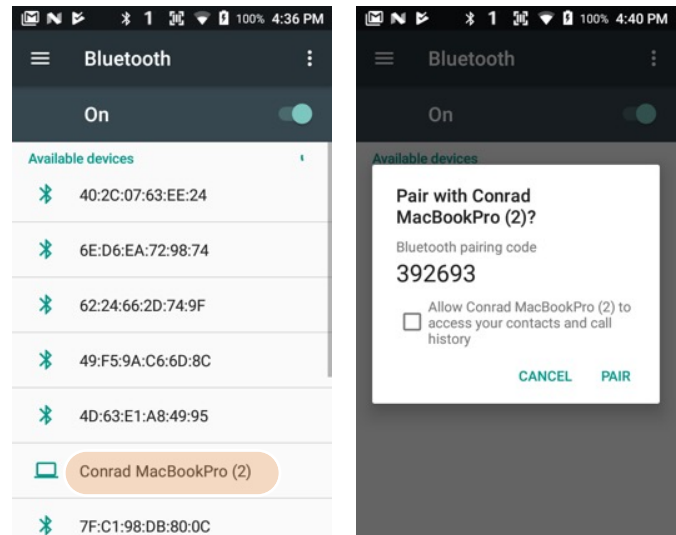
If the number is the same on both devices, accept the pairing request on both the XG200 and the iMac, and the two devices will be paired.

Paired devices will remain on the XG200'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 XG200 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 XG200 and the MacBook allows the MacBook to send files to the XG200, browse files, and the Mac can use the XG200 to connect to a network.

While the Mac side is capable of browsing files on the connected XG200, Bluetooth on the XG200 does not provide that service in the other direction. It is only used for contact sharing.



Using the Keypad

Introduction

Janam's XG200 rugged mobile computer offers keypad and touchscreen functionality on the same device. The Janam XG200 comes with either a 24-key numeric keypad (see below left) or a 51-key alpha-numeric keypad (see below right).

Android keys

Located above the keypad, the three Android keys enable you to bring up recent apps, go to the Start/Home, and back/esc.



YELLOW and BLUE modifier keys

The small **orange** and **blue** keys modify the primary function of hardware keys as follows:

Orange key (51-key keypad)

Cycles the keypad between **default white function** and **modified yellow function**. Indicator changes accordingly on the command bar from **1** to **Ctl**. Upper/lower case multi-press.

Blue key (51-key keypad)

Modifies the next key pressed to its blue function. Indicator goes from **1** to **Fn**.

Orange key (24-key keypad)

Cycles the keypad between **default white function**, **lowercase alpha** and **uppercase alpha** modes. Indicator changes accordingly on the command bar from **1** to **a** to **A**.

Blue key (24-key keypad)

Modifies the next key pressed to its blue function. Indicator goes from **1** to **Fn**.

BLUE and YELLOW key combinations

The lists below show the default button assignments for BLUE key combinations on the Janam XG200's hardware buttons. These default assignments can be programmed to execute different functions using the **Program Buttons** app in the **Tools** folder.

**XG200 Alpha-Numeric keypad**

BLUE + F1	F5
BLUE + F2	F6
BLUE + F3	F7
BLUE + F4	F8
BLUE + A	Volume Up
BLUE + G	Volume Down
BLUE + F	Backlight Up
BLUE + L	Backlight Down
BLUE + I	Page Up
BLUE + U	Page Down
BLUE + N	Home
BLUE + P	End
YELLOW + A	!
YELLOW + B	@
YELLOW + C	#
YELLOW + D	\$
YELLOW + E	%
YELLOW + F	^
YELLOW + G	&
YELLOW + H	*
YELLOW + I	(
YELLOW + J)
YELLOW + K	-
YELLOW + L	+
YELLOW + M	=
YELLOW + N	_
YELLOW + O	?
YELLOW + P	/
YELLOW + Q	:
YELLOW + R	;
YELLOW + S	`
YELLOW + T	"
YELLOW + BKSP	Del

**XG200 Numeric keypad**

BLUE + F1	F5
BLUE + F2	F6
BLUE + F3	F7
BLUE + F4	F8
BLUE + 1	Volume Up
BLUE + 4	Volume Down
BLUE + 3	Backlight Up
BLUE + 6	Backlight Down
BLUE + 5	Page Up
BLUE + 0	Page Down
BLUE + 7	Home
BLUE + 9	End
YELLOW + 1	@?!
YELLOW + 2	abc/ABC
YELLOW + 3	def/DEF
YELLOW + 4	ghi/GHI
YELLOW + 5	jkl/JKL
YELLOW + 6	mno/MNO
YELLOW + 7	pqrs/PQRS
YELLOW + 8	tuv/TUV
YELLOW + 9	wxyz/WXYZ
YELLOW + .	*
YELLOW + 0	,
YELLOW + Ent	#
YELLOW + BKSP	Del

Function reprogramming

It's important to understand the difference between blue key combinations and function reprogramming.

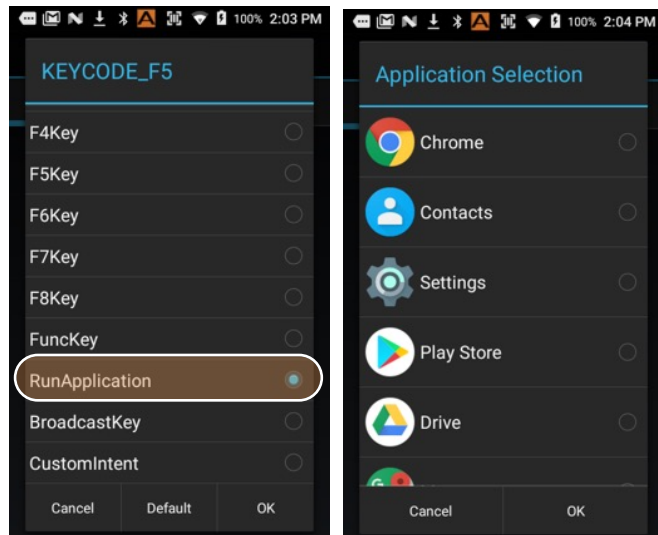
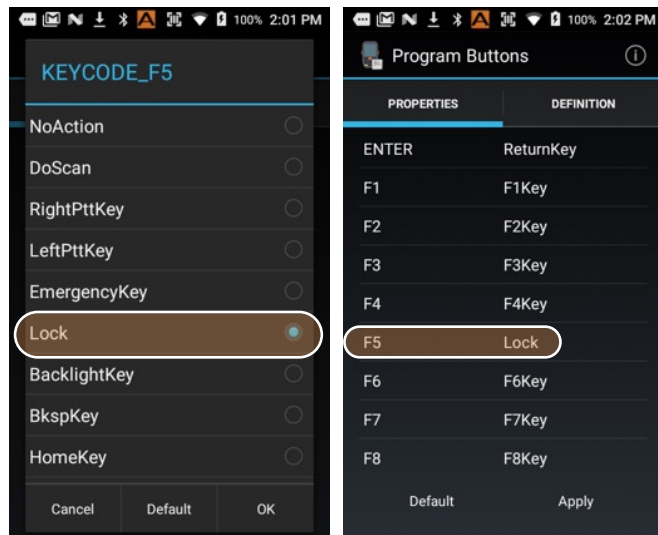
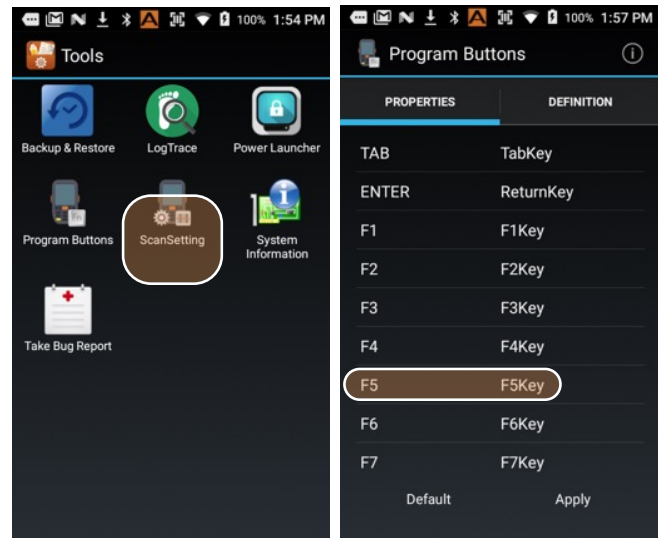
Here's an example: Pressing BLUE + F1 on either XG200 keypad is like pressing F5 if the XG200 keypad had a physical F5 key.

But what does F5 do? Nothing, unless a particular function has been assigned to it. This is where **Home > Tools > Program Buttons** comes in. This handy utility allows users to assign any available function or any application to a regular or blue key function.

Program button examples

Let's assume a user wanted to have an easy way to lock the XG200. This function could be assigned to any of the programmable keys. To assign it to, for example, F5, tap **Home > Tools > Program Buttons** and scroll down to F5. Select F5 to bring up a list of programmable functions. Scroll up to select "lock," tap "OK," and F5 will now issue a "lock" command.

Programmable keys can also be assigned to launch an application. To assign an application to F5, go to **Home > Tools > Program Buttons**. Scroll down to the RunApplication, tap on it to bring up a list of applications that can be assigned, and select the one you want. Tap OK to accept.



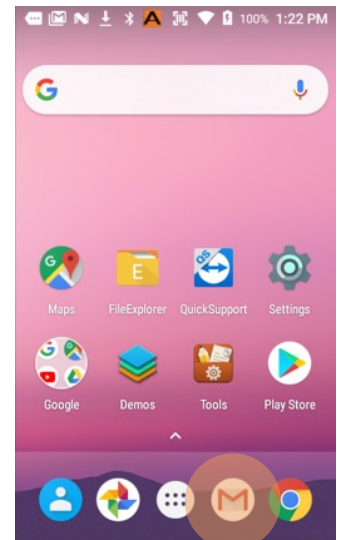
Email

Introduction

Like a smartphone, laptop or desktop PC, the XG200'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, or a private enterprise (corporate) network. This allows the XG200 to receive, read, respond to, and send emails.

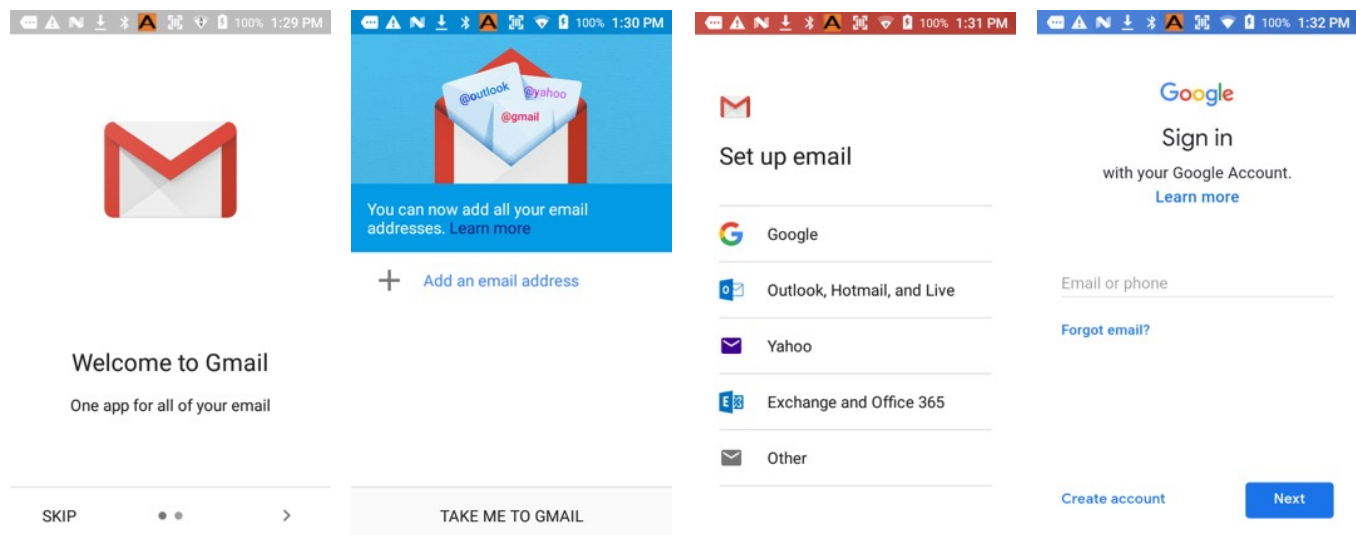
The **Google Gmail app** is the default Email app installed on the XG200 running Android version 6. The **Gmail app** can be used without an actual Google account. It simply serves as the XG200's email app that can accommodate a single email account or multiple accounts.

Before setting up an email account on the XG200, be sure that a core email address is active with an email service provider or within a private enterprise (corporate) network to which the XG200 user has access and authorization.



Setting up Email

If you haven't already set up an account, tap on the **Gmail** icon on the Start screen. For Gmail and popular email service providers like Microsoft Outlook or Yahoo), entering your email address and password will be enough.



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

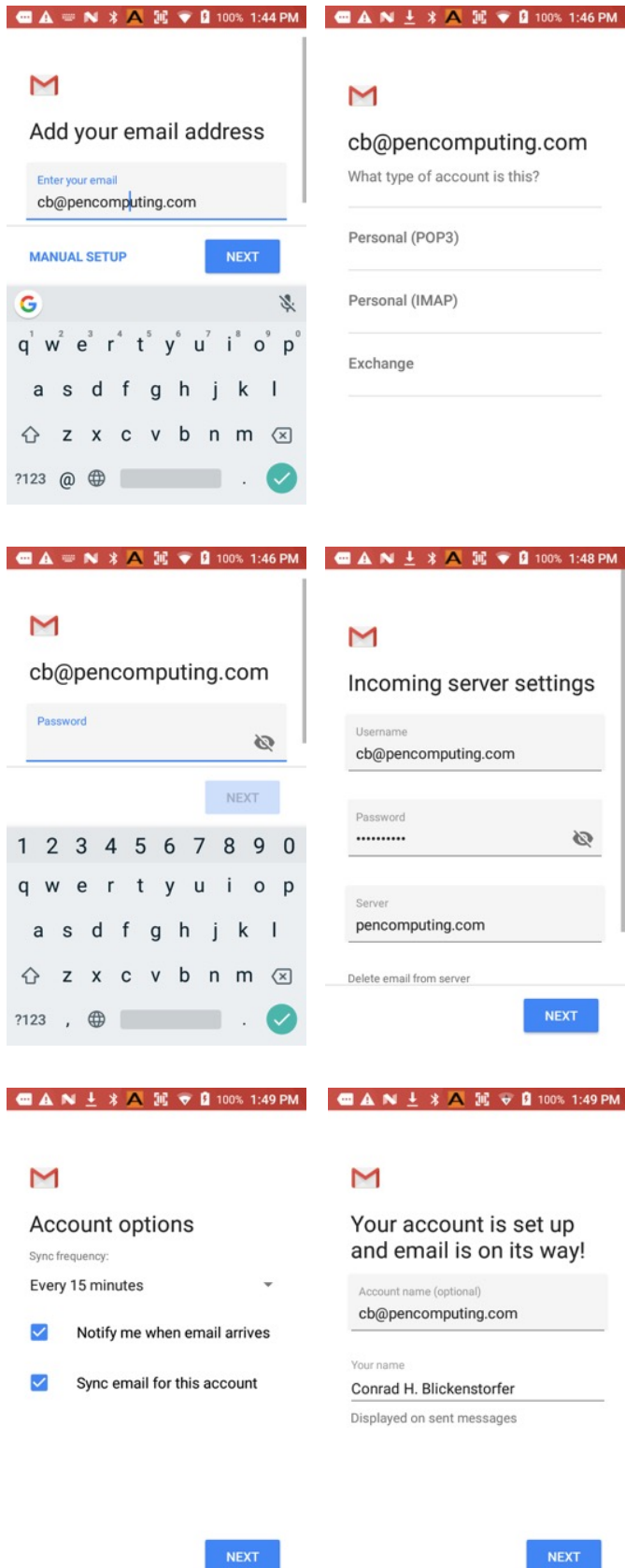
During email setup you will be asked how often you want your XG200 to check with your email provider and update email. "Never" means you'll do it manually.

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.



The screenshots illustrate the manual email setup process:

- Add your email address:** Enter `cb@pencomputing.com`. Select **MANUAL SETUP**.
- What type of account is this?:** Select **Personal (POP3)**.
- Password:** Enter the password.
- Incoming server settings:** Username: `cb@pencomputing.com`, Password: [redacted], Server: `pencomputing.com`.
- Outgoing server settings:** Require signin: ☒, Username: `cb@pencomputing.com`, Password: [redacted], SMTP server: `pencomputing.com`.
- Account options:** Sync frequency: **Every 15 minutes**, ☒ **Notify me when email arrives**, ☒ **Sync email for this account**.
- Final screen:** Your account is set up and email is on its way! Account name (optional): `cb@pencomputing.com`, Your name: **Conrad H. Blickenstorfer**.

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 configure and manage your individual email accounts. Note that account-specific settings and capabilities may be different for various email servers and services. The examples shown in the four bottom screen captures on the right are for a generic POP3 account.

Signature

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

Data usage

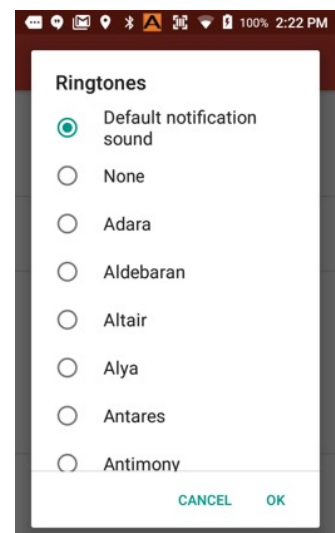
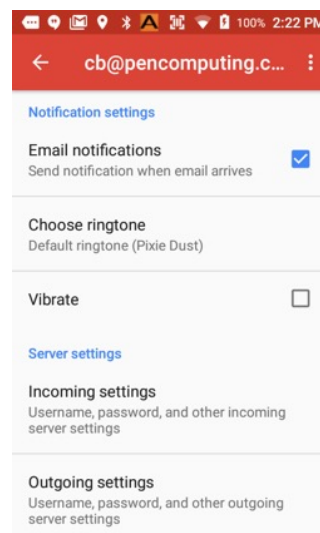
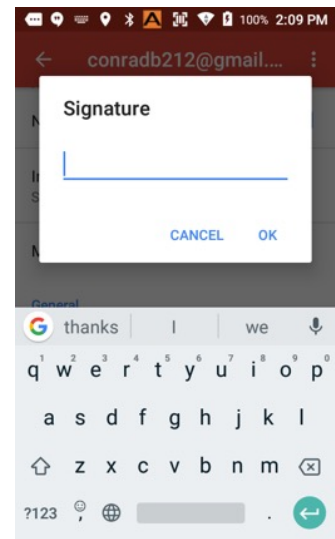
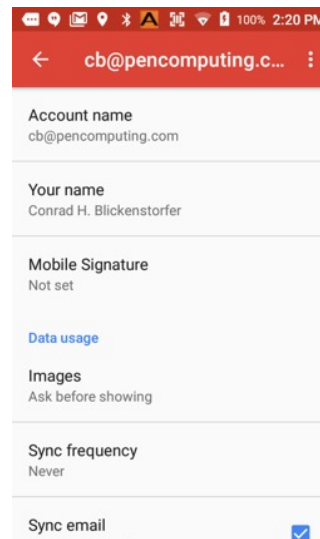
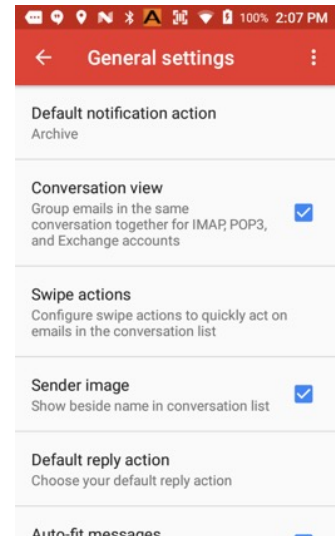
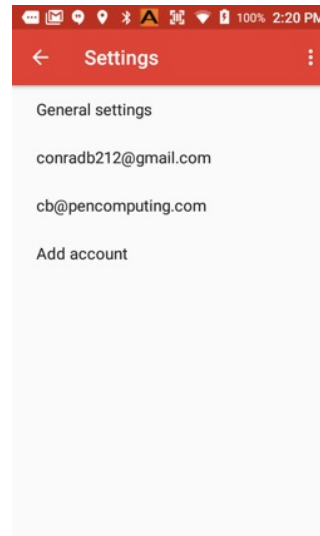
Email practices can affect data usage. This includes the frequency of syncing (every 15, 30, 60 minutes or never), asking before showing pictures, etc.

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.

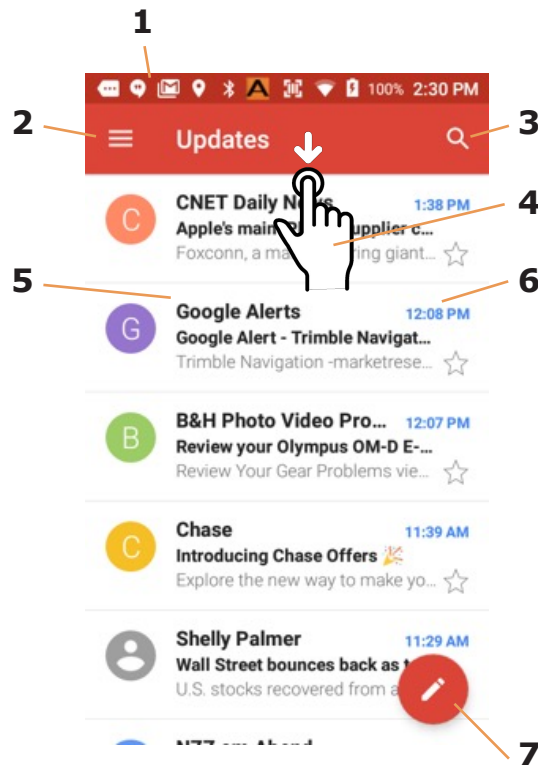
Server settings

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

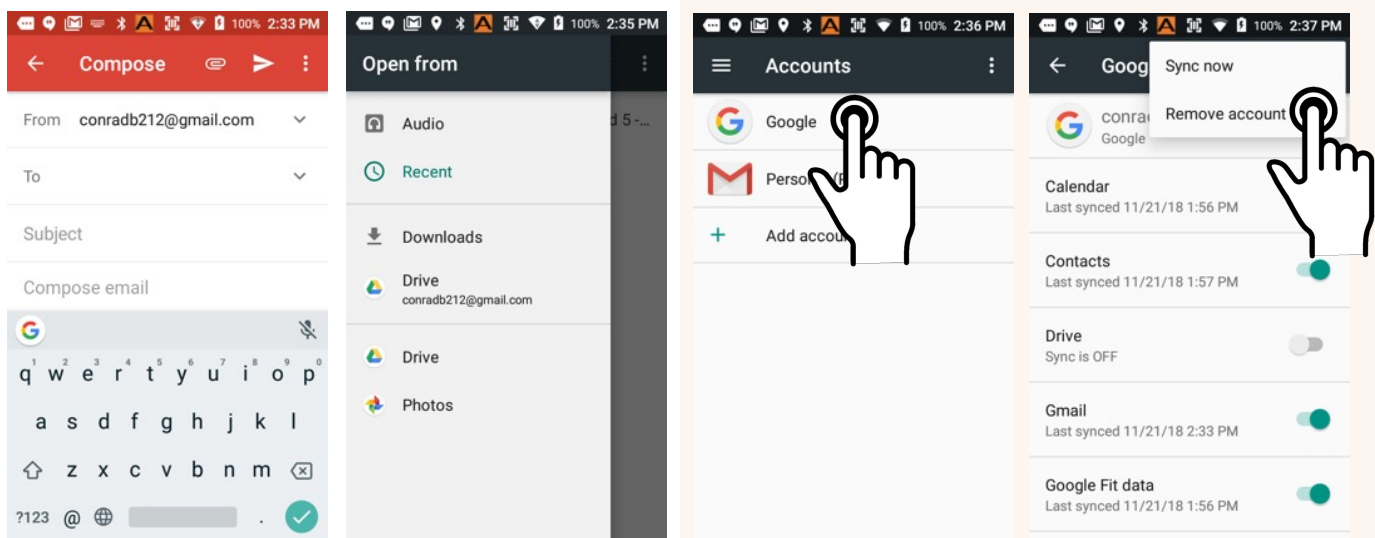
Creating and Sending an Email:

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.

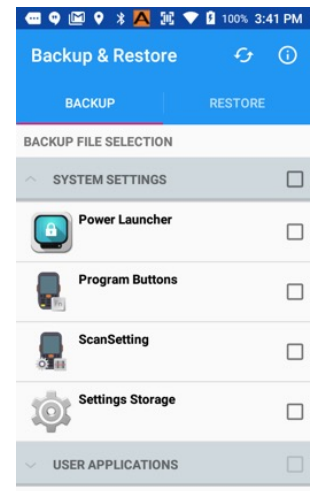
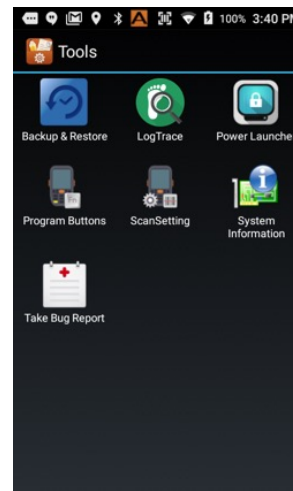
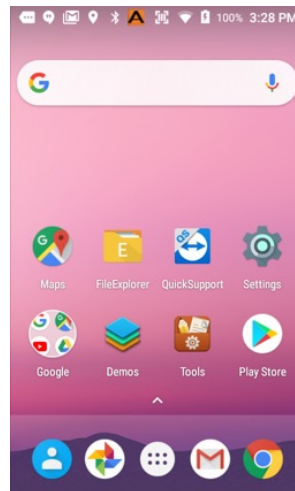


Tools

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 XG200's Tools folder contains a few examples of such tools.

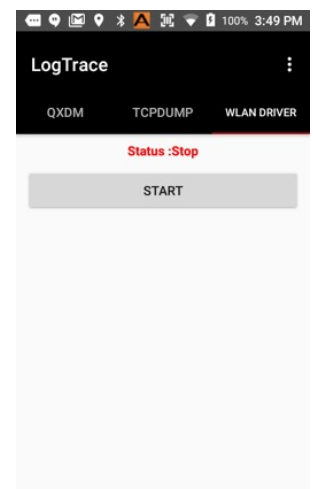
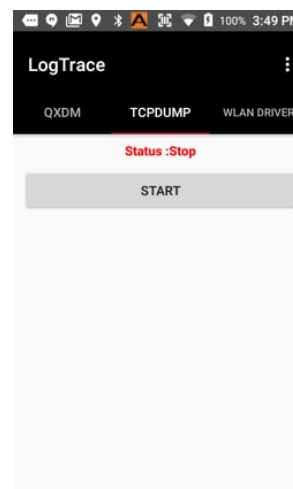
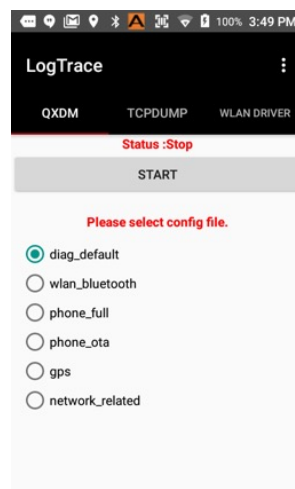
Backup & Restore

The **Backup & Restore** app allows manual backup of system settings and user applications. Backups can be assigned a password. Since the XG200 does not have a card slot, backups are to Internal Storage. To restore a backup, tap on the app's Restore tab, select which backup you wish to restore.



LogTrace

LogTrace is an example of a network testing and analysis tool. It can be used to log a variety of QXDM (Qualcomm EXtensible Diagnostic Monitor) RF performance data. LogTrace can also record TCP/IP and other packets being transmitted or received over a network, or record WLAN driver data.



Power Launcher

With Power Launcher, you can secure your XG200 by hiding Quick Settings, restricting the use of MTP (Media Transfer Protocol), and disabling screen shots.

System information

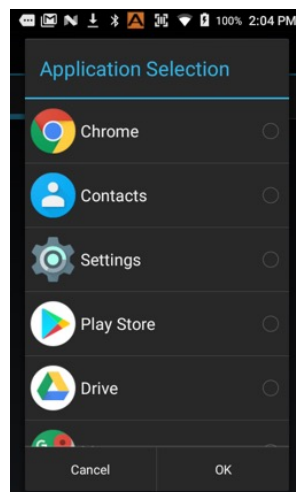
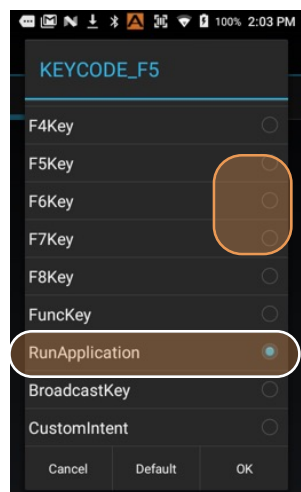
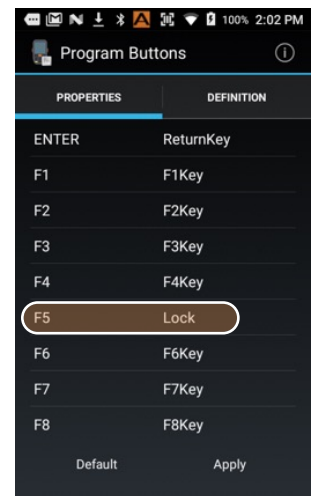
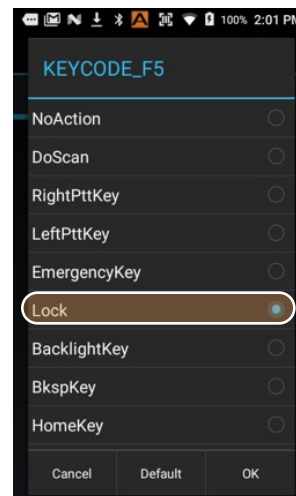
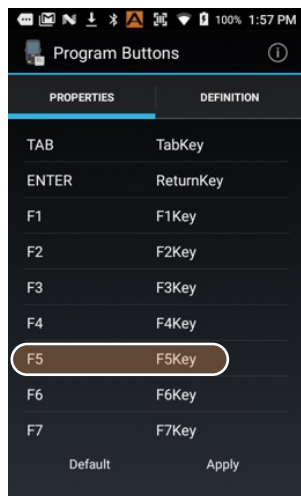
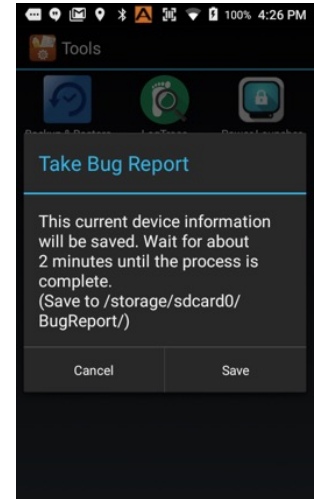
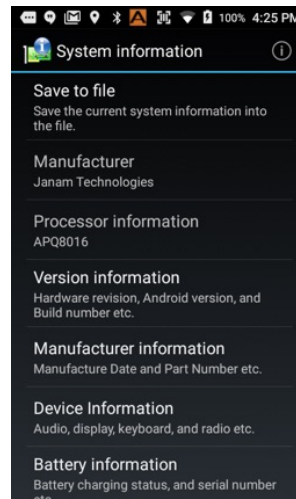
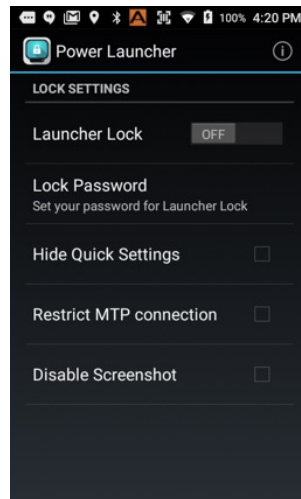
System information provides detailed information about the XG200 hardware, OS, applications, firmware and drivers. Tap to drill down into any area.

Take Bug Report

If something goes wrong with the XG200, this utility can be used to record device information for analysis and debugging.

Program buttons

Program Buttons allows users to assign any available function or application to a regular or blue key function. If, for example, a user wanted to have an easy way to lock the XG200, the Lock function could be assigned to any of the programmable keys. To assign it to, for example, F5, scroll down to F5. Select F5 to bring up a list of programmable functions. Scroll up to select "lock," tap "OK," and F5 will now issue a "lock" command. Keys can also be assigned to launch an application. To assign an application to F5, go to **Home > Tools > Program Buttons**. Scroll down to the RunApplication, tap on it to bring up a list of applications that can be assigned, and select the one you want.



Barcode Scanning

Using the Imager

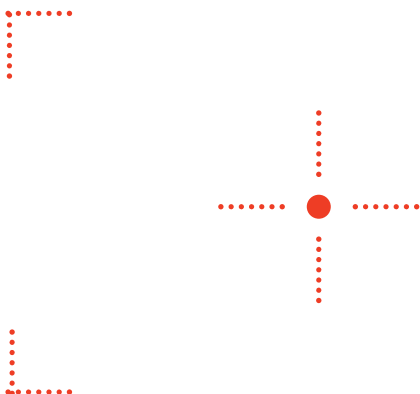
Janam XG200 Series mobile computers are available with two barcode scanning technology options, each of which is suited for varying end-user requirements, preferences and work environments. This chapter covers each of the available XG200 Series barcode scanning technologies. Therefore, some of the barcode functions described in this chapter may not apply to the XG200 version you are using. For that reason, and depending on the configuration of your XG200, some information in this chapter may not apply.

Scanning with the XG200

The XG200 integrated barcode scan window is located on the top edge of the handheld computer.

When triggered via the orange scan trigger button in the gun handle, the barcode scanner illuminates a red-dotted rectangular area with a dotted red crosshair and a bright red scan dot in the center. This serves as a confirmation of scan triggering and as a general targeting guide.

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!

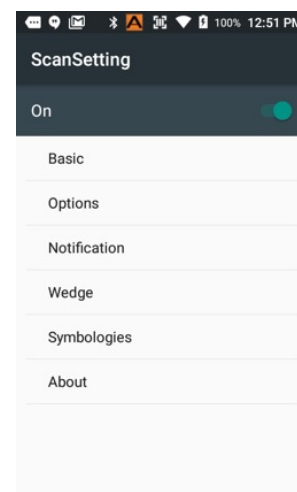
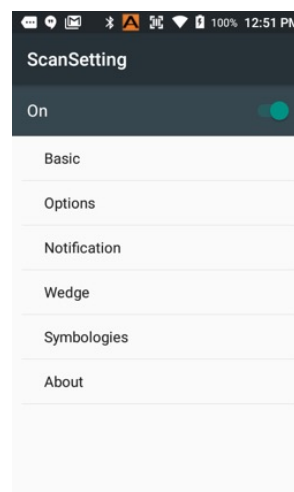
Never point the barcode beam emitted from the barcode imager window into the sightline of others!

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

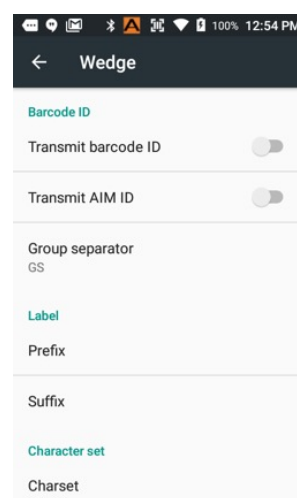
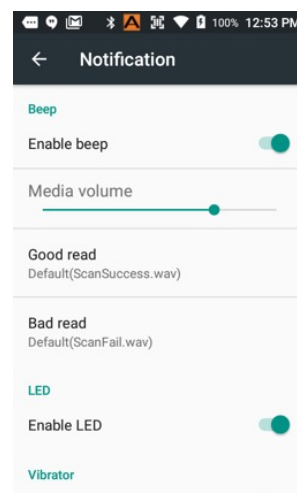


Scan Settings

Go **Tools > Scan Settings** to configure the XG200'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: User Message, Keyboard Event (default) Clipboard, Intent Broadcast
Notification	LED	Terminator	Select the desired barcode end method from the pull down list. Values: None, Space, Tab, LF, Tab & LF
		Custom intent	Can be part of a datawedge profile.
	Beep	Enable Beep	Set enable/disable plays audio sound.
		Media Volume	Slider to set volume
Wedge	LED	Good/bad read	Set sound to indicate good/bad read.
		Enable LED	Set enable/disable visual scan indicators.
	Vibrator	Enable Vibrator	Set enable/disable vibrator operation.
		Good read	Set vibration time after good read.
Symbologies	Barcode ID	Bad read	Set vibration time after bad read.
		Transmit Barcode ID	Enable to transmit predefined barcode ID.
	Label	Transmit AIM ID	Enable to transmit predefined AIM ID.
		Group separator	Set to one of 30 codes (default is GS).
About	Character set	Prefix	Prefix sent prior to the decoded/received data.
		Suffix	Suffix to be sent after decoded/received data.
	Extend. wedge	Charset	Select one of 14 character sets.
		Enable	Toggle to select extended wedge.
Symbologies	Select barcode types you want to read		
	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.

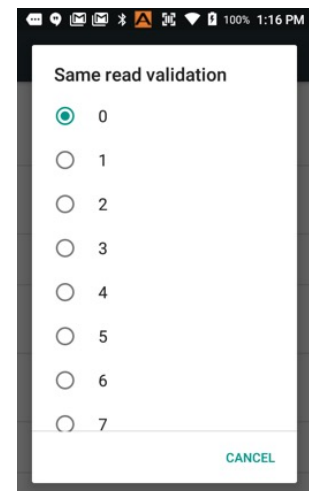
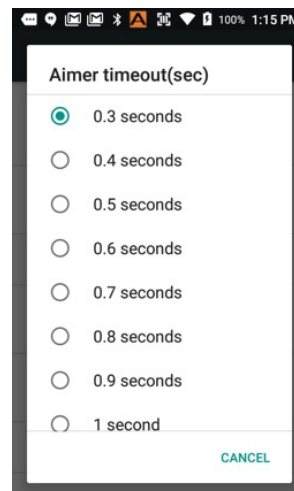
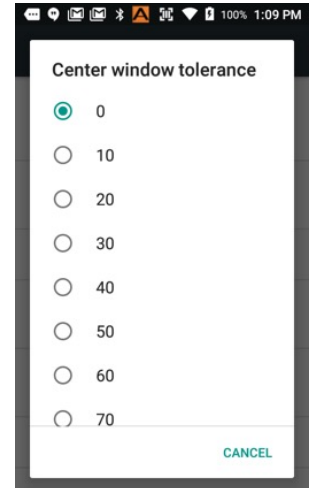
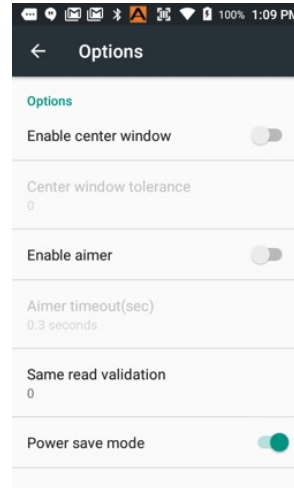
Center Window Tolerance — Set tolerance from 0 to 100.

Enable aimer — On or off. When open, allows setting of Aimer timeout.

Same read validation — Can be set from 0 to 10..

Power Save mode — Set Power Save mode 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

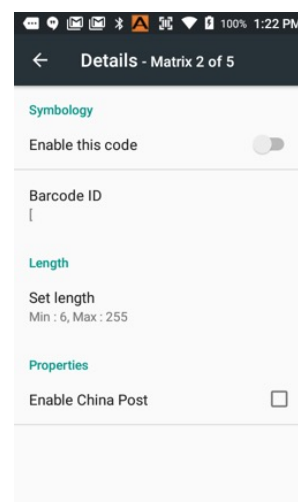
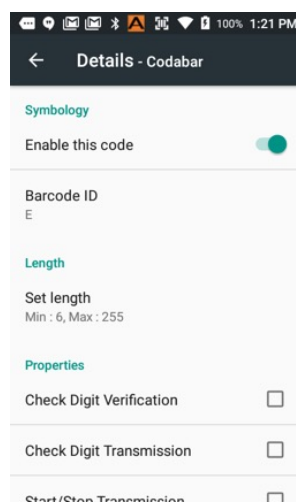
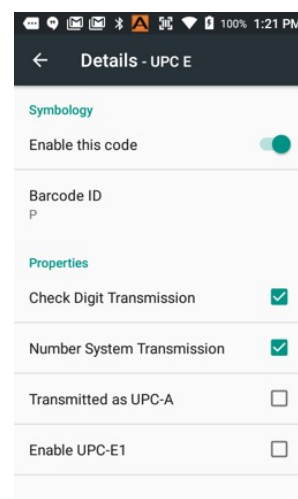
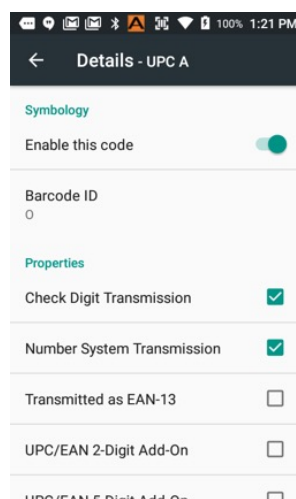
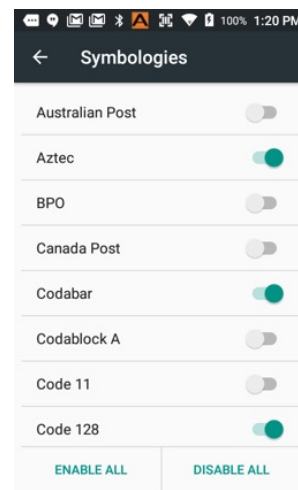
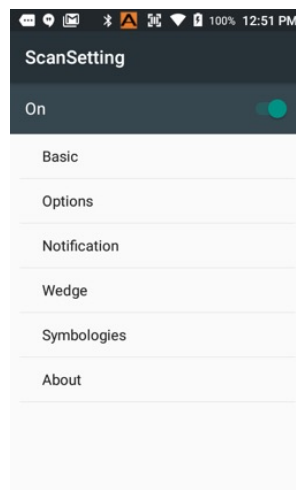
The XG200's scanner can read and decode virtually any 1D or 2D bar code in milliseconds.

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 XG200:

	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	

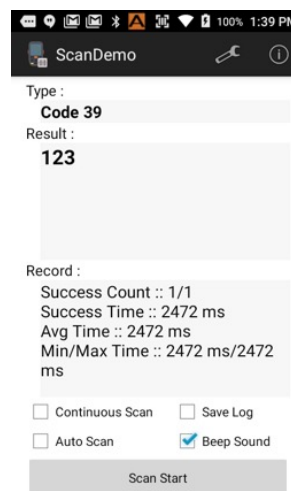
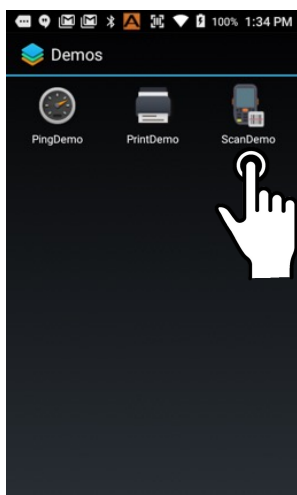


Scan Demo App

The XG200 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 XG200 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, pull the XG200's scan trigger button on the handle or tap "Scan start" on the ScanDemo 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. In addition, a blue LED flash indicates a good read, an orange one a bad read.

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.



Code 39



PDF 417

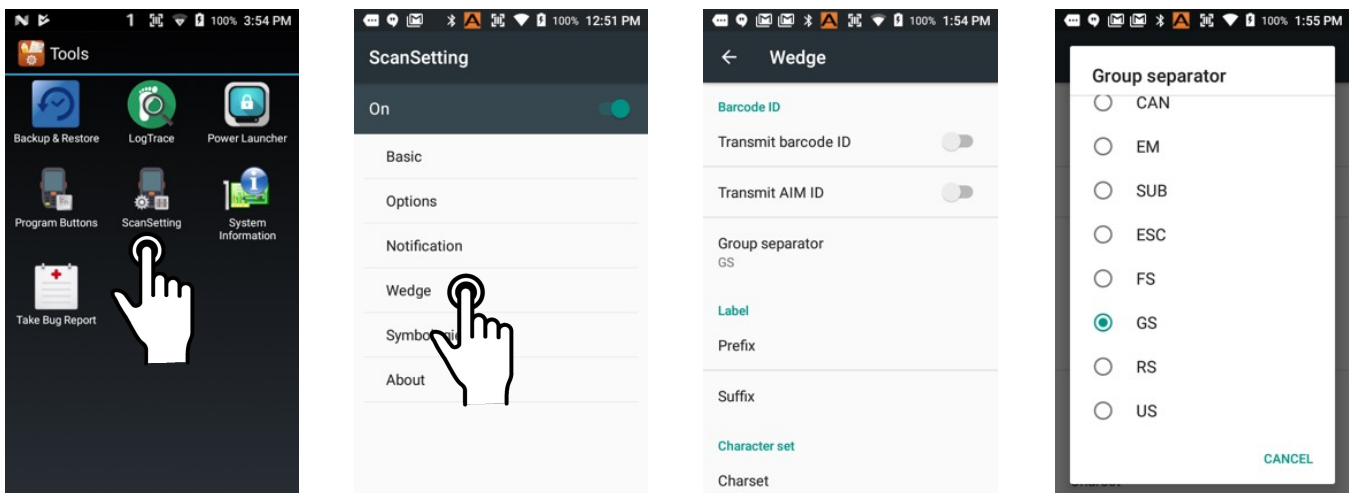


Scan Wedge App

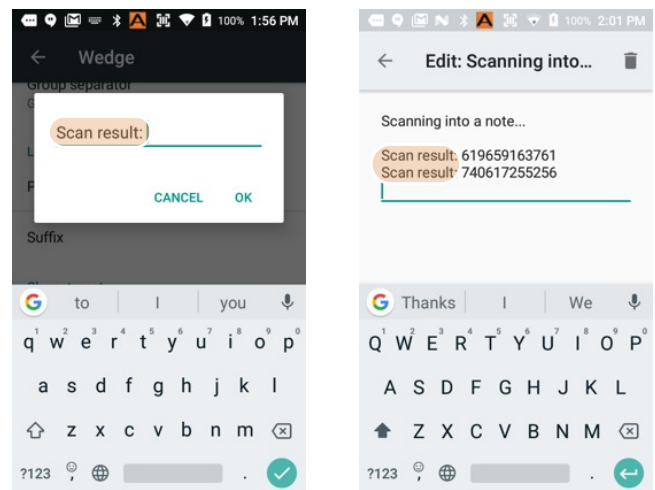
The XG200 also comes preloaded with the **Scan Wedge** application. When active, Scan Wedge runs in the background and can send scanned and decoded data directly into the currently active foreground application. For example, with Scan Wedge active, the XG200 can be used to scan barcode data directly 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 is an example of adding a prefix ("Scan result:") in **Scan Wedge**, and then scan barcode data directly into the Notes application. Scan data can be captured into any app that accepts text input, including **Word** or **Excel** files.



OS Update

Update from local storage

To see if a firmware update is available, go to **Settings** > **About phone**, and tap on **System updates**. The XG200 will then check internal storage to see if an upgrade file is present. If one or several update files are found, they will be listed. You can then select and start the update.

If no update file is found, the XG200 will display "<No result>" and state that an update file must either be in internal storage or the top directory of an inserted SD card (the XG200 does not have an SD card slot).

The XG200 also supports firmware update via USB OTG. With a USB Type C flash drive or OTG cable and USB flash drive combination, you can update the OS.

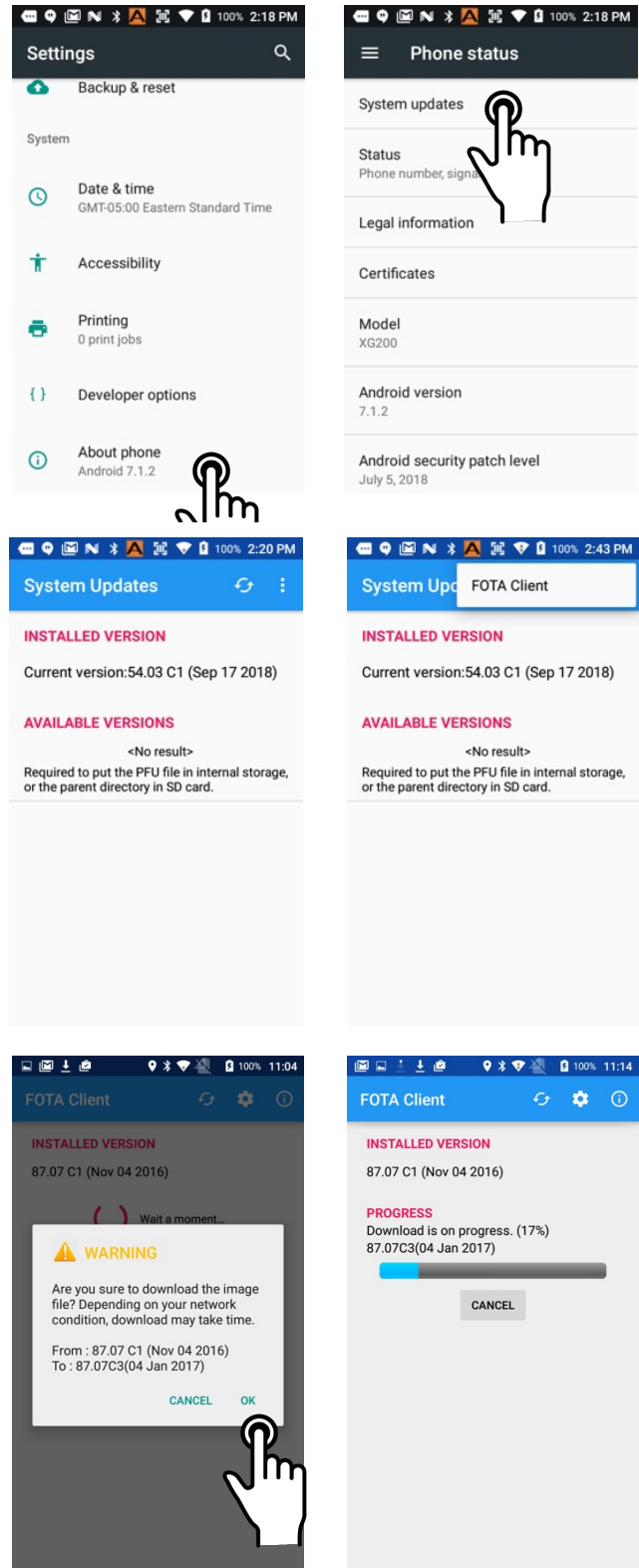
Update via FOTA client

The XG200 supports Firmware Over The Air (FOTA) updates.

If connected to a network, users may see if an update file is available over the air from a manufacturer server. To inquire, 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.

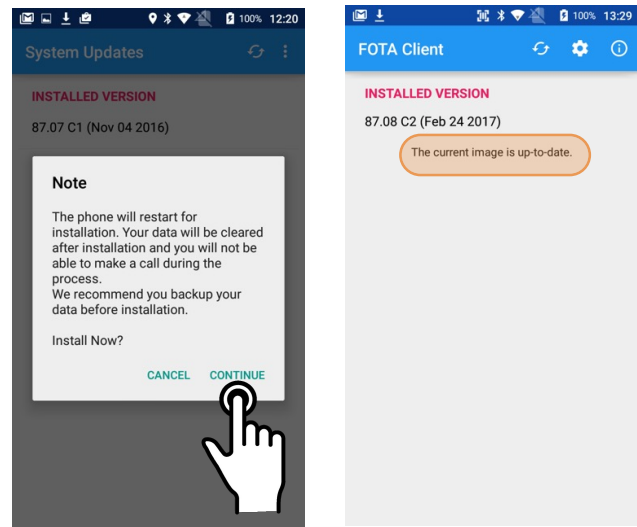
If you wish to proceed, tap OK and the download will start. Downloading the file will take several minutes.



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 XG200. 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.



User Applications

Google Play Store

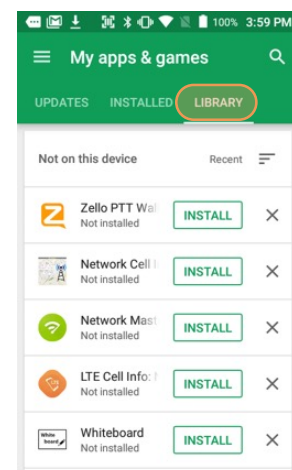
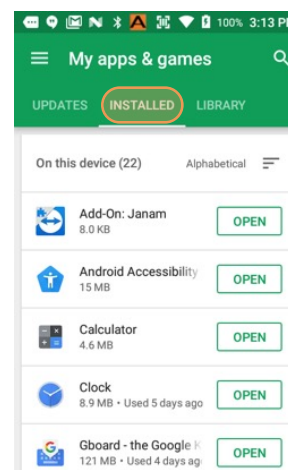
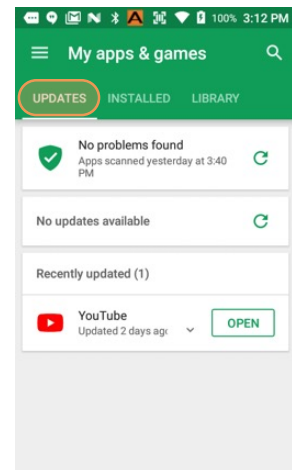
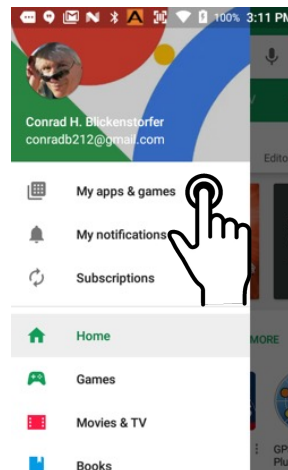
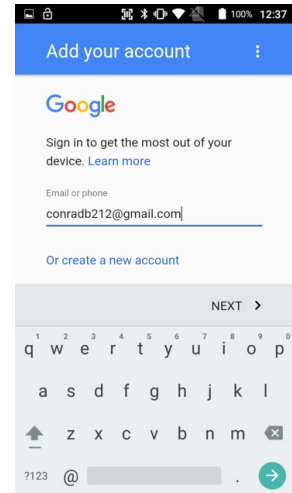
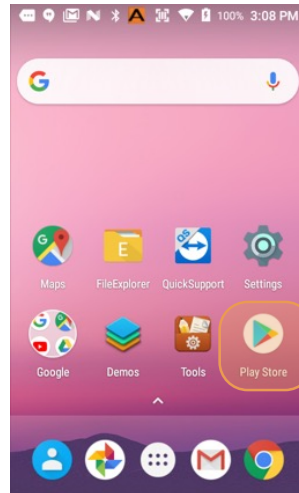
Applications can be obtained in the Google Play Store. To go to the **Play Store**, tap on the Store icon on the **Home Screen**, or locate the Store app in the **Apps Screen** and tap on it.

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 XG200 as long as the purchased app supports the XG200'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.

App download preference

You can allow downloading over any network, over WLAN only, or do it case-by-case.

Auto-update apps

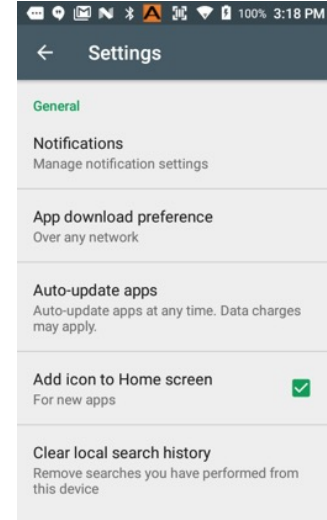
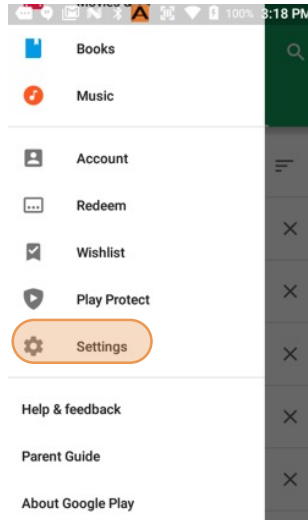
You toggle auto-update apps on/off, or only allow auto-update over Wi-Fi. You can opt to have new apps put an icon on the home screen. You can clear searches of the app store.

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

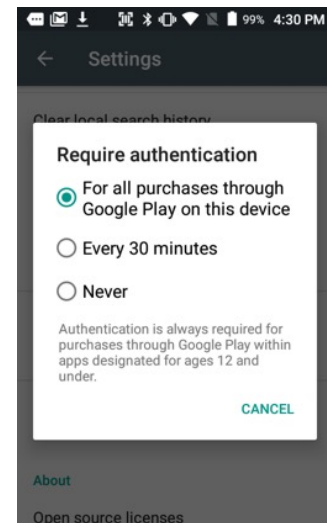
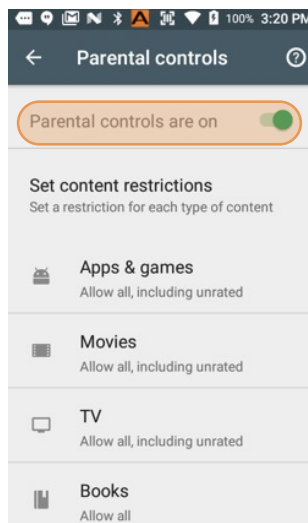
Toggling on brings up a parental controls setting screen.

Require authorization for purchases

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

Google Play Instant

Some apps can be used without actually installing them.



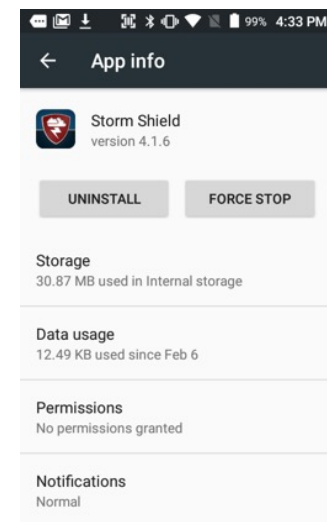
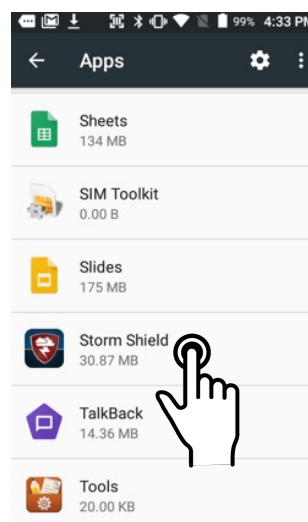
Uninstalling Apps

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.



Janam XG200 Specifications

TECHNICAL	
Operating System	Android 7
Processor	Qualcomm Snapdragon™ 410 quad-core CPU @1.2GHz
Memory	2GB RAM/16GB Flash
Expansion	NA
Power	3.63V 6300mAh user-accessible rechargeable Li-ion battery
PHYSICAL	
Dimensions	8.05" L x 3.11" W x 6.88" D / 205mm L x 79mm W x 175mm L
Weight	20.7oz / 586g including battery
Display	4.3" WVGA (480 x 640 pixel) with Corning Gorilla Glass 3; exceptionally bright, outdoor viewable
Touch Panel	Multi-touch capacitive touch screen, passive stylus included
ENVIRONMENTAL	
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 5ft/1.5m drops to concrete at operating temperature; multiple 6ft/1.8m drops to concrete at ambient temperature per MIL-STD 810G
Water & Dust	IP65
Electro Static Discharge (ESD)	+/- 15kV air; +/- 8kV contact
INTERFACE FEATURES	
Audio	Speaker
Alerts	Vibration; LED indicators
Connectors	USB Type C v2.0
LED Indicators	Dual-color indicators at top
External Buttons	24-Key Numeric or 51-Key Alpha-Numeric; user-programmable
DATA CAPTURE	
Imager	Honeywell N6603ER 2D Imager or Honeywell EX25 near/far imager
WIRELESS COMMUNICATION	
WLAN	Dual-band 802.11a/b/g/n/d/h/i/k/r/v
Security	IEEE802.11; WEP; WPA/WPA2 Personal; WPA/WPA2 Enterprise; RC4 Algorithm / TKIP; RC4 Algorithm / AES, Rijndael Algorithm; EAP-FAST; EAP-TLS; EAP-TTLS; PEAP-GTC; PEAP-MSCHAPv2; PEAP-TLS; LEAP; CCX v4 supported
WPAN	Bluetooth v4.1, supports HFP1.7 and HSP1.2
MOBILE APPURTENANCES	
Motion Sensor	Accelerometer
ACCESSORIES	
	Single-slot cradle kit (Ethernet; Charging)
	Spare battery
	Six-slot battery charging kit
SAFETY/REGULATORY	
Safety	IEC 60950; EMC; RF; SAR; LED; Laser
Radio	FCC; IC; CE
Environment	RoHS and WEEE compliant

Regulatory and Maintenance

XG200 Rugged Mobile Computer Regulatory Information

Copyright 2019 Janam Technologies LLC. All rights reserved.

XG200 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.

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 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.

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**XG200 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 transmit 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 non-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

- ☐ 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 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.

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.

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.