JANAM
part of HID

XR2 User Manual

Technology at Work®

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Janam Technologies, part of HID, assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, dead battery or repairs. To protect against data loss, be sure to make backup copies (on other media) of all important data.

Follow all usage, charging and maintenance guidelines in the Product User Guide. If you have questions, contact Janam.

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

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1

Introduction

XR2 All-in-One UHF RFID Reader

XR2 is Janam's ultimate all-in-one UHF RFID reader designed for the dynamic needs of the supply chain, manufacturing and logistics industries. Engineered for real-time tracking and superior visibility, XR2 redefines inventory management and asset tracking with its unparalleled speed and accuracy.

This state-of-the-art RFID reader merges advanced RAIN RFID technology with a sleek and intuitive design to help businesses of all types and sizes optimize their operations. Powered by the industry-leading Impinj E710 reader chip, XR2 is a cost-effective, high-quality solution that doesn't compromise on functionality.

Capable of scanning more than 1,000 EPC Class 1 Gen 2 tags per second and from up to 60 feet away, XR2 delivers new levels of efficiency in asset management and inventory control, significantly reducing the time and labor required for businesses of all types and sizes. And integration of an advanced Honeywell 1D/2D imager delivers high-throughput capture of even the most difficult-to-read barcodes.

XR2 offers enhanced connectivity options through JanamConnect®, an optional multi-carrier SIM card solution that provides businesses with access to the best-performing cellular networks globally. Built-in GPS functionality not only provides accurate location data but also enhances asset tracking and management. By merging precise tag location information with RFID data, XR2 enables businesses to gain business-critical insights into asset logistics, streamline operations and significantly boost efficiencies across the modern supply chain.

Hardware Overview - Top and Sides

1. Scan engine
2. Power Button
3. Front Camera
4. PTT Custom Button
5. Scan Button
6. Scan Trigger
7. Lanyard Anchor
8. RFID Reader Antenna
9. USB/Charging Port
10. Scan Button
11. Volume Up +/Down -
12. Flash
13. Camera
14. Audio Receiver
15. System LED
16. Scanner LED

2

Getting Started

Unpacking the Janam XR2 UHF RFID Reader

Make sure you have the following:

— Janam XR2 UHF RFID Reader
— USB-C to USB-C cable
— Documentation (Quick Start Guide, License Agreement and Regulatory Guide)

Recommended Host Computer Requirements

— Microsoft Windows-compatible host computer with USB port, Microsoft Windows 10/11, or
— Mac OS X 10.10 (Yosemite) or higher, or
— Linux GNOME or KDE desktop or higher, or
— Chrome OS
— If installing Android™ Studio, 8 GB of available disk space minimum (IDE, Android SDK and Emulator).
— 1280 x 800 minimum screen resolution.

Janam XR2 SDK

The Janam XR2 Software Development Kit enables programmers to develop applications for Janam XR2 rugged touch computers running the Android™ operating system. It contains details and instructions for developing applications that access the XR2 embedded scanner.

The development kit, which is available upon request, is designed for use with the publicly available Android SDK.

Charging the Janam XR2

BATTERY SAFETY GUIDELINES

The XR2 has a user-accessible, rechargeable battery. Replace only with a Janam-approved battery. There is the risk of explosion if the battery is replaced by an incorrect type. For more information on battery replacement see the janam.com website or contact JanamCare at 866-915-5311. Use only battery chargers approved for the XR2 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 XR2 battery

To release the XR2's battery, first move the locking slider into the unlock position. Then firmly hold the reader antenna enclosure with one hand and the pistol grip in the other, then pull them apart about 1/8th of an inch, and you can lift off the pistol grip that's also the battery compartment cover.

Use a fingernail or small flatblade screwdriver to carefully picot the battery out of its seat.

To install the battery, first make certain that the red perimeter seal is intact and properly sitting in its groove. Then insert the top first at an angle, then firmly push it down into the battery compartment until it is properly seated. Lower the pistol grip battery compartment cover into its track leaving the same 1/8th inch gap. Then firmly push the pistol grip cover towards the reader antenna enclosure until it snaps into place. Then glide the locking lever into its locked position.

Changing the battery

Before removing or replacing a battery pack, power down the device or press the Power key to put the XR2 in Suspend Mode.

Charging the XR2 battery

The XR2 ships with the battery charged. However, before first use, charge the battery for a minimum of four to six hours.

To charge the battery using the supplied USB Type-C cable:

1. Connect the supplied USB Type-C cable to the USB-C port of the XR2.

2. Connect the supplied USB Type-C cable to a USB-C power adapter..

3. The Power LED on the left side above the display will turn red while charging and will change to green when fully charged.

XR2 Battery Condition and Usage Information

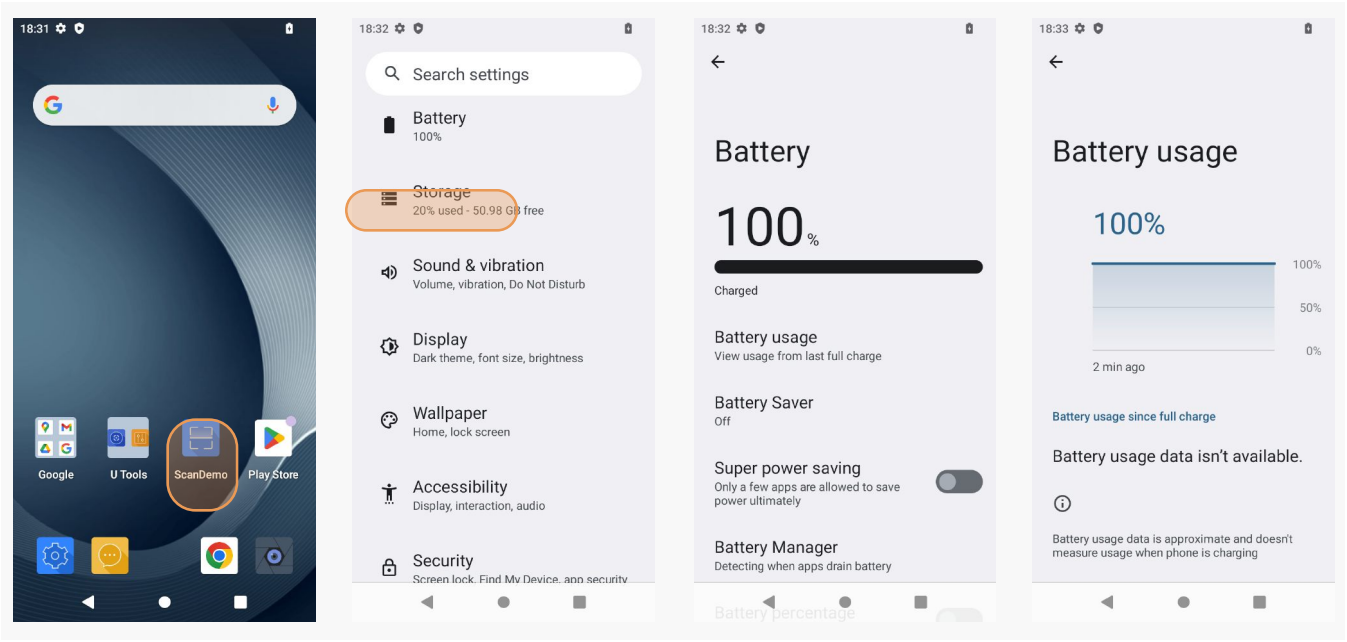
Android provides information on battery charge level in percent, estimated amount of battery charge remaining, and how much of the battery capacity has been used by various applications and device functions. This information can be accessed as follows:

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

Or, go to **Settings** > **Battery** to get to the **Battery screen**.

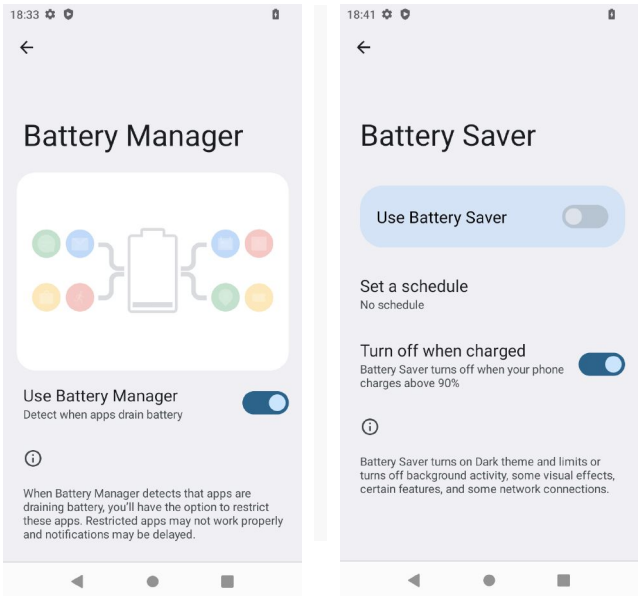
View battery status and level, and estimated battery life remaining.

To view battery usage by application, tap on **Battery use** in the menu on the upper right.



Tip — You can conserve battery life by:

1. Using the AC adapter to plug the XR2 into an external power source.
2. Manually or auto-suspend device operation when possible.
3. Reducing screen brightness.
4. Turning off wireless functionality (Wi-Fi, Bluetooth, location services, or GPS) when not in use.



Turning the Janam XR2 Rugged Mobile Computer on

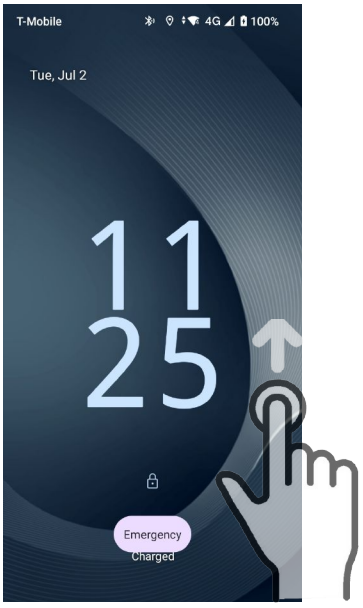
1. Press and hold the **Power Key** (marked red in its center) on the top right-hand side of the XR2.

   — If the XR2 is being powered on for the first time, follow the on-screen setup instructions.

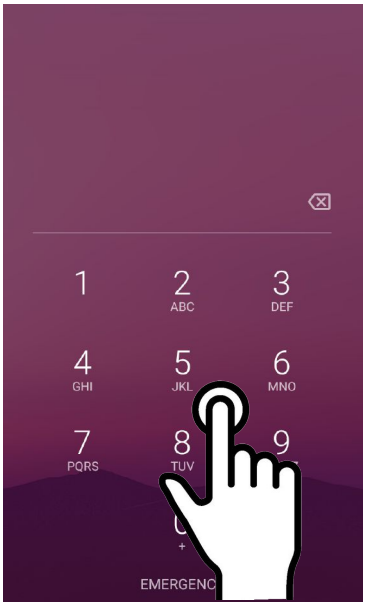
   — When the XR2 is on, pressing the power button briefly will suspend operation until it is pushed again.

2. When powered on, an **unsecured** XR2 will first display the **Android lock screen**. It is unlocked by swiping up on the screen. The **lock screen** will be replaced with the **start screen**. For information about securing the XR2 with a password or pin code, refer to Chapter 3.

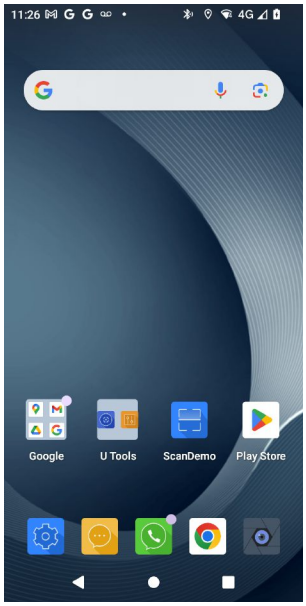
3. When powered on, a **secured** XR2 will also first display the Android lock screen. Swipe up to get to the **pin code keypad**. Enter your pin code. Once the correct pin code has been entered and you've tapped on the check mark, the **welcome screen** with the **pin code keypad** will be replaced with the **start screen**. For information about securing the XR2 with a password or pin code, refer to Chapter 3.



Unsecured: just swipe up



Secured: enter pin, password or pattern



Both ways get to the start screen

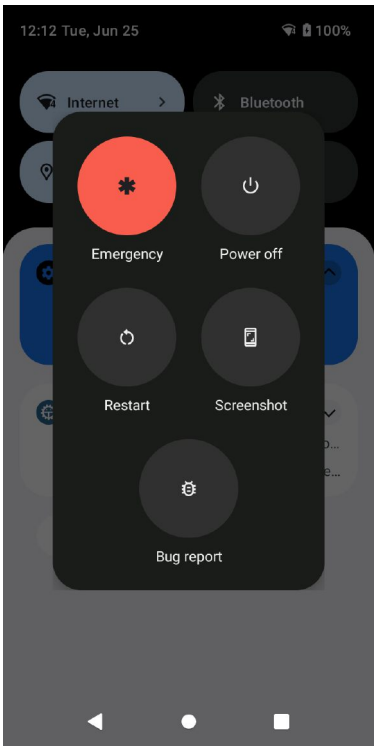
Turning the Janam XR2 Rugged Touch Computer off

Note that there are different levels of turning off power to the XR2.

1. To put the XR2 display to sleep, briefly press the **Power Button** (marked red in its center). The display will turn off. To turn the XR2 back on from this state of sleep, depress the **Power Key** again. The welcome screen will come up, and by swiping up it will return you to the last used app.

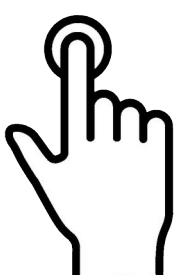
2. To put the XR2 display to sleep and also shut down Android, press and hold the **Power Button** (marked red in its center) until the "Power off / Reboot / Screenshot" overlay appears. Tap on Power off and the XR2 will power down. To turn it back on, press and hold the **Power Button** until the device vibrates and the screen turns on, showing "Technology at Work."

3. To completely power down the XR2 and reboot it from a cold start, press and hold the **Power Button** and keep holding it for about ten seconds. The display will go black, and in a few seconds the XR2 will reboot automatically.



Touch Screen Navigation

The Janam XR2 uses capacitive multi-touch technology. Almost all of the XR2'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.

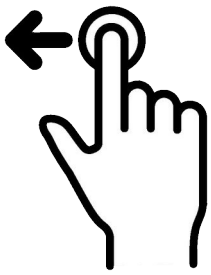


Touch

Touch a tile or object to select or open it.

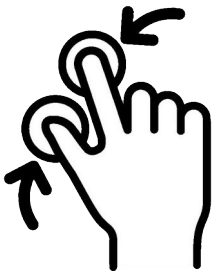
Touch and hold

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 direc-tion.



Pinch and spread

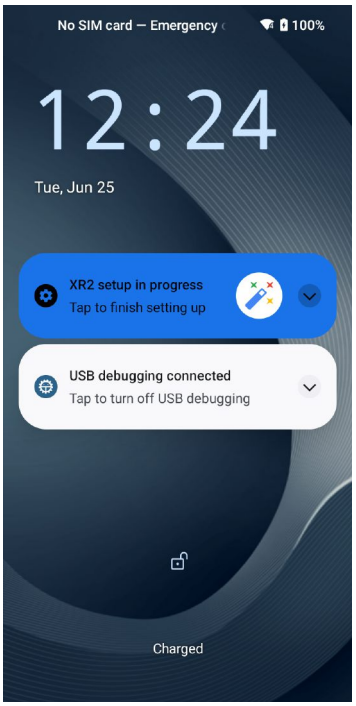
Put two fingers on the display, then drag them together or apart to zoom in or out.

Screen Rotation

The XR2 was designed to be used in portrait (vertical) orientation. Many screens and apps, however, can also be used in landscape (horizontal) orientation. By default, the XR2's internal sensors automatically present a vertical or horizontal view in sync with the physical orientation of the device. If automatic orientation is not desirable, the screen can be locked in its current orientation in **Settings**.

Lock Screen

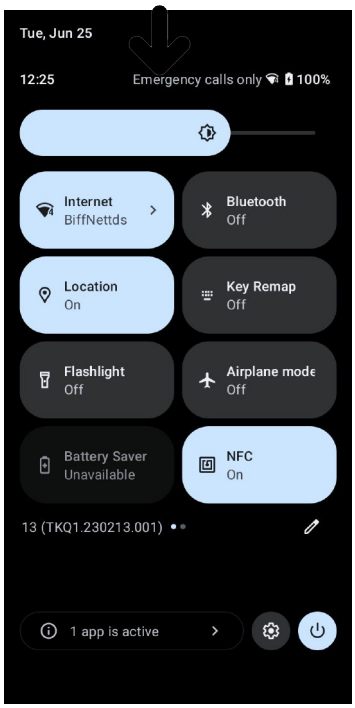
When turned on, the XR2 first displays the Android **lock screen.** The lock screen shows the current time and date. If the XR2 is secured, it may also display an access prompt. The lock screen can be personalized by changing its color, picture, and sounds. It may also provide a quick status of selected apps (such as 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 WLAN and Bluetooth, the presence of notifications, SIM card, battery charge, airplane mode, the current time and more. Some function icons are static and indicate the presence of something (like airplane mode). Other icons provide information on a function (like the WLAN signal strength, battery charge, or type of data service).

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

Icon	Description	Icon	Description
	EDGE connected		Strong signal
	GPRS connected		Good signal
	3G connected		Weak signal
	LTE connected		Connection issue
	No SIM card installed		No data connection
	Airplane mode		Hotspot enabled
	Data communication		
	Wi-Fi turned on		Connected to a Wi-Fi network
	Bluetooth turned on		Connected to a Bluetooth device
	Battery is full		Battery is partially drained
	Battery is low		Battery is very low
	Battery is charging		
	Location service turned on		Using location service



The Home Screen

In Android, the **home screen** is the central launchpad for all of the XR2's most frequently used features and applications. The home screen can consist of multiple screens (on the XR2 you can add additional screens to the right of the home screen).

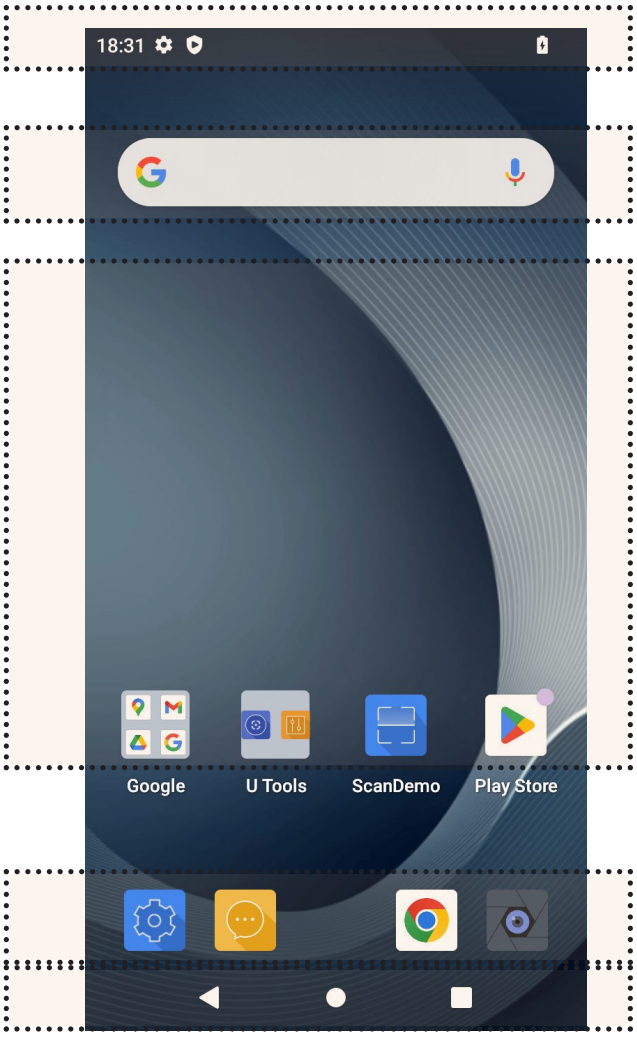
The home screen contains the **status bar** on top of the screen and the **favorites tray** at the bottom. The status bar displays various information icons. Swipe down to expand it and show more detail. The favorites tray can have up to five (changeable) favorites.

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. Touch and hold to rearrange icons. Widgets perform functions, like showing the time, weather, news, or act as shortcuts.

Status Bar: shows status icons and notifications. Drag down to show the Quick Settings panel.

Search Bar: search by text or by voice (say "Hey Google").

Apps and Widgets: this area is for app icons, app folder icons, and widgets.

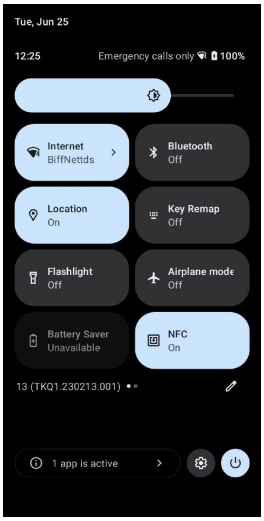


Favorites Tray: place most often used app icons here. Tap to launch.

Android buttons: Back, Home, Overview

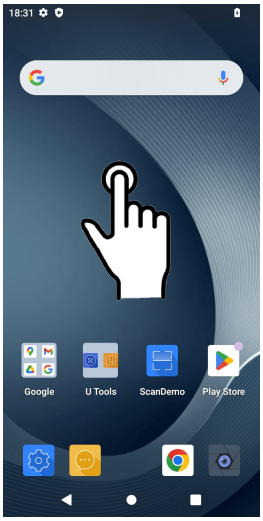
Home Screen (continued)

In Android 13, the **home screen** provides easy access to other functions by swiping up, down.



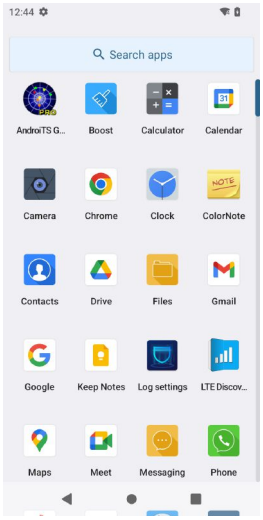
Swipe down:

Brings up the Quick Settings panel with notifications



Swipe up:

Brings up the App screen.



Home Screen (continued

On the Home screen, a long push brings up popup with three selections: Wallpapers, Widgets, Home settings.

Wallpapers: If the Wallpaper app is installed, you can select from Photos, Live Wallpapers, or standard Wallpapers.

Widgets perform functions, like showing the time, weather, news, or act as shortcuts. You may select one with a long tap and then deposit it either on the Home screen, or drag it to the right to put it on an additional Home screen (there can be more than one). To remove a widget, long-tap on it and drag it to "x remove".

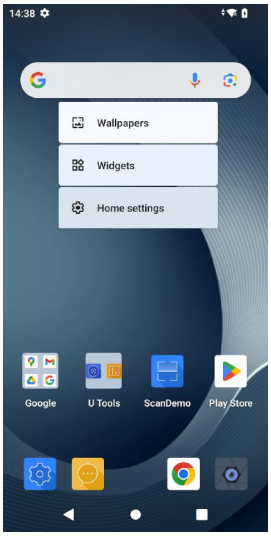
Home settings:

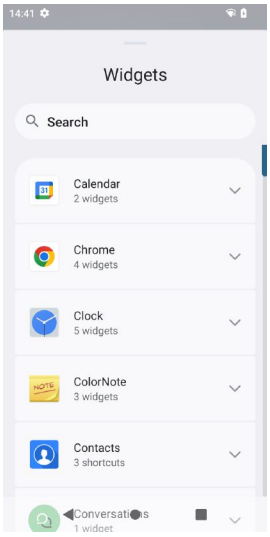
Notification dots: Toggles on/off small dots on top of app icons that alert to unread notification. Long-tap a dot to get a preview in a speech bubble.

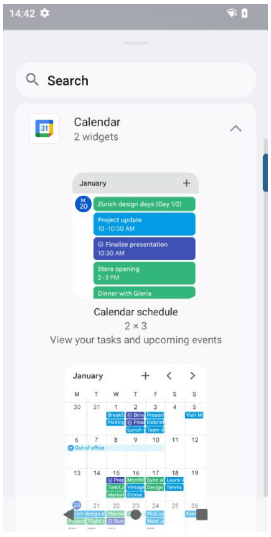
There are Privacy as well as General Notification settings for the Home Screen.

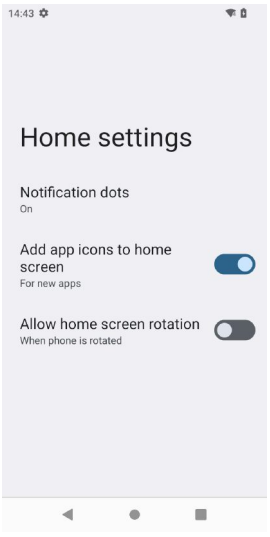
In Privacy, you can set what apps are and are not allowed to read Home Screen notifications. You can also set what sort of notifications should be shown.

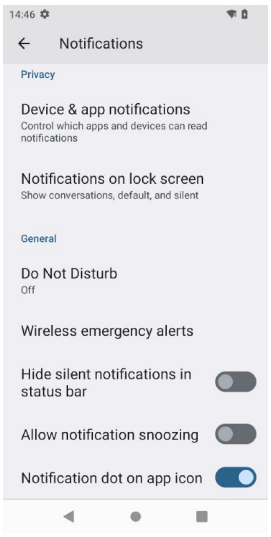
In General, you can manage the "Do Not Disturb" function, you can set wireless emergency alerts in detail, and you can toggle a variety of notification settings on and off.

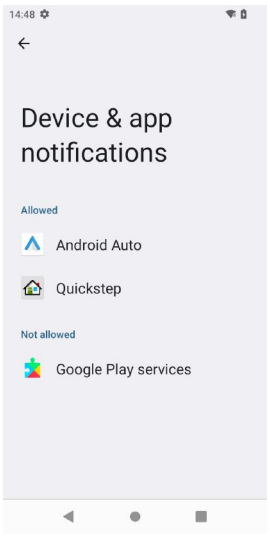


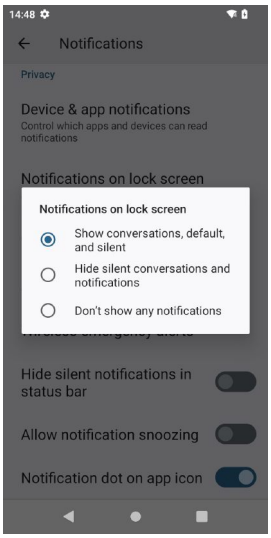


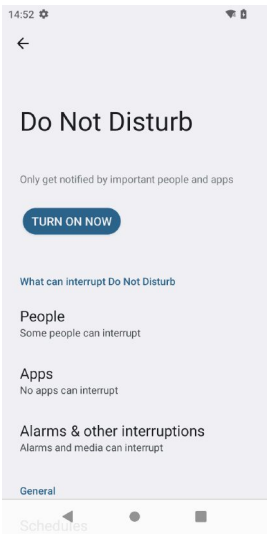












3

XR2 Setup

Removable Memory

IMPORTANT NOTE!
To avoid possible damage to microSD cards or the XR2 itself, ESD (electrostatic discharge) precautions are recommended when installing or removing microSD cards. Before handling, discharge any personal static electric buildup to a point of discharge other than the device.

microSD Card

About microSD Cards

The XR2 UHF RFID Reader has a microSD flash memory card/nano SIM slot in its battery compartment that is compatible with SDXC (Secure Digital Extended Capacity) cards with capacities of up to 2TB (exFAT32 card formatting). Older microSD and microSDHC cards can also be used. Removable microSD memory is useful for general file storage, uploading and downloading of user data, and more. The use of high-quality microSD cards supplied by a reputable manufacturer is recommended.

To access the microSD card slot:
Remove the XR2's battery compartment cover with its integrated pistol grip, and then the battery as shown in section 2-3 of this manual. The XR has an adapter that can accommodate a microSD card as well as one or two nano SIMs.

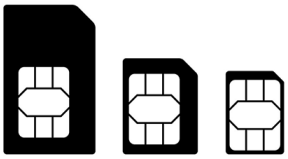
To install a microSD card:
Pull the XR2's card adapter out of its slot. You may use a small flat-blade screwdriver or similar to carefully pry the adapter out of its slot. Place a compatible microSD card into the adapter with its copper contacts facing you/up and its smaller edge going into the card slot. Fully re-insert the adapter into its slot, with card(s) facing up. Put the battery back into its compartment and put the battery compartment cover back on.

To remove a microSD card or nano SIM:
Before removing a microSD card, Go to **Settings** > **Storage and USB** > **SD card**. Tap the eject symbol to unmount the card. Then remove the battery compartment cover, remove the battery, and gently remove the microSD/nanoSIM card adapter.

SIM Cards

About SIM Cards

SIM (Subscriber Identity Module) cards are needed to add cellular voice and/or data communication service to devices equipped for cellular signal functionality. SIM cards can be transferred between devices supporting the same communications standards.



The Janam XR2 comes with WWAN (Wireless Wide Area Network) cellular signal functionality include two removable SIM card slots, marked NANO SIM1 and NANO SIM2. Neither cellular signal connectivity for internet access nor optional 3rd party voice telephone applications can function without an activated SIM card installed. The XR2 SIM card adapter is designed for use with **NANO SIM cards**. Standard or micro SIM cards are too large and will not fit. Contact Janam or your local wireless carrier for more information about SIM cards and wireless service. Also inquire about **JanamConnect**, an optional multi-carrier intelligent SIM card solution that provides XR2 customers with access to the best-performing cellular networks regardless of location.

To access the NANO SIM card slots:

Remove the XR2's battery compartment cover with its integrated pistol grip, and then the battery as shown in section 2-3 of this manual. The XR has an adapter that can accommodate a microSD card as well as one or two nano SIMs.

To install NANO SIM cards:

Pull the XR2's card adapter out of its slot. You may use a small flat-blade screwdriver or similar to carefully pry the adapter out of its slot. Place a compatible microSD card into the adapter with its copper contacts facing you/up and its smaller edge going into the card slot. Fully re-insert the adapter into its slot, with card(s) facing up. Put the battery back into its compartment and put the battery compartment cover back on.

To remove a NANO SIM card:

To remove a NANO SIM card, first remove the battery compartment cover, remove the battery, and gently pry out the microSD/nanoSIM card adapter.

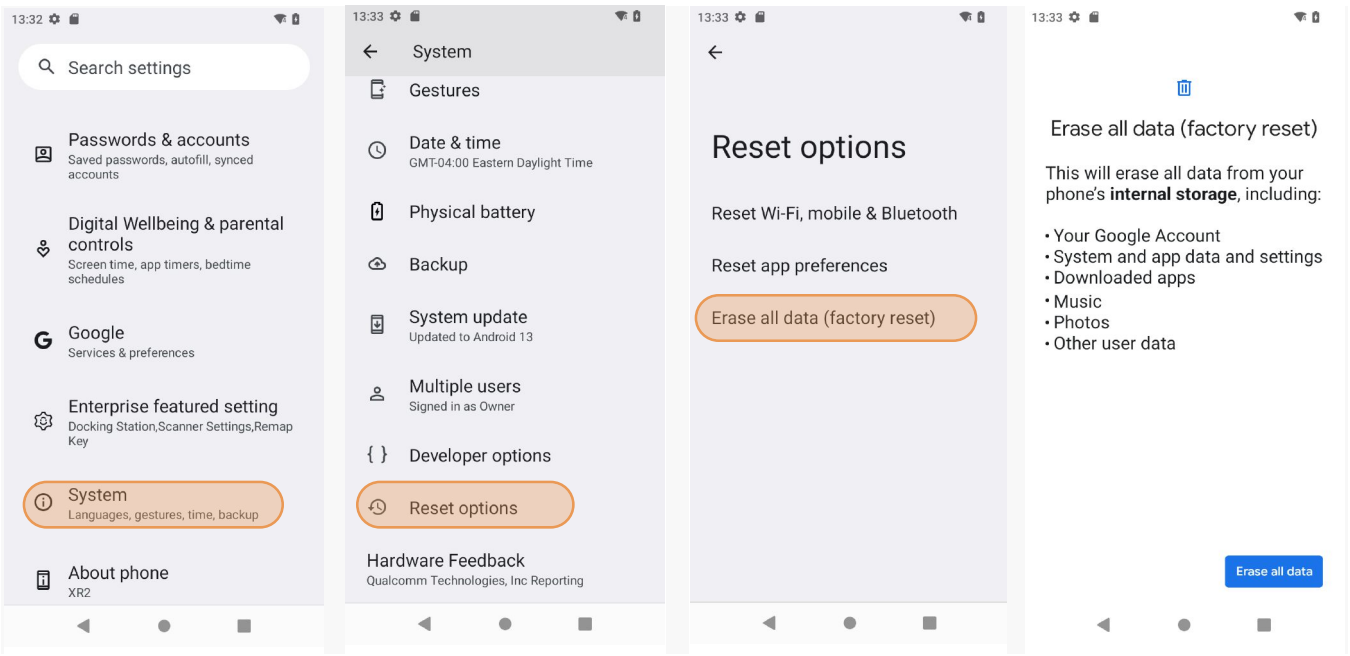
USB Port

The Janam XR2 provides charging as well as USB connectivity through its reversible **USB Type C** at the bottom of the device.

Resetting the XR2 to factory condition

Resetting the XR2 erases all personal data from internal device storage. This includes Google Account information, information about any other accounts, system and application settings and configurations, and any downloaded applications. The device is returned to factory condition.

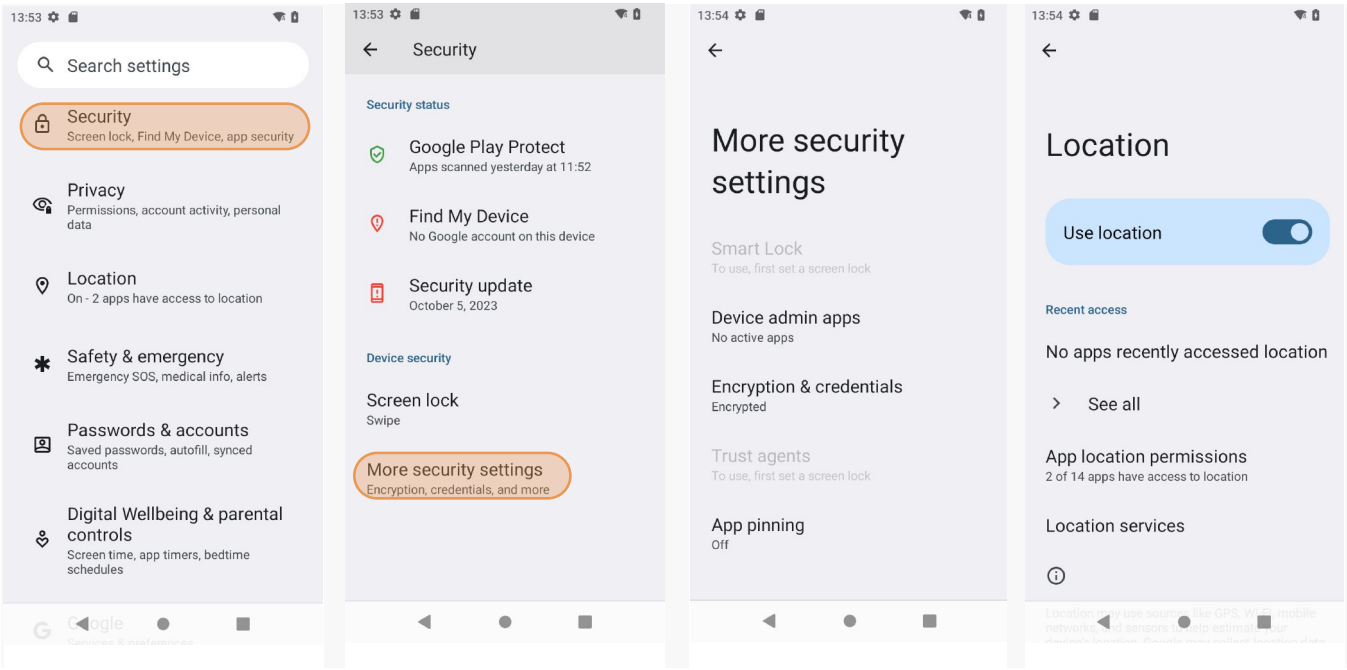
To perform a full reset go to **Settings** > **System** >**Reset options**, then tap on **Erase all data (factory reset)**. This brings up a warning screen. If you wish to proceed, tap on **RESET PHONE**. Depending on your access security options, you will be asked to supply your PIN, password, or pattern.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



Security

Android Security

The Android 13 operating system inherently provides a high degree of security. Here is an overview of available security and privacy settings:



Manage security settings

- ☐ **Settings** > **Security** and **Settings** > **Security** > **More security settings**

Check security status

- ☐ Security update: Settings > System > Systems update

Device security

- ☐ Screen lock/type of screen lock: **Settings** > **Security** > **Screen lock**
- ☐ Emergency information: **Settings** > **Apps & notifications** > **Advanced** > **Emergency alerts**

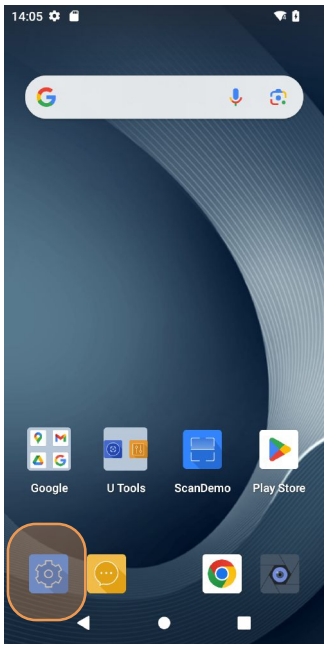
Privacy:

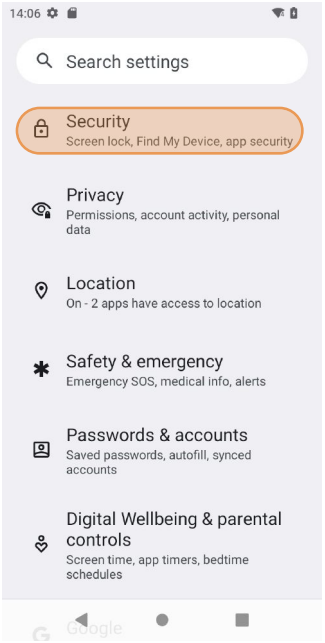
- ☐ **Settings** > **Location** (many options)
- ☐ **Settings** > **Security** > **More security settings** > **Device admin apps** (shows apps that can administer the XR2)
- ☐ **Settings** > **Security** > **More security settings** > **App pinning** (locks device into one app)
- ☐ **Settings** > **Notifications** (change permissions)

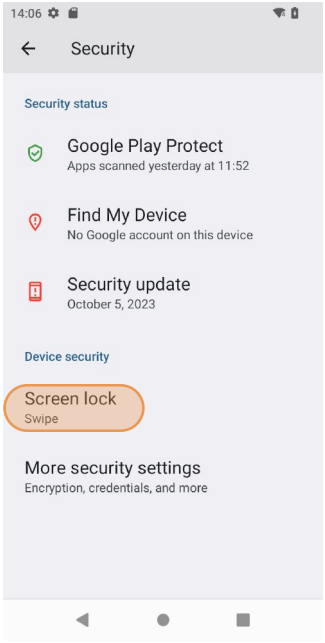
Device Security

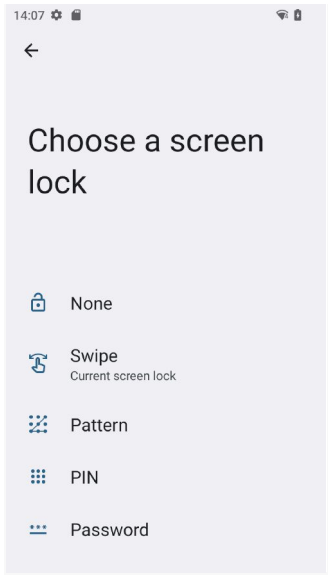
Screen Lock Types

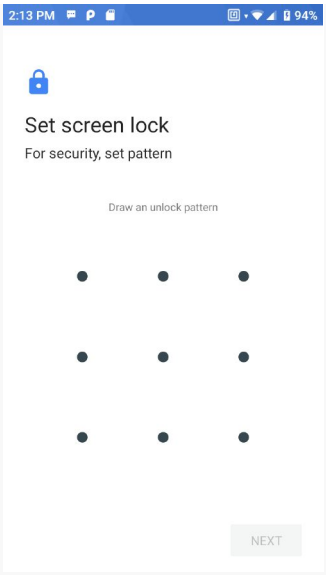
Android provides four lock screen options. Patterns must connect at least four unique dots, PINs must be at least four digits long (but can be as long as 16), and passwords must be at least four characters (but can also be as long as 16). To set, go to **Settings** > **Security** > **Screen lock**.

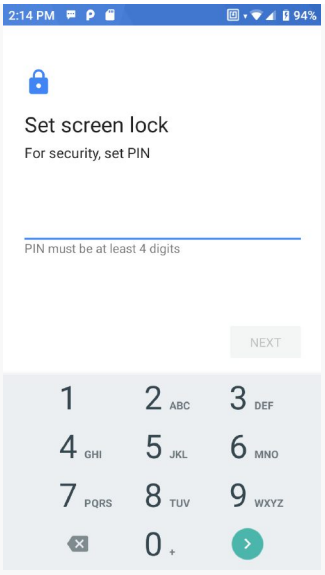


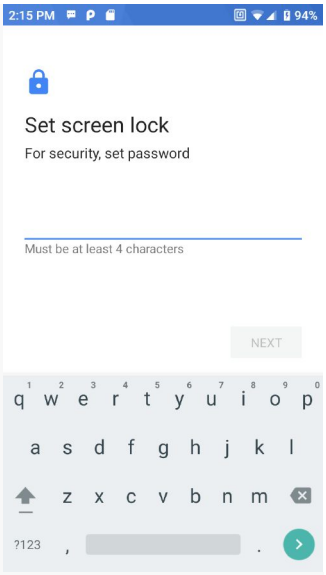












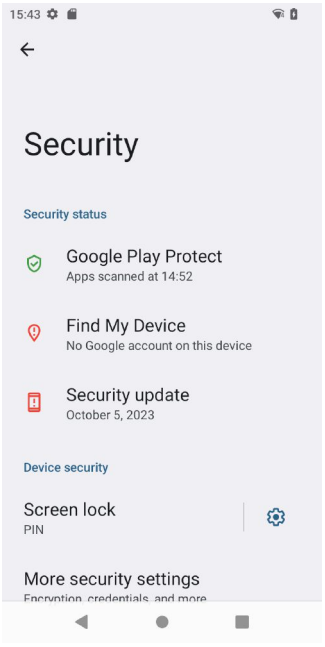
Changing Screen Lock Settings

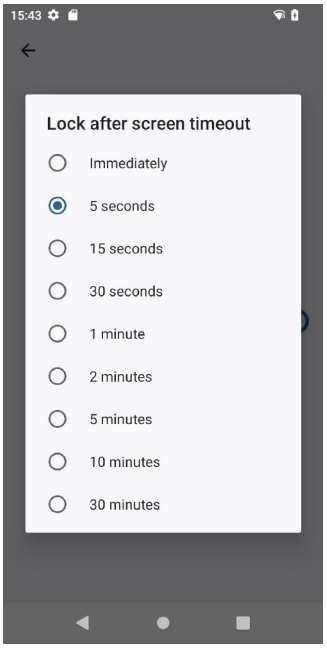
Lock screen options can be changed anytime. You can go from PIN to pattern or password, etc. To make a change, go to **Settings** > **Security** > **Screen lock**. If you have lock screen security in place, you must enter the code before you can change the screen lock type or code.

Additional Device Security Settings

Once a screen lock has been set, users can tailor screen lock security according to their preferences (or company policy) at **Settings** > **Security** > **Screen lock** . Among the available options are:

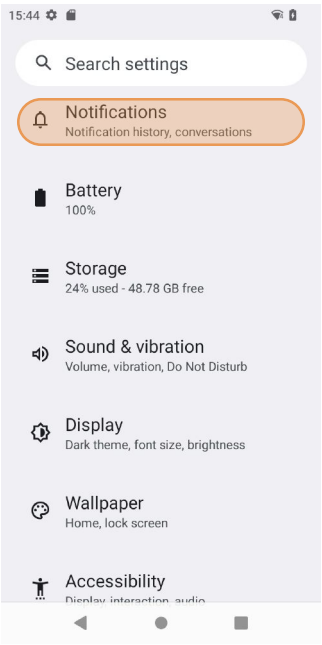
- ☐ **Lock after screen timeout** (can be set from immediately to 30 minutes)
- ☐ **Power button instantly locks** (screen instantly locks when power button is pushed)

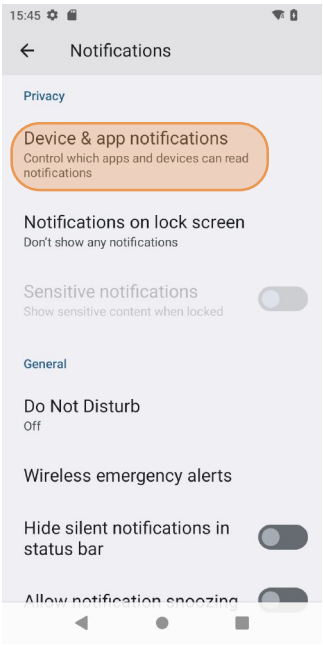


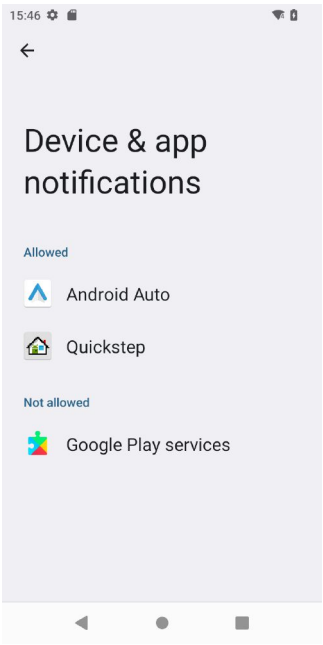


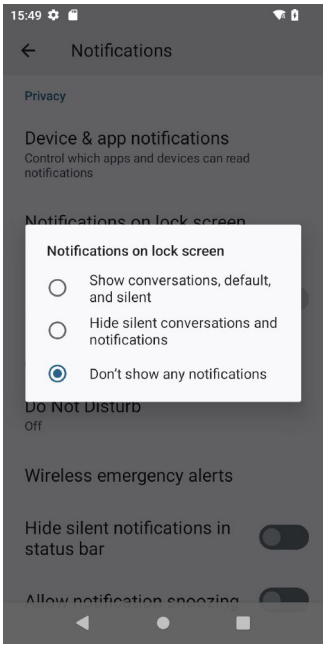
In addition, in **Settings** > **Notifications,** users can set:

- ☐ **Device & app notifications** sets what apps are allowed to show notifications.
- ☐ **Notifications on lock screen** sets what type of notifications should show on the lock screen.
- ☐ **Sensitive notifications:** Toggles the display of sensitive content when the device is locked.





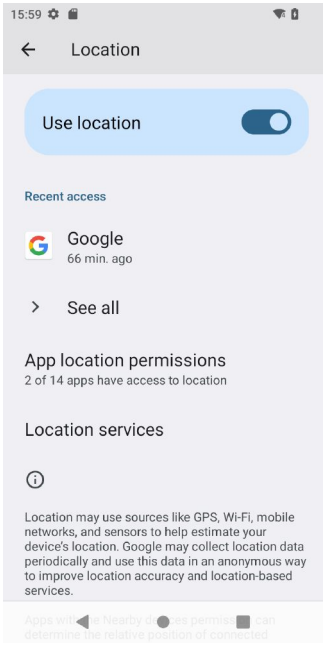


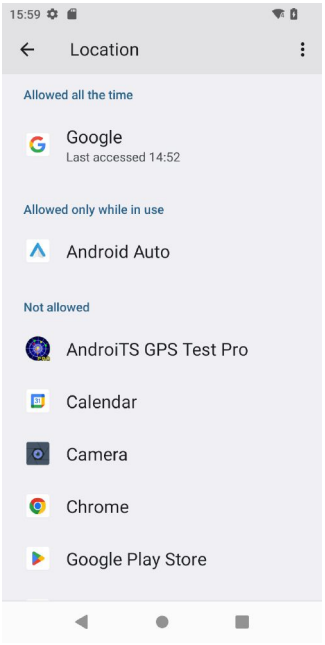


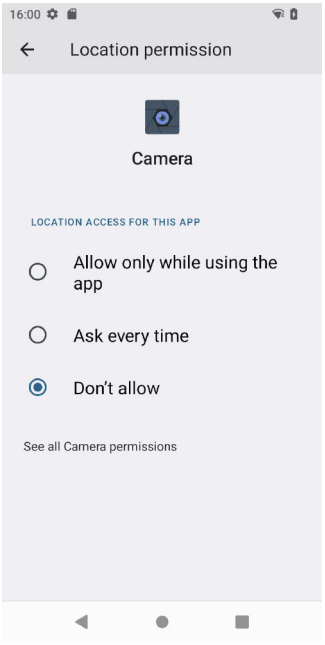
Privacy Settings

Location

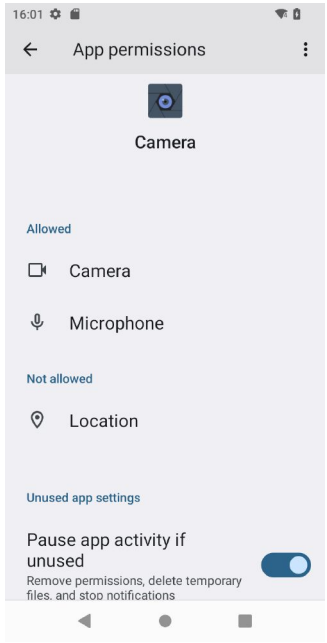
When connected via Wi-Fi, Bluetooth or mobile broadband and "location" is turned on for your XR2, you can get information based on its location. Examples are commute predictions, nearby stores and restaurants, and local search results. Use **Settings** > **Location** to turn the location feature on or off, or set location preferences.

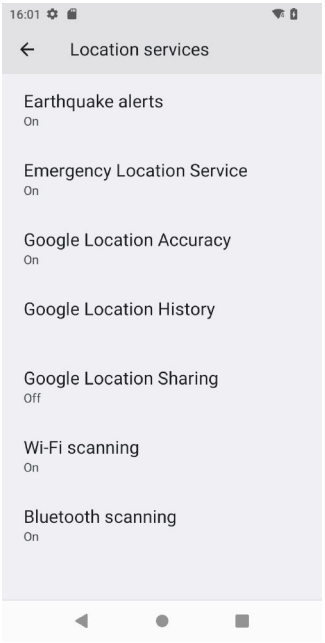


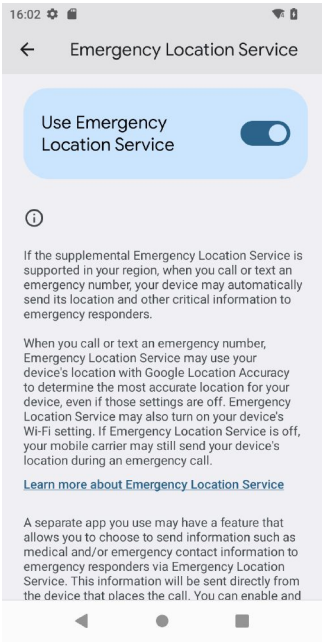


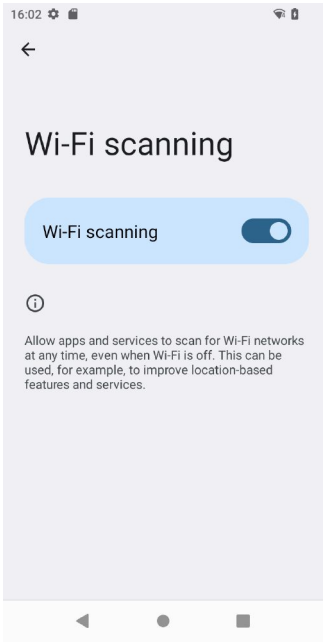


When location is turned on, you can see which apps have issued location requests. Tap on **App location permissions** to see what permissions app have. Tap on an app to change its permissions. You can also set whether an app can get your precise location or just an approximate one. You can also view and set all permissions an app has.





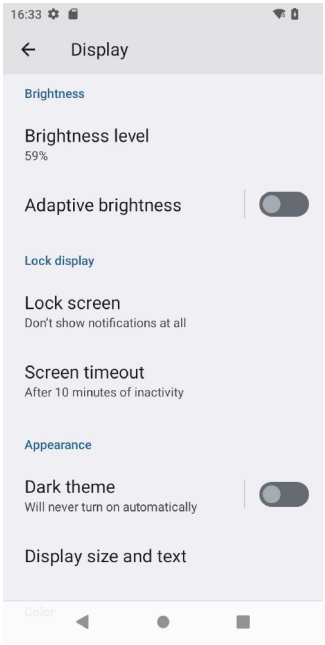




From **Location** you can view and set the various **Location services** available. Here you can toggle earthquake alerts (if available in your region) and emergency location on and off. You may also set location accuracy, history and sharing. Wi-Fi and Bluetooth scanning can be toggled on/off as well. This can improve location-based features even if Wi-Fi and Bluetooth are turned off.

Device Settings

The XR2 can be configured according to personal preferences. This makes the device easy to use and helps to enhance efficiency and productivity.



Display

The **Brightness level** can be adjusted manually via a slider.

If turned on, **Night Light** turns the screen to a dim, adjustable amber color. It can be set to turn on/off automatically at certain times.

Adaptive brightness automatically adjust the brightness level.

Lock screen lets you set what should be displayed and when it should be displayed

Screen timeout can be set from 15 seconds to never.

Dark theme can be enabled or disabled.

Font size can be set to **Small**, **Default**, **Large**, and **Largest**.

Display size and text is where you can set font size as well as item size, and also bold everything or display it in high contrast.

Night light toggles on/off, **Colors** can be set natural, boosted or adaptive.

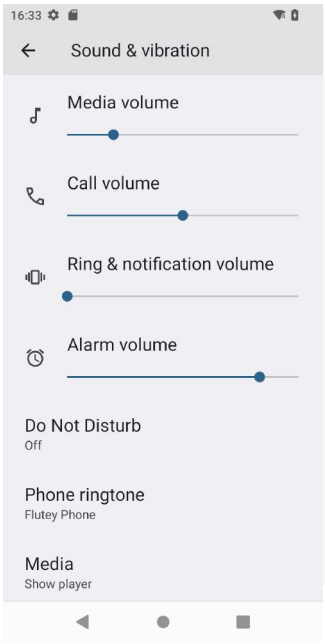
Ambient display makes the XR2 wake up and display notifications.

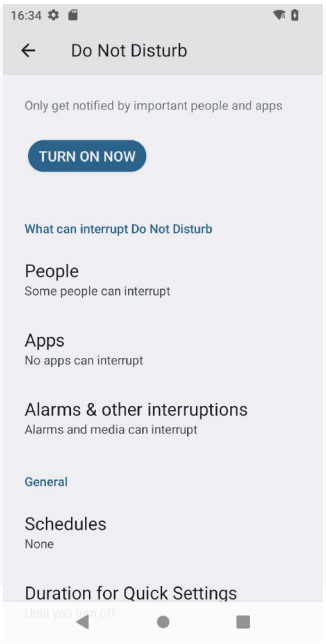
Device theme sets light or dark mode, or auto based on wallpaper.

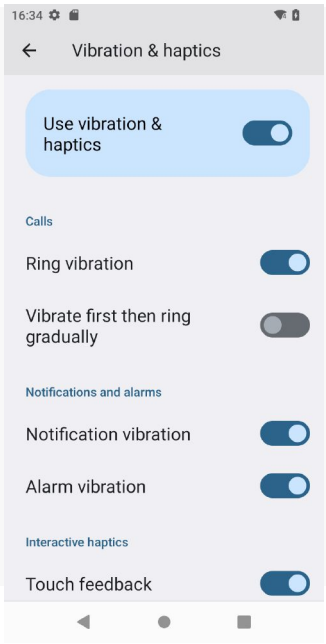
The **Screen saver** can be configured, and **Auto-rotate** toggles on/off.

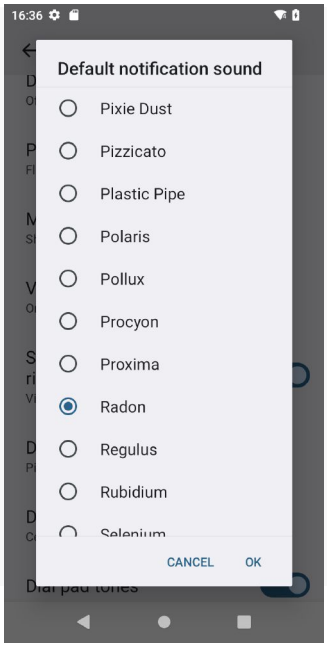
Sound & vibration

Allows setting of **volume of media, calls, rings, alarms** and **notifications**. You can set various **Do Not disturb** options, rules and restrictions for both calls and messages. You can set **vibration & haptics** options, set various sounds on/off, set the **default notification** sound and more.





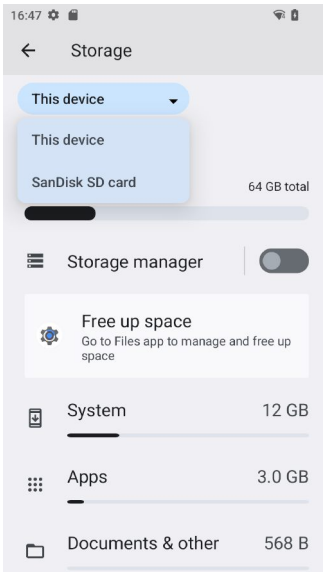




Device Settings (continued)

Storage

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

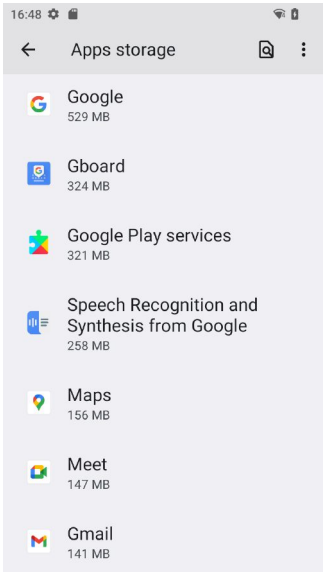


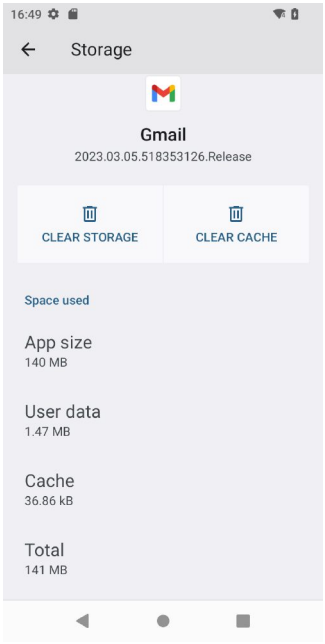
Apps

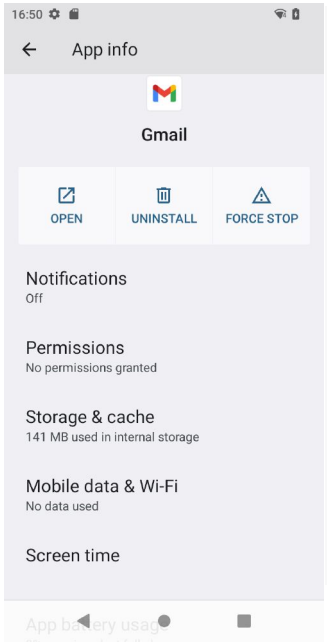
Touch **Apps** from the **Settings** screen to see recently opened apps. Tap on **See all xx apps** to view either all apps or only installed or disabled apps.

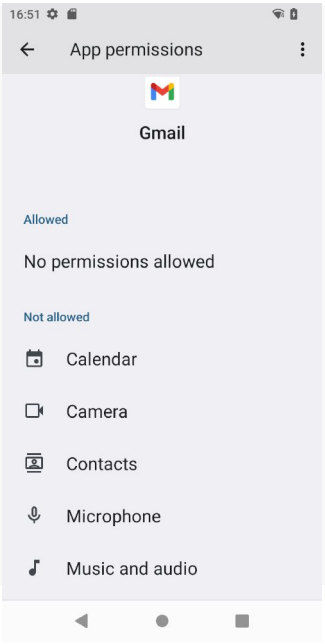
Tap on an app to see its **App info** screen that contains detailed statistics on an app including its notification and permissions options, the amount of storage or cache used, the time spent using the app, its battery usage, and its default settings. You can perform the following actions:

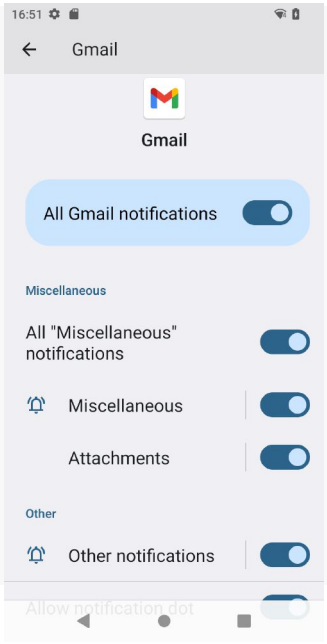
- ☐ Force stop the app,
- ☐ Disable the app,
- ☐ Show and set notifications options,
- ☐ Set app install location,
- ☐ Clear stored data,
- ☐ Clear cache, or
- ☐ Manage battery use,
- ☐ Open the app by default
- ☐ Manage battery use.
- ☐ See app details (where it's from, etc.).











Personal Settings

Passwords & Accounts

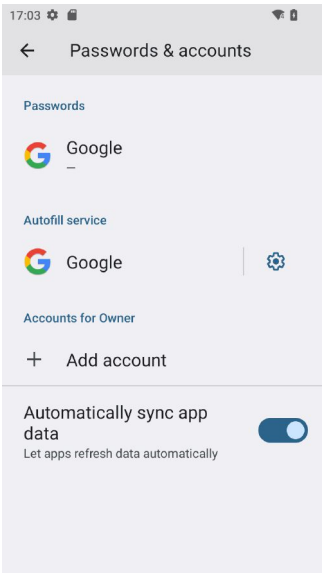
Accounts are created by going to **Settings** > **Passwords & Accounts**. To add an account, tap **Add account**, then tap the type of account to add. Follow the on-screen instructions to enter the required information for the account type selected.

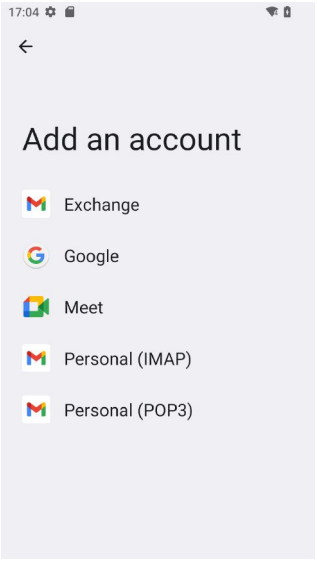
Depending on the type of account, you may need to provide a user name and password, select security settings, and configure data sync preferences during the setup.

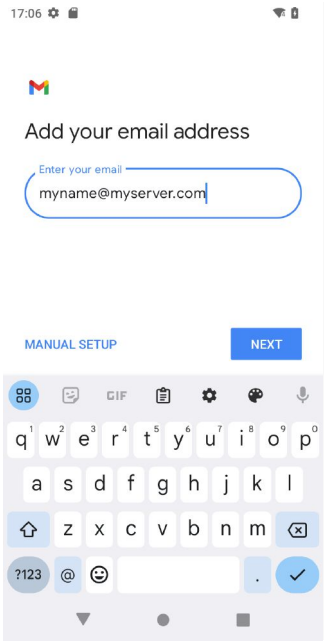
While the **Add an account** screen only specifically lists **Exchange** (Microsoft's email server solution), **Google** and **Meet** (Google's video calling app), you can use **Personal (IMAP)** and/or **Personal (POP3)** to set up either an IMAP (Internet Message Access Protocol) or a POP3 (Post Office Protocol) account.

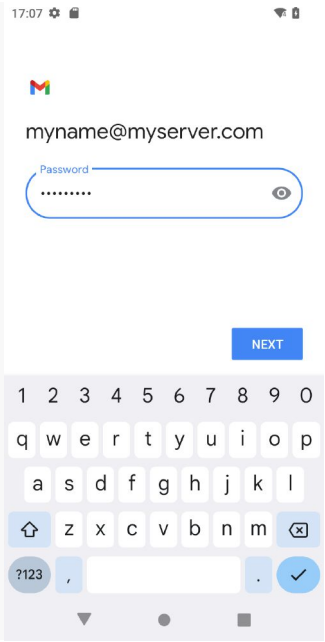
Accounts appear in the **Accounts list** when setup is complete. Depending on the settings you selected during the account configuration, your XR2 device may automatically start to sync account data (e.g., email, contacts, music and calendar, etc.).

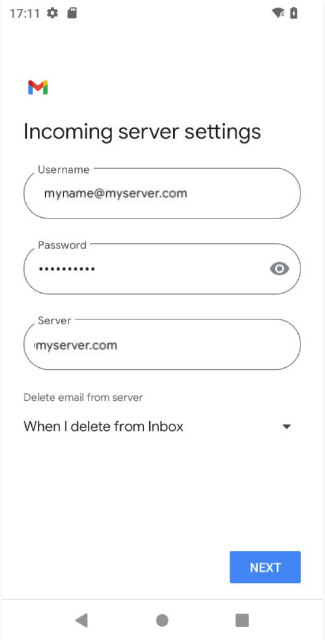
To remove an account, go to **Settings** > **Passwords & Accounts.** Tap the account you wish to delete. Press the **Menu** button at the right top of the screen and then select **Remove account**. Tap Remove account to confirm deletion.

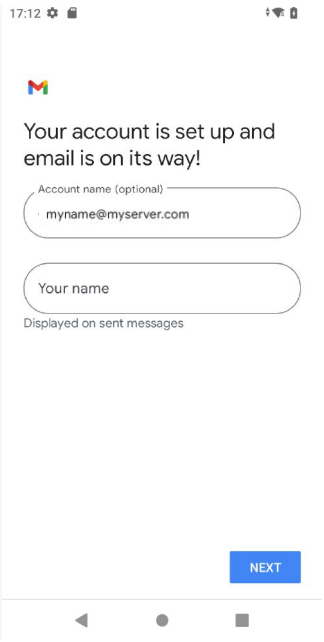




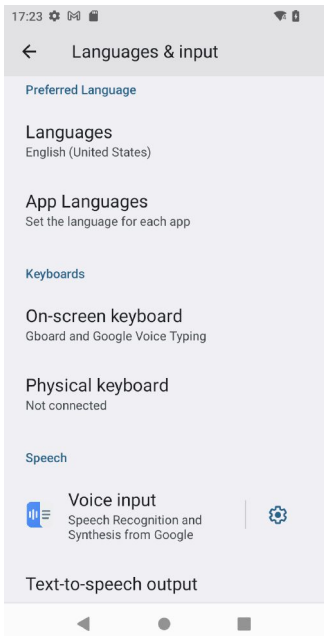








Personal Settings (continued)

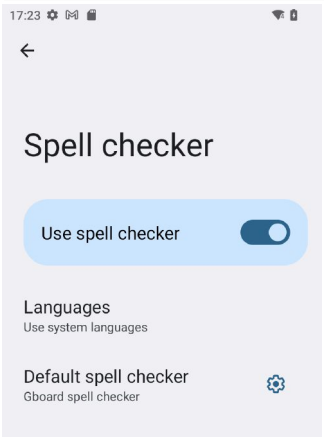


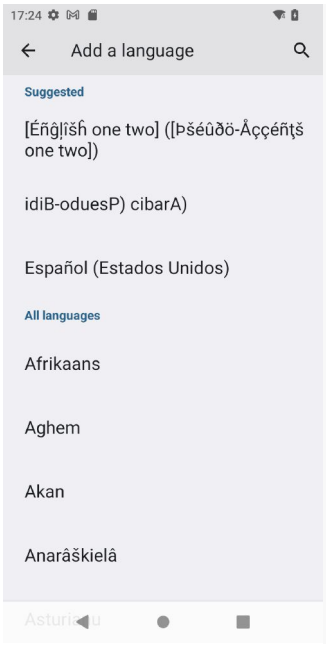
Language & input

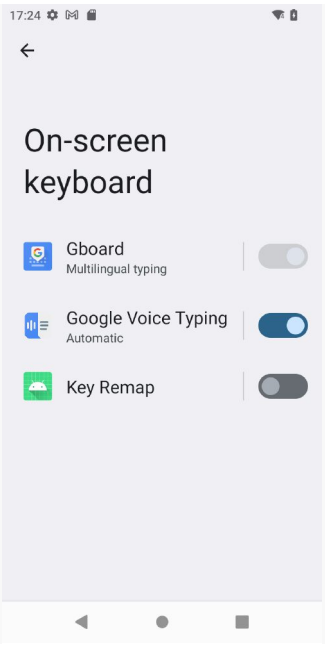
To configure and customize various language and input settings on your XR2, go to **Settings** > **System** > **Languages & input**. Here you can set:

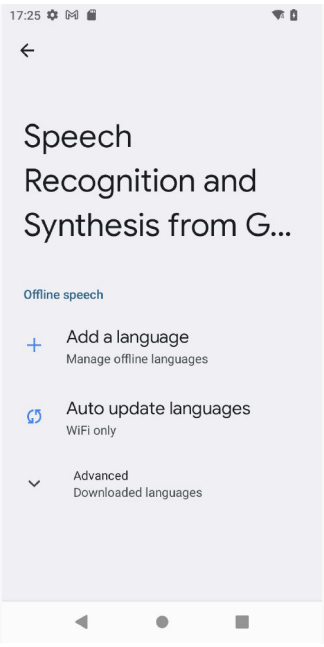
- ☐ **Language**: You can add languages from a long list.
- ☐ **Keyboard & Input Methods**: By default, the enhanced virtual keyboard appears when you open an application or select a field that requires text or numerical input. The content of the keyboard may vary depending on the selected default, the application in use, and the input field requirements.

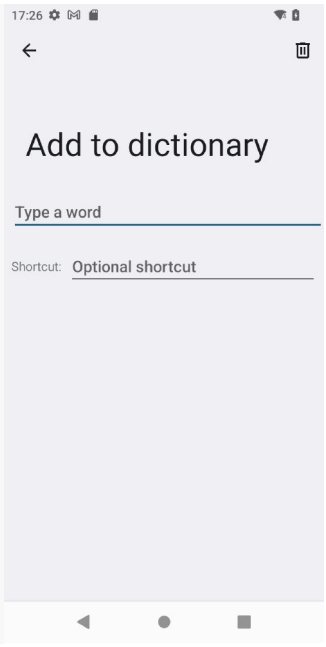
  To modify the default method for entering text, go to **Settings** > **System** > **Languages & input** and tap on **On-screen keyboard**.
- ☐ **Speech**: Lets you configure voice recognition, add languages, and also configure text-to-speech output (language, pitch, speed rate, etc).
- ☐ **Spell checker**: 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.
- ☐ **Pointer speed**: Adjusts the speed of a mouse connected to the XR2.











System Settings

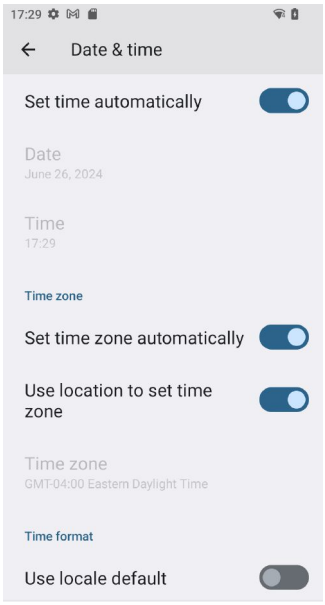
Date & time

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 **Set time automatically** box or you can manually enter the values by touching **Date**, **Time**, or **Time zone** (note that if the Automatic option is checked, you cannot set Date, Time, and Time zone.

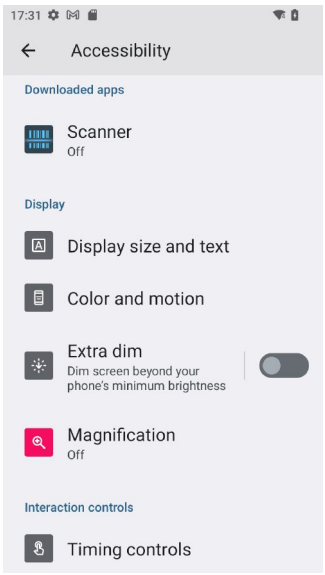
To modify how the time is displayed on the screen, check the **Use 24-hour format** box to switch from a 12-hour cycle to a 24-hour cycle. In a 24-hour time cycle, 1:00 pm displays as 13:00 pm.

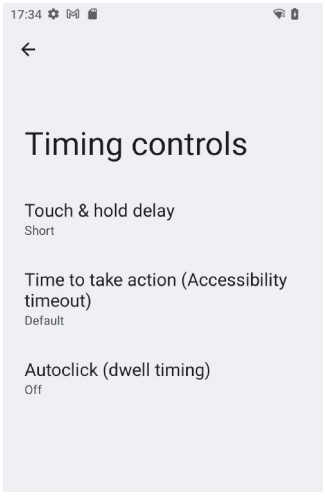


Accessibility

Settings > **Accessibility** allows configuring the XR2 to be as accessible as possible for all users. Services, system settings and display settings include:

- ☐ **Select to Speak**: When on, reads or describes aloud items you tap. Select to speak can be configured and personalized.
- ☐ **TalkBack**: If seeing the screen is difficult, TalkBack provides spoken feedback without looking at the screen.
- ☐ **Display size and text**: This is where text and items can be set to be smaller or larger.
- ☐ **Color and motion**: Colors can be corrected for various types of anomalies, the dark theme can disabled, animations can be removed, and the mouse pointer can be set to large. Allows settings the screen to accommodate the three types of color blindness.
- ☐ **Extra dim**: Dims the display beyond minimum brightness.
- ☐ **Magnification**: When on, configures magnification type and shortcut.
- ☐ **Accessibility Menu**: When on, provides a large configurable on-screen menu for device control.
- ☐ **Gloves mode**: When enabled, accepts screen swipes wearing gloves.
- ☐ **Timing controls**: Sets touch & hold delays, time to action settings, and automatic clicks.
- ☐ **Systems controls**: toggles navigation between traditional Android buttons and gesture navigation, toggles use of the power button to end calls, and sets screen auto-rotation on and off.
- ☐ **Vibration & haptics**: Set on or off for touch as well as ring/notifications.
- ☐ **Live captions/preferences**: toggles and configures live caption.
- ☐ **Audio descriptions**: Toggles on/off a description of screen action in supported movies and shows.
- ☐ **Audio adjustment**: You can combine stereo channels when playing audio and set the left/right audio balance.
- ☐ **Accessibility shortcuts**: Toggles a button for quick access to accessibility features..



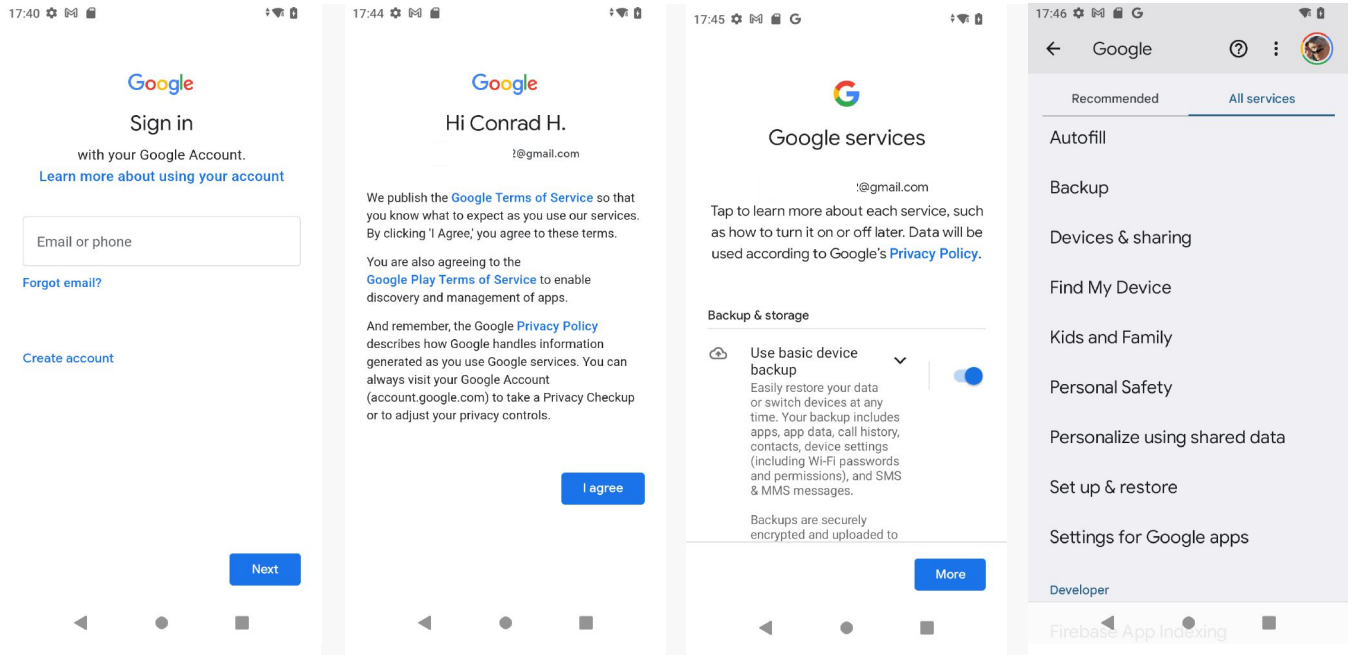


Google Account

Is it mandatory to have a Google account to use Android on the XR2? It is not mandatory, but without a Google account a lot of useful Android functionality does not work because Android is tightly integrated with many Google services. Examples are backups, app and security updates, privacy settings, location services and much more.

However, **Google accounts do not have to be Gmail accounts**! You can set up your Google account with any other email account you may already have.

Your Google account has numerous options, settings, and checkups that allow for personalization and efficient use. Please examine at **Settings > Google**.



4

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 XR2 rugged mobile 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 XR2 can see as it scans for available networks.

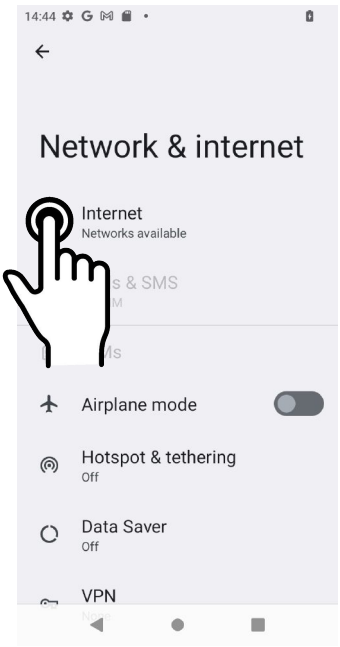
Typically, wireless local area networks are configured with a security scheme. Wireless devices connected to a wireless network must:

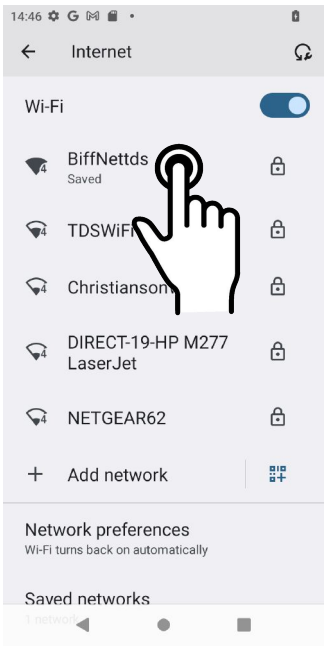
A. Be configured for compatibility with the host wireless network's security requirements. These security requirements are necessary to prevent unauthorized access to the wireless network, and also to prevent damage to computers using the wireless network.

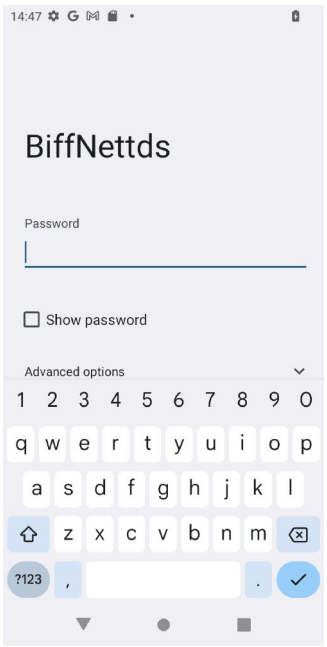
B. Be granted access to the host wireless network through the use of a security code (password) established by the host wireless network's administrator to protect the network from unauthorized use. Public wireless networks may require both a login and a password for a connection.

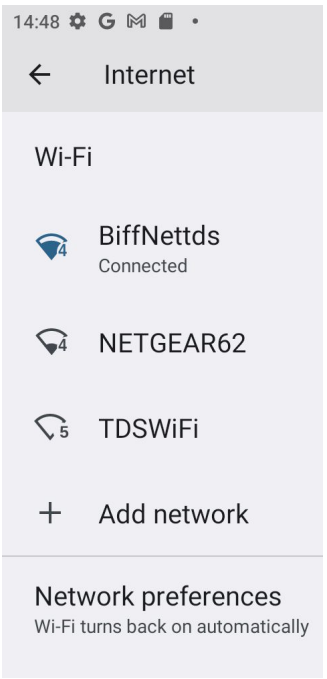
Connecting the Janam XR2 to a Wireless Local Area Network (WLAN)

To initially connect the XR2 to a wireless local area network, go to **Settings** > **Network & internet** > **WLAN**. Turn **WLAN networking** on. The XR2 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**.



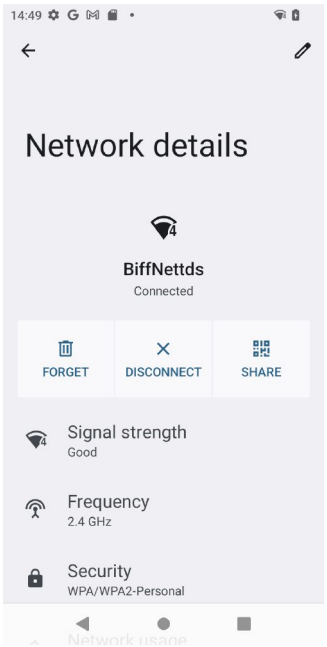


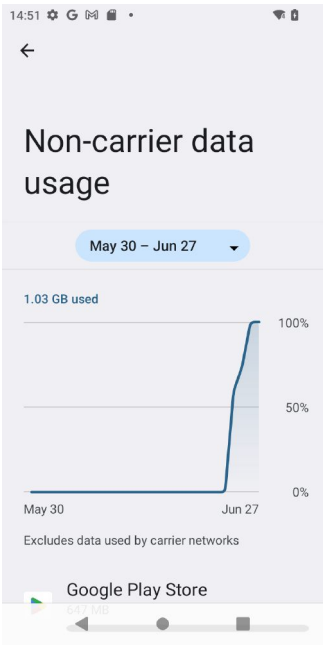


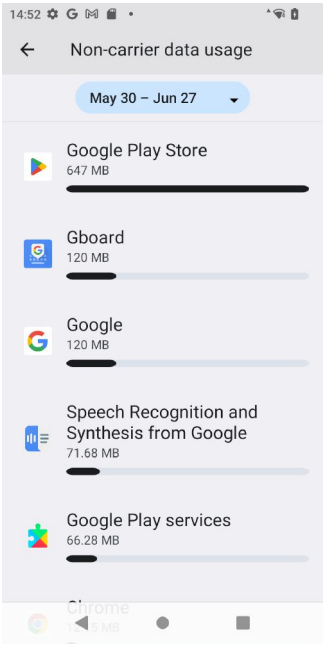


Tap on the network you are connected to show connection information (signal strength, link speed, frequency, and type of security). You may also opt to **forget** this network.

In **Settings** > **Network & internet** you may also tap on **Data Usage** to see how much data you used in a given time span. Tap **Wi-Fi data usage** to see how much data was used overall and by each active app.







Network preferences

- **Turn on Wi-Fi automatically**: When on, Wi-Fi will turn back on automatically near saved networks (Wi-Fi scanning must be turned on for this option to work).
- **Notify for public networks**: Notifies you when a strong public network is available.
- **Install certificates**: Certificates use a crypto-graphic key for certain secure web connections. Certificates are saved on **Settings** > **Security** > **More security settings** > **Encryption & credentials** >.
- **Wi-Fi Direct**: Used for peer-to-peer Wi-Fi connections that do not need a Wi-Fi wireless access point.
- **WLAN Band**: Selects 2.4GHz, 5GHz, or auto.
- **Wi-Fi Roam Trigger**: Selects at what signal strength roaming may start.

Mobile network

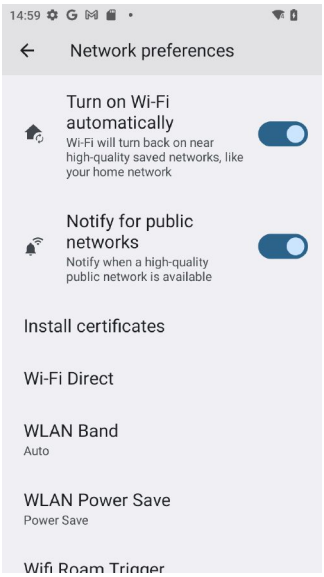
If your XR2 has mobile phone and data service, you can adjust how your device uses data.

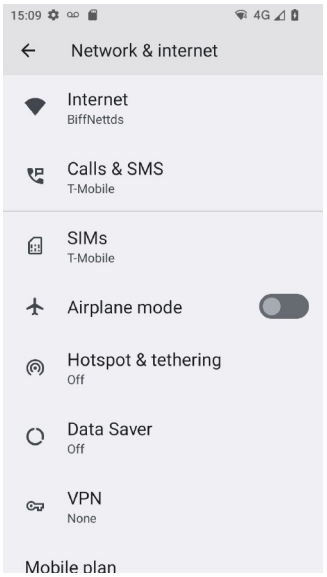
- **Mobile Data**: Determines if the XR2 uses mobile data or if connectivity is limited to voice.

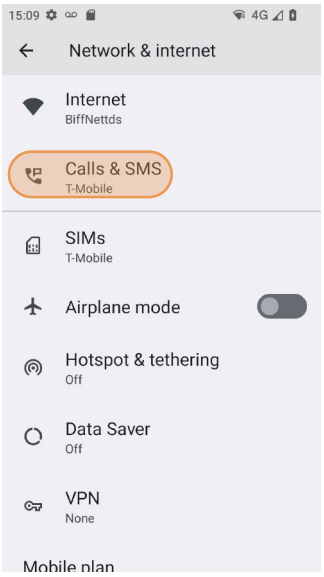
- **Roaming**: Allows or disallows to connect to data services other than your primary provider when roaming (to prevent unexpected expense).

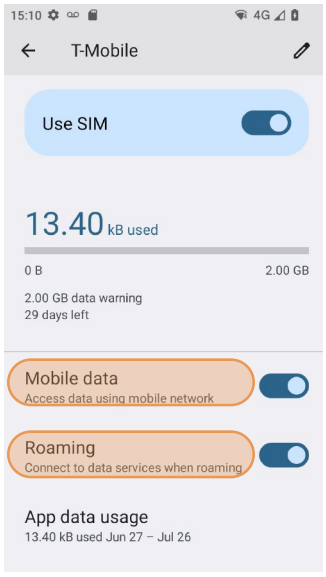
Mobile data settings

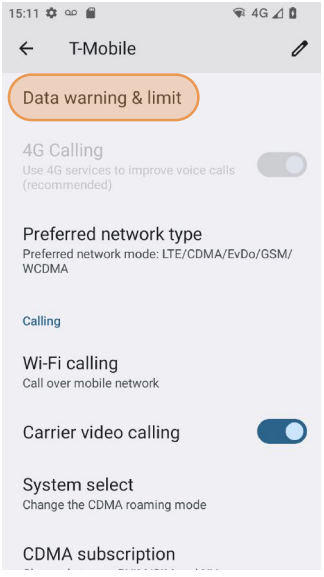
In Settings > Network & internet > Internet > [your provider] you can see data usage by app, set data warmings and limits, and the preferred network type. You can also enable or disable Wi-F calling and video calls, and control various network provider-specific items.

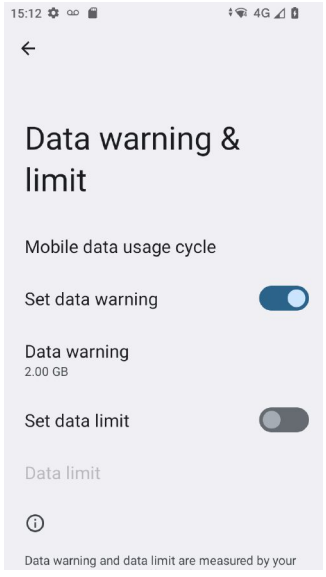












5

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 XR2, 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 handheld device 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 XR2 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.

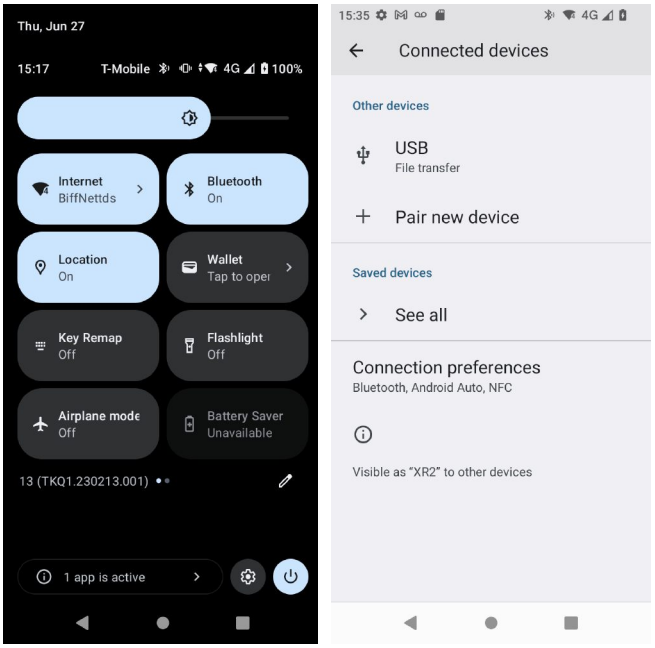
Bluetooth Partnerships:

A Bluetooth partnership (often referred to as a pairing) is, as it relates to this chapter, a relationship created between the XR2 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 XR2 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 XR2 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.



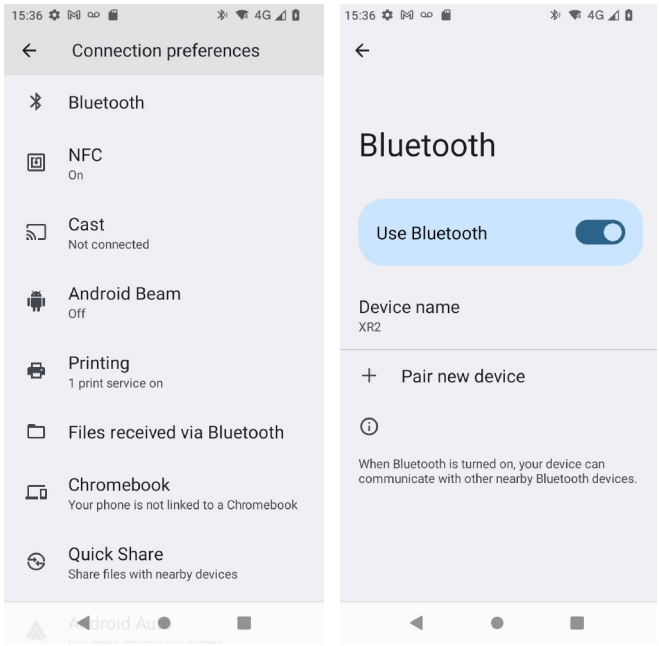
Note that in Bluetooth terminology, there is a difference between "**paired**" and "**connected**." Paired means that a Bluetooth relationship has been established between two devices, and they know each other. Connected means the devices have an active connection.

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.

In order for the XR2 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 XR2 discoverable, go to **Settings** > **Connected devices** > **Connection preferences** > **Bluetooth** and turn Bluetooth status on.

Note that it's not always easy to determine the nature of discovered devices, especially when they are shown to the right, two are listed only by the MAC (Media Access Control) hardware address. To keep the XR2 from showing up with such a code or serial number, rename it to something descriptive (like Jay's XR2").



Bluetooth Pairing

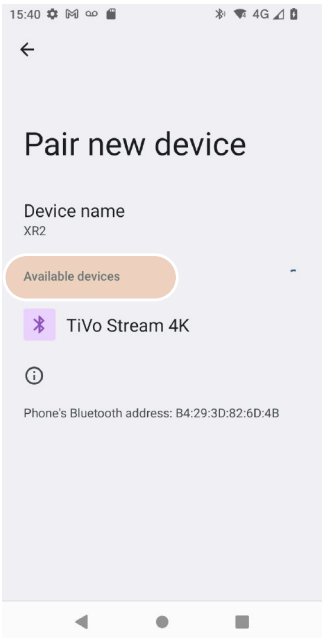
Due to the large number of Bluetooth enabled devices there are really no universal pairing procedures. Pairing your smartphone with your car may be very different from pairing your XR2 with a desktop PC or portable printer. And pairing with a device with a display will be different than pairing something that does not have a display, like headphones.

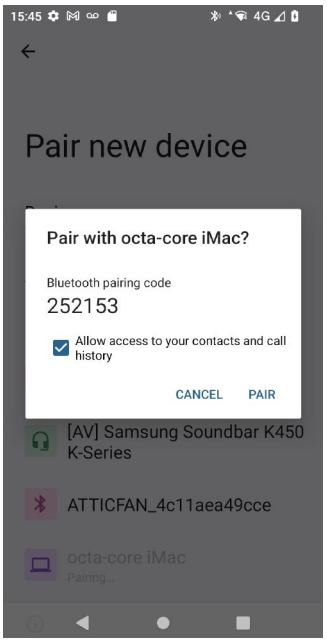
The example to the right shows pairing the XR2 with a desktop Apple iMac. Go to **Connected Devices** > **Bluetooth**, turn Bluetooth on, and wait until the Mac shows up as a device that can be paired, then **Tap to Pair**.

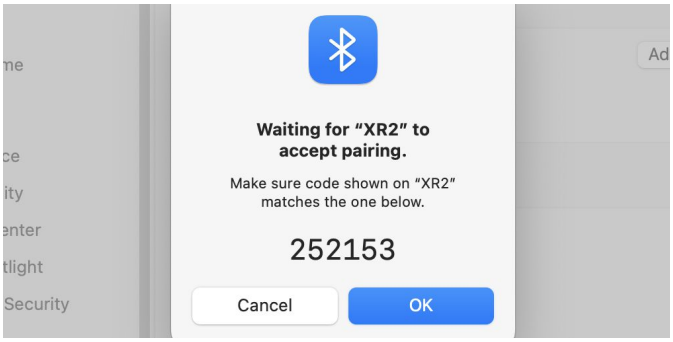
In this combination, the XR2 then receives a pairing request from the iMac, which you accept. And in this instance, a unique **6-digit Passkey number** is generated so that you know you're pairing with the device you intended to pair.

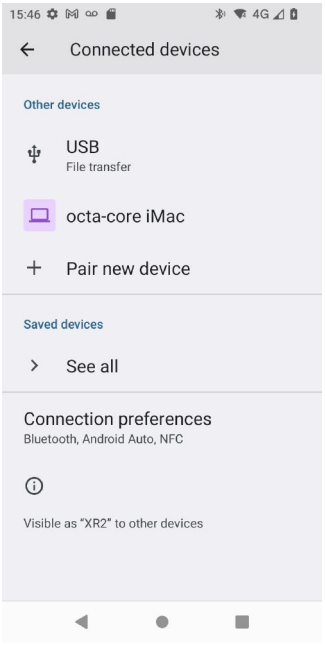
If the number is the same on both devices, accept the pairing request on both the XR2 and the iMac, and after a bit, the two are then paired.

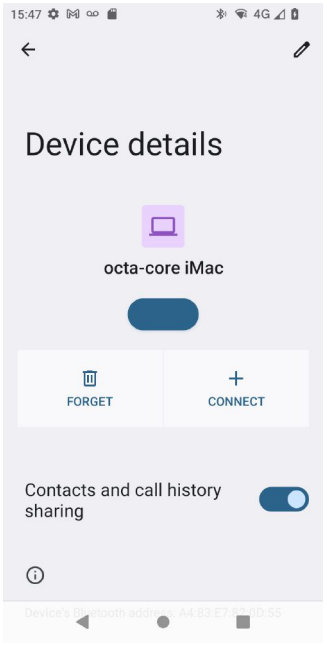
Paired devices will remain on the XR2's list. There is no need to pair the same devices again. They will stay paired until you tap and hold a paired connection on the XR2 and select **delete** on the resulting popup.











Available Bluetooth Services

As stated above, Bluetooth "services" between two connected devices vary. In the above case, the pairing between the XR2 and an Apple iMac allowed contacts and call history sharing. In the Janam example shown to the right, the XR2 is paired with Apple iMac and shares Contacts and call history. Other connections may allow to browse or exchange files between paired devices. Note that shared device names can be edited for clarity.

6

Camera

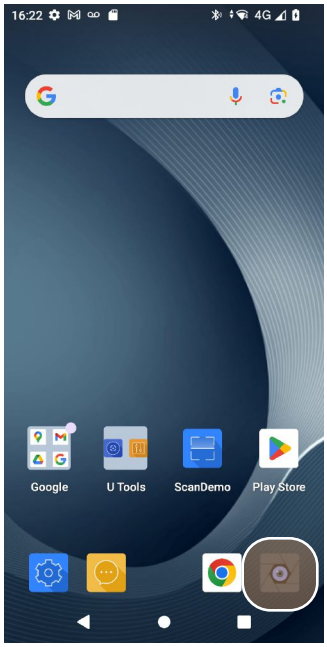
Introduction

The Janam XR2 UHF RFID reader features a high-resolution 13 megapixel CMOS rear-facing autofocus camera with user-controllable LED flash for capturing crisp still pictures and video recording up to 1080p. Both functions are useful for documentation of inventory locations, product damage, procedures and more. In addition, the XR2 incorporates a 5.0 megapixel front-facing camera primarily intended for video conferencing and video calls.

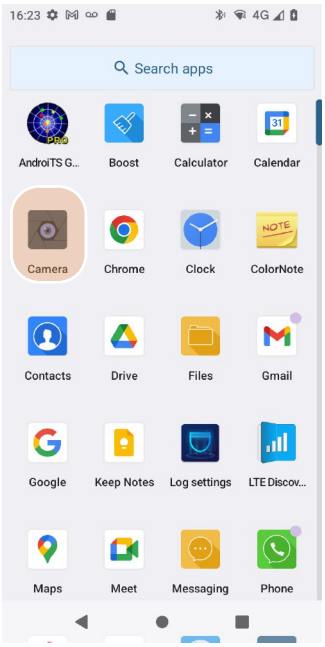
Different ways to activate the camera:

- Tap the **Camera** icon on the XR2 **Apps Screen**
- Tap the **Camera** icon on the XR2 **Home Screen** (if you placed a camera shortcut there)
- Optional: set programmable hardware button to launch the camera (Use **System** > **Remap Key** to assign launching the camera to one of the programmable buttons)

From Start Screen (if added)



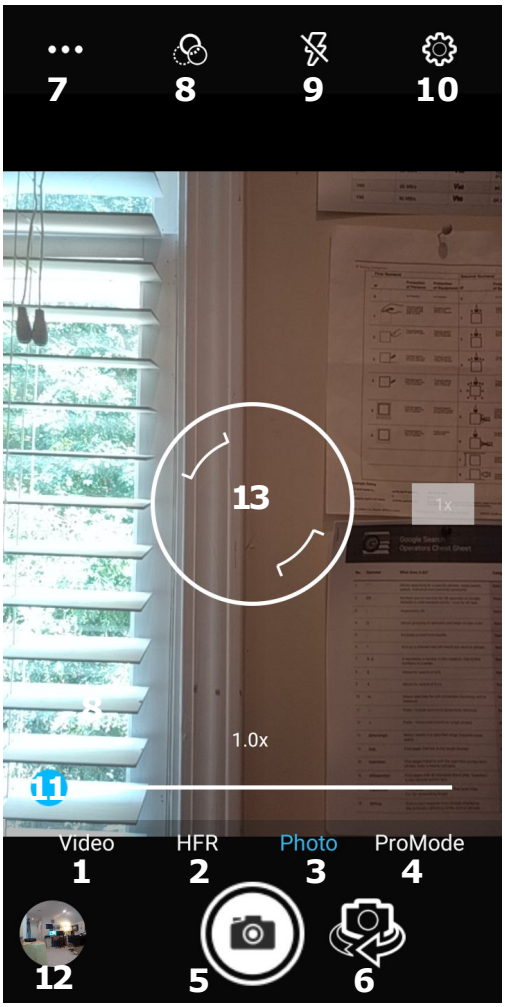
From Action Center



Programmable button can be set to launch camera

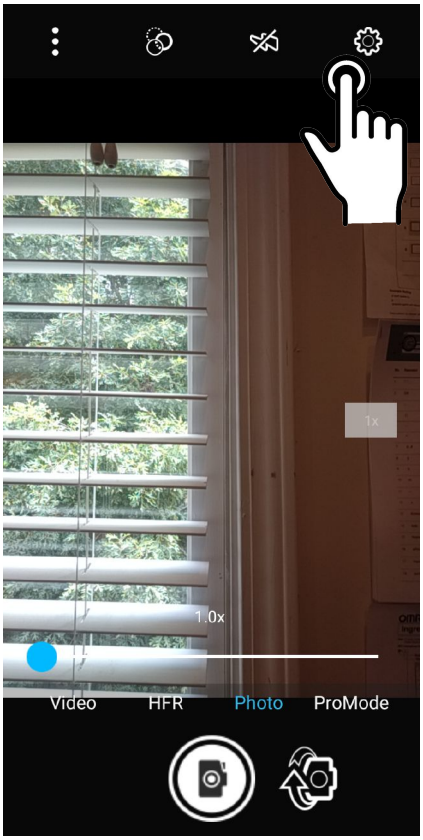
Camera Controls Overview

All of the XR2 camera controls are located onscreen.



1. **Video** camera mode.
2. **HFR (High Frame Rate)** video camera mode.
3. **Photo** still image mode.
4. **ProMode** for manual camera control (exposure, focus, white balance, ISO, zoom).
5. **Shutter button** for all modes.
6. Toggle between **main camera** and **user-facing camera**.
7. Touch show Automatic and HDR shooting selections.
8. Select from seven **toning modes** (none, mono, sepia, negative, solarize, posterize, aqua).
9. Set **Flash** (on/off/auto).
10. **Settings** (brings up camera settings for all shooting modes).
11. **Zoom slider** (1X to 8X digital zoom for both still images and video).
12. **Most recent picture**. Tap on it to launch the Photos app for post-processing.
13. **Autofocus circle**; shows where the current focus is, turns green when in focus.

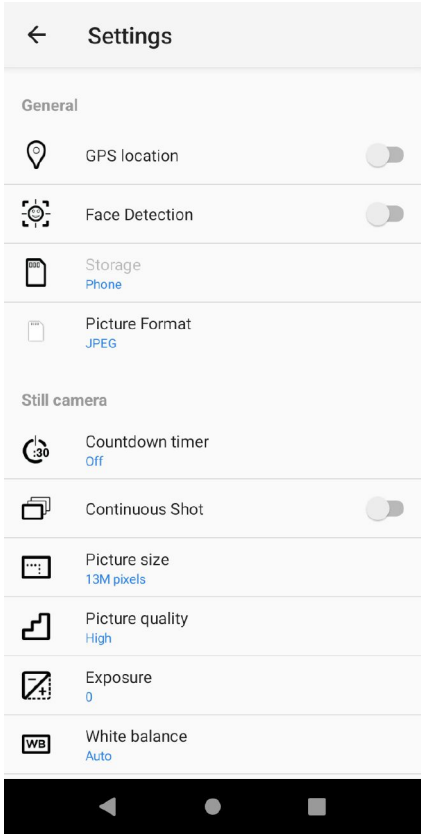
Camera Settings

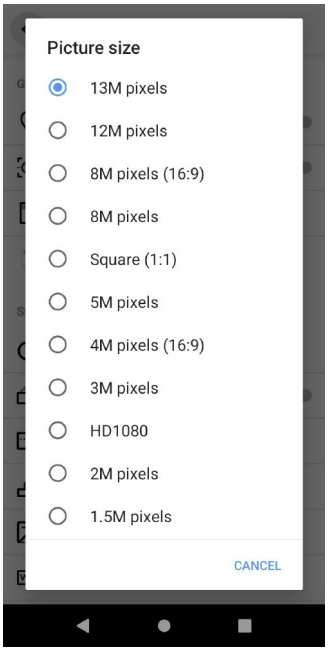


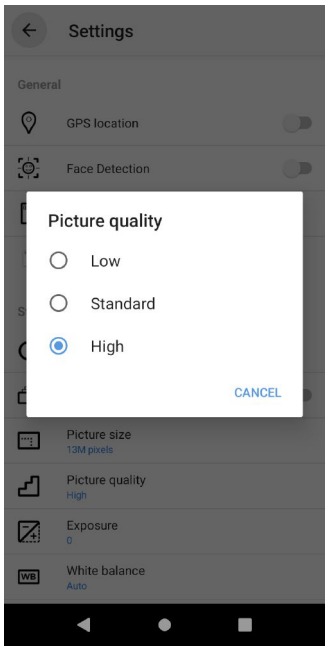
When using the Camera app, the Settings button is on the upper right in any mode. In Settings, you may toggle GPS location and Face Detection on/off, determine the file storage location and image format.

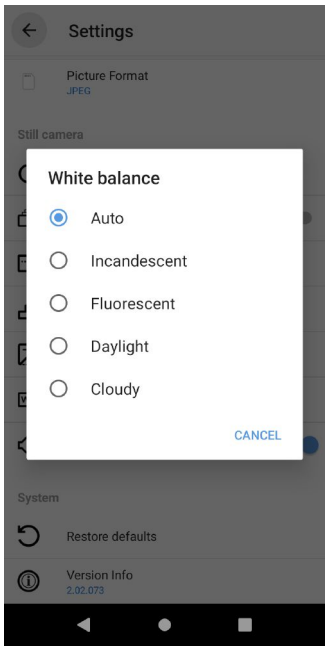
For the **Still camera**, you can set the countdown timer, continuous shot, picture size, picture quality, exposure, white balance, and shutter sound.

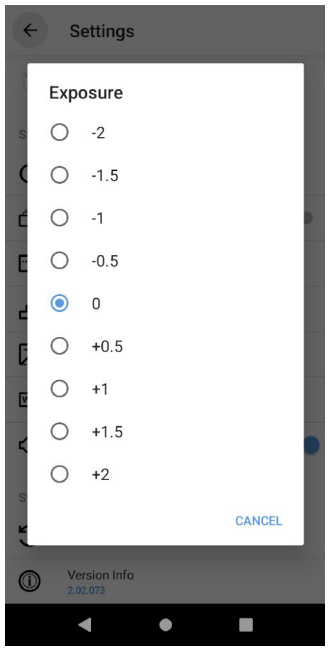
For the **Video camera,** settings include video quality and maximum duration, image stabilization, noise reduction, video and audio encoder, video rotation and time lapse. In **Video HFR** mode, you can additionally set the HFR frame rate.





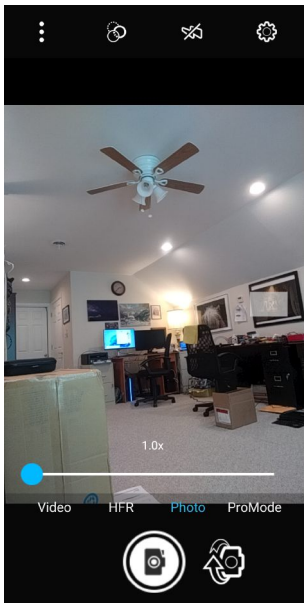


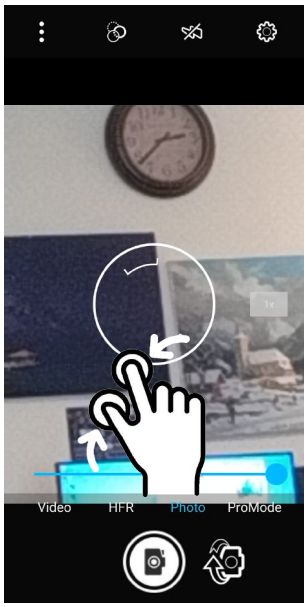




Camera Zoom

The XR2's camera has digital zoom. To zoom in and out, touch with two fingers, then pinch them together or draw them apart.

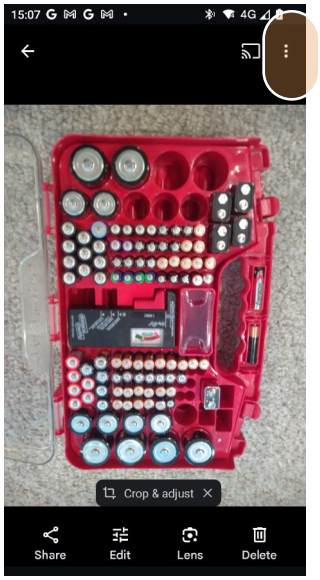


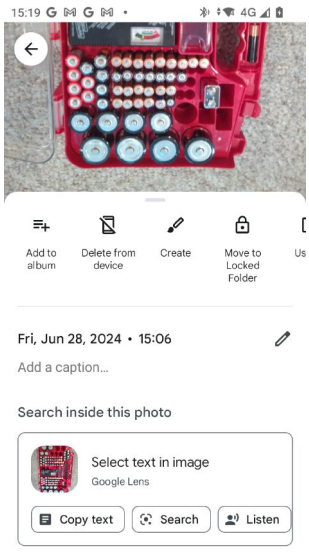


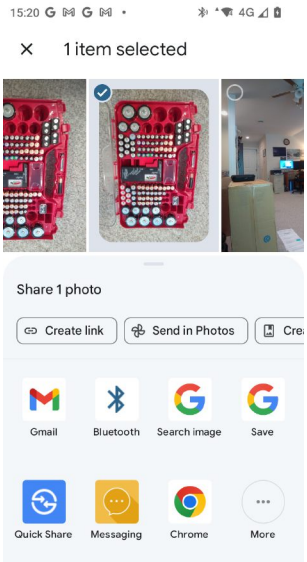
Editing Pictures

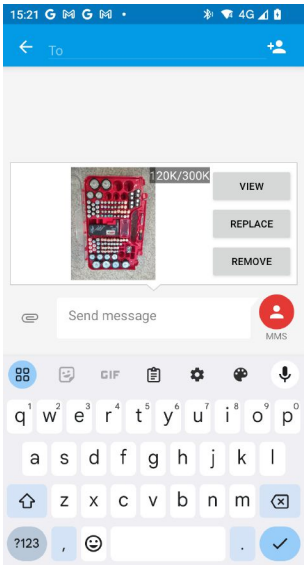
Tapping on the last picture taken icon on the bottom left the XR2's standard Android **Camera app** brings up the Android **Photos app** and displays the last image captured. Tap on **:** to get a list of very detailed information about the image..

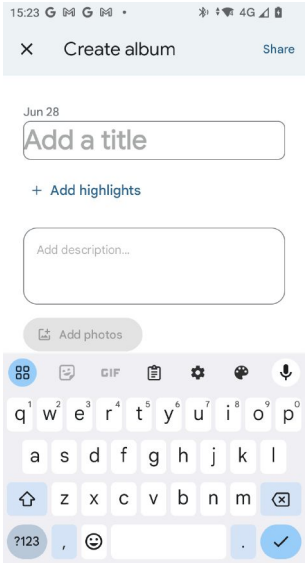
Tap the **share icon** in the **Photos app**, and you'll get a list of apps and services to send to or share images. The below examples show information on an image, the various **share** options, messaging an image, and creating an image album right from the XR2.











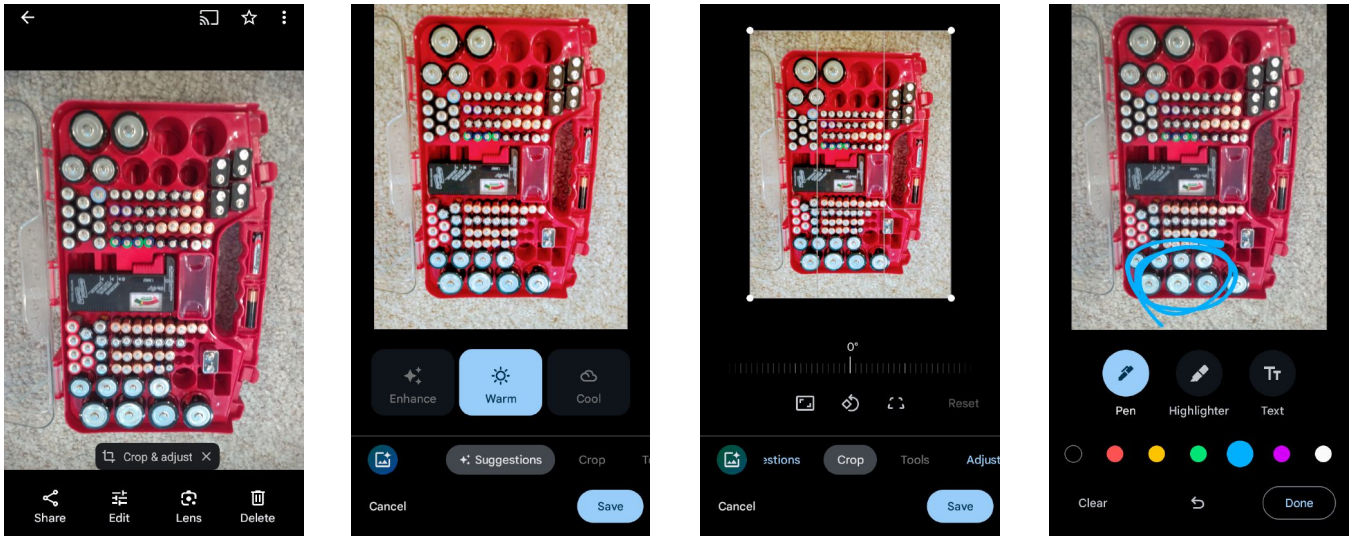
Editing Pictures with the Google Photos app

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

Share: You can send pictures to individuals or groups, or share them to apps.

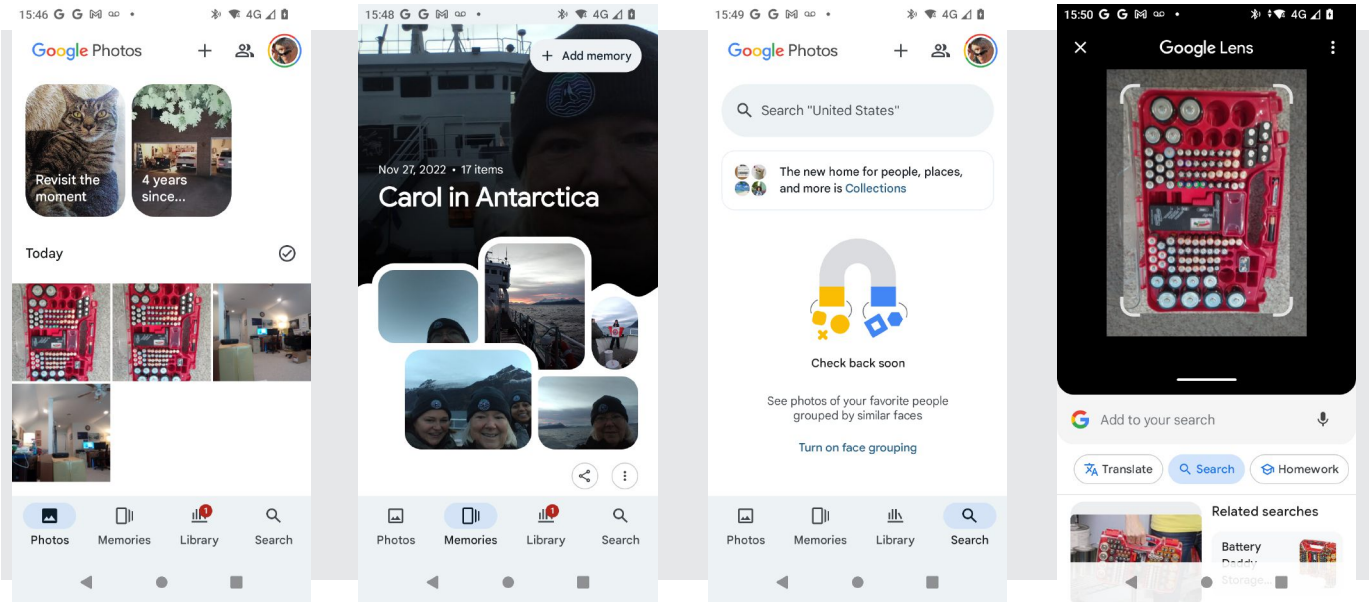
Edit: You can crop, rotate and adjust pictures or apply filters to them.

Lens: You can use Google Lens to search for similar pictures, items or locations, translate text on pictures, copy text in pictures and more.



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

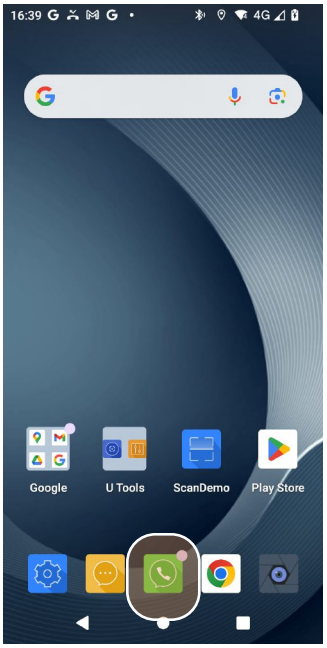
- ☐ View and sort your pictures.
- ☐ Manage and back up pictures.
- ☐ Create albums, movies, animations, photo books, etc.
- ☐ Search for pictures in various ways.



7

Email

Introduction



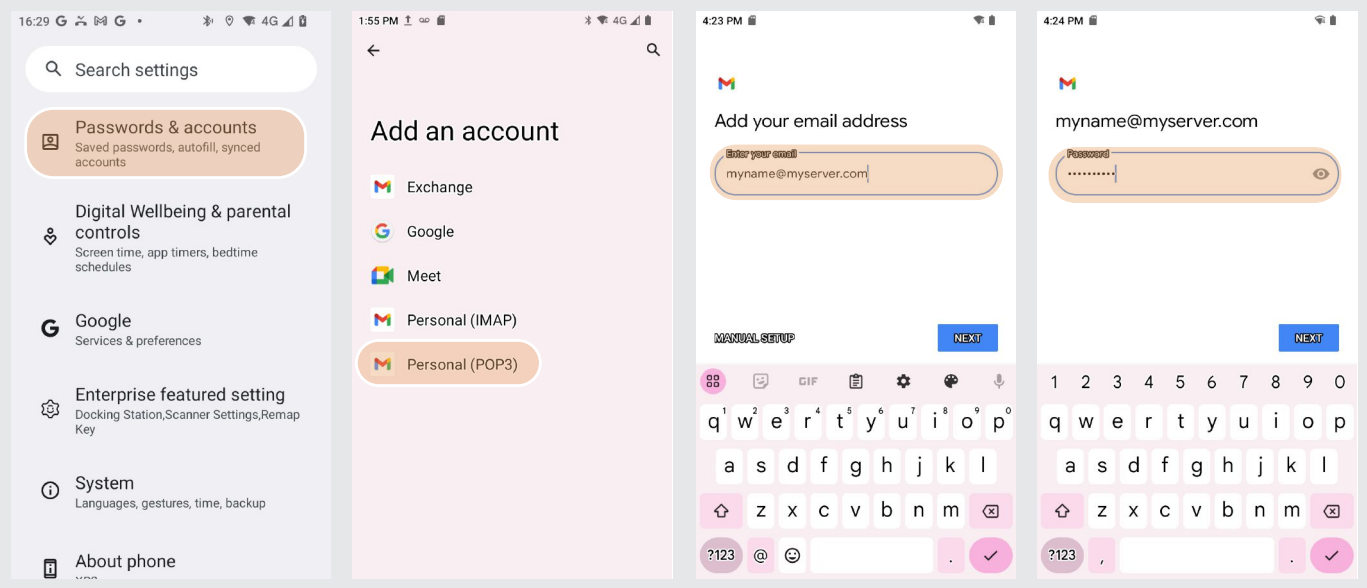
Like a smartphone, laptop or desktop PC, the XR2's email interface acts as a portal to an already existing email account with one of the commonly available email service providers such as Gmail, Microsoft Outlook, Yahoo or a private enterprise (corporate) network. This allows the XR2 to receive, read, respond to, and send emails.

The default **Email app** installed on the XR2 can accommodate a single email account or multiple accounts. It can also be used with a **Gmail** account without setting up an actual Google account on the XR2.

Before setting up an email account on the XR2, be sure that a core email address is active with an email service provider or within a private enterprise (corporate) network to which the XR2 user has access and authorization.

Setting up Email

If you already set up an account or accounts as shown in Section 3-10, your accounts will show up when you tap on **Settings > Passwords & accounts** in the Apps screen. If you have not set anything up yet, select from Exchange (Microsoft's email server solution), Google, Meet or Personal IMAP/POP3 for any other private or corporate email account you use.



Manual Email Setup

If your email provider isn't on the list of popular and commonly used email service providers, or your email provider requires more during setup than just email address and password, the email setup procedure may have separate incoming and outgoing server settings.

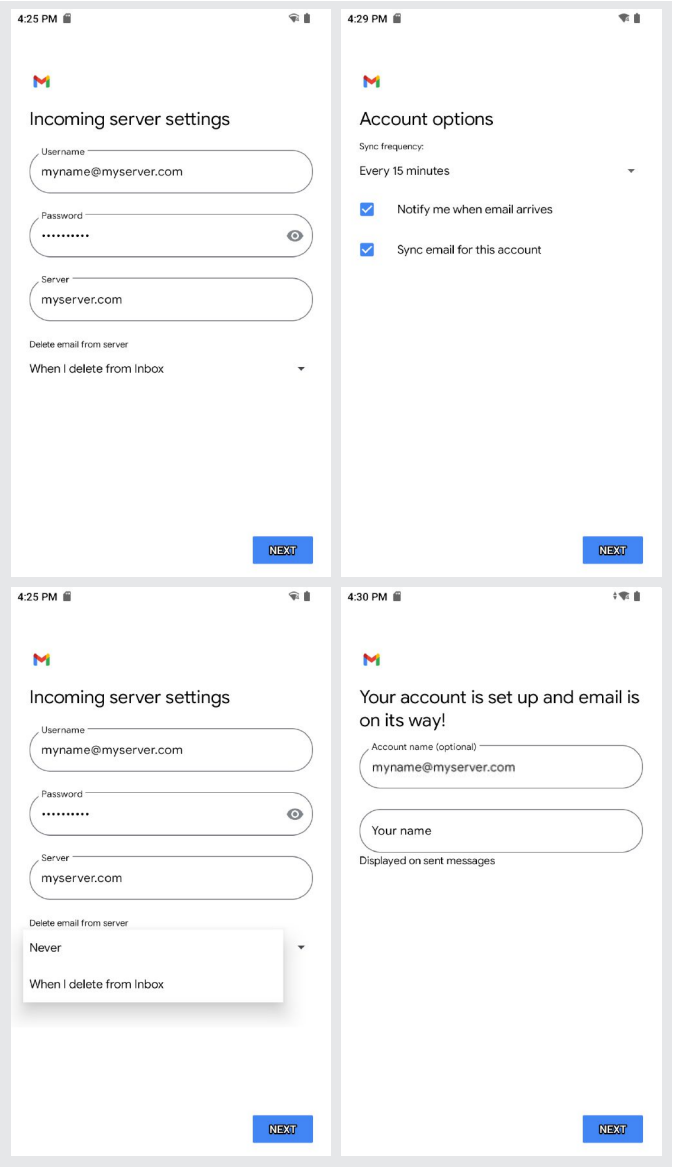
Incoming server settings may include port number, security type, and whether or not email should be deleted from the server when it is deleted from the XR2.

Outgoing server also may include port number, security type, and whether or not sending mail requires a sign-in each time.

During Email Setup

During email setup you will be asked how often you want your XR2 to check with your email provider and update email. "Never" means you'll do it manually.

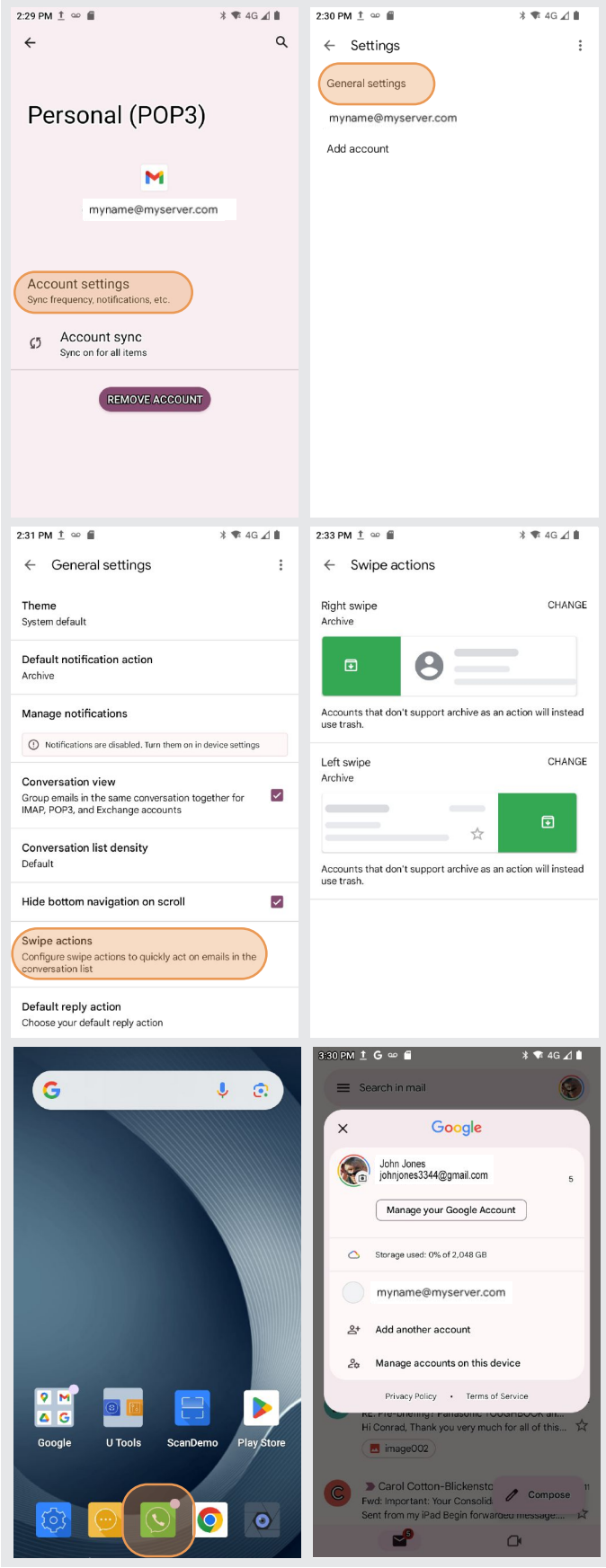
You can also request notifications when email arrives on this account, and whether email should be synced for the account in the first place.



General Email settings

In email, **General settings** apply to all of your email accounts. Most of these settings are self-explanatory:

- Setting the theme
- Setting the default notification
- Managing notifications
- Displaying sender image
- Setting the conversation view
- The default reply action
- Auto-fit messages on the display
- Auto-advance settings
- What to display after a delete
- Confirm before deleting a message
- Confirm before sending a message



Multiple Email accounts

You can set up multiple email accounts on your XR2. Each email account can be viewed separately, or you can elect to view all email together in one inbox.

To switch between email accounts, tap and hold the profile picture in the upper righthand corner to select the account you wish to view.

To switch to a combined view of all inboxes, tap the options icon in the upper lefthand corner and select "All inboxes."

Account name and your name

While the actual email address cannot be changed, account name and your name can.

Mobile signature

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

Images

Whether or not images should automatically be displayed.

Sync frequency

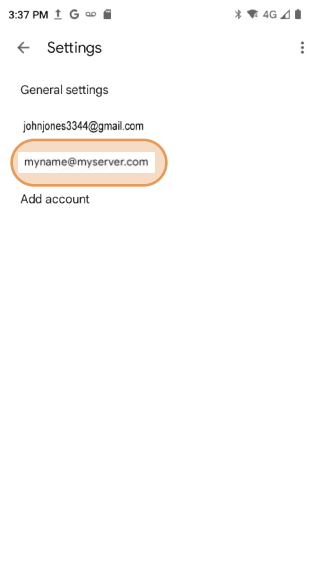
How often you want to check for mail.

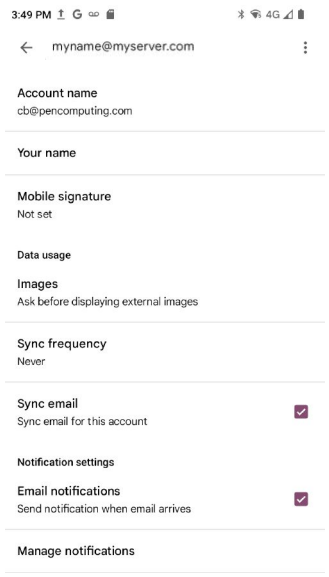
Notification settings

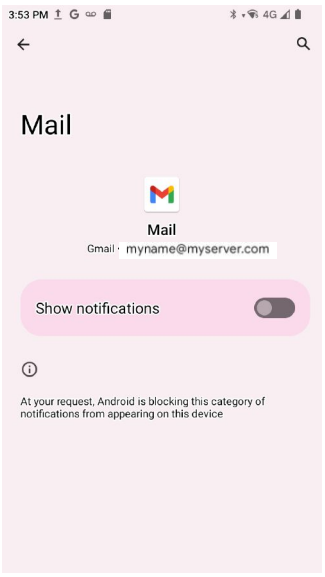
Here you can set whether you want to be notified if new email arrives. You can choose a special ringtone, and whether there should be a vibrate or other alert.

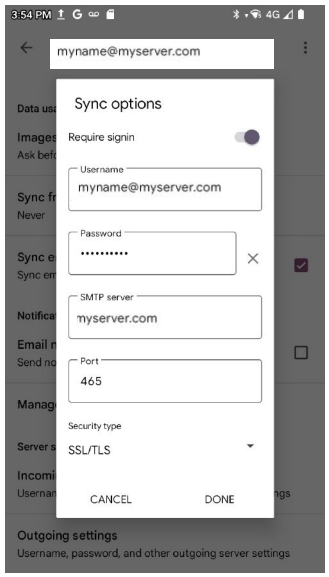
Server settings

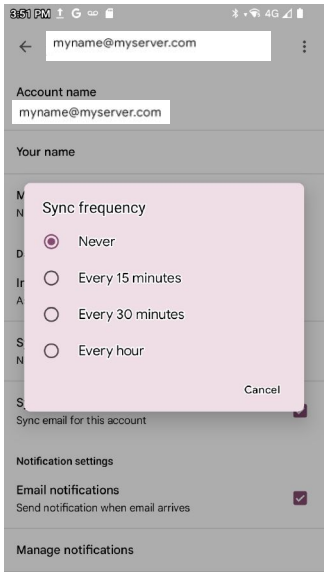
Set or change incoming and outgoing server settings (passwords, account name, ports, etc.).

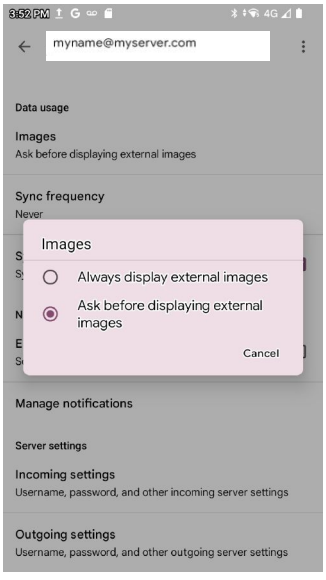


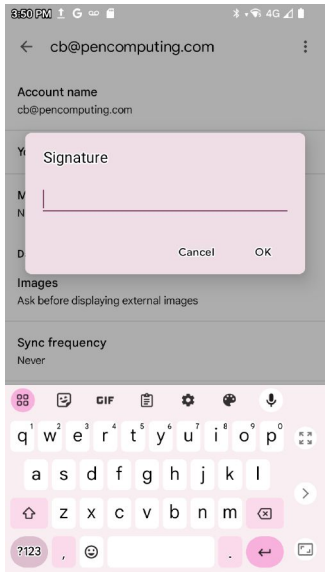






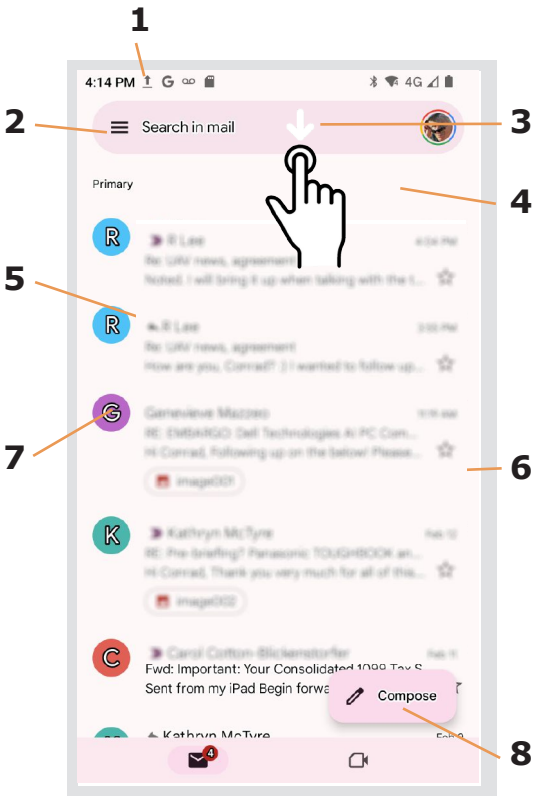






Email Inbox

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. Swipe down to check for new email
4. Attachment
5. Email sender and title
6. Tap on individual emails to see full text
7. Tap to select multiple emails for action
8. Compose a new email message

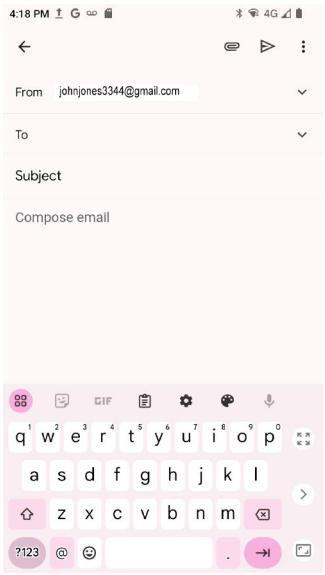
Creating and Sending an Email:

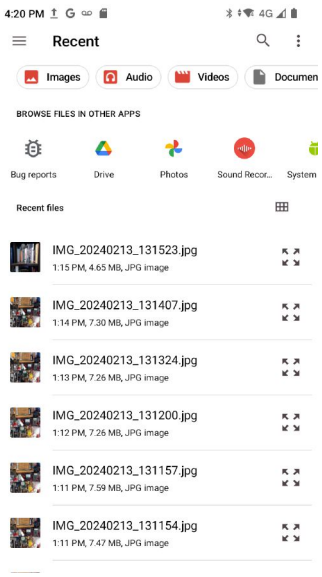
From the Email Inbox, tap the **pencil icon** (8) to launch a new email. Tap on **To:** to bring up the keyboard. Begin typing the email address. Tap down arrow to open CC and BCC fields.

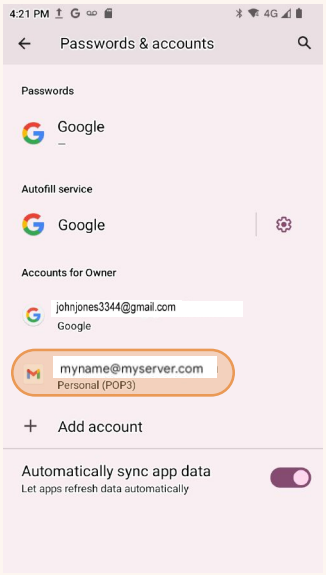
Tap on the text area to begin typing (or dictating) your email. Tap the **paperclip icon** to add an **attachment** from a variety of sources. When done, hit the paper **airplane icon** to **Send**.

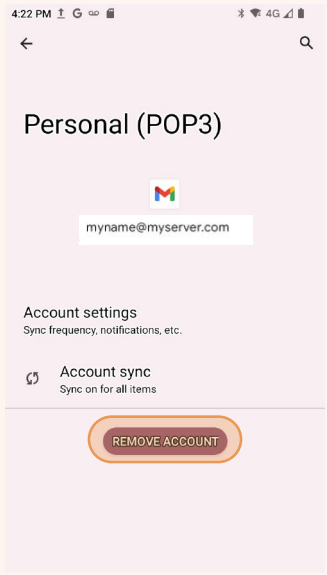
Deleting an Email account:

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**.









8

Tools

One of the great strengths of the Android operating system is the wealth of tools, utilities and productivity apps readily available from the Google Play Store or other sources. The Janam XR2's Tools folder contains a few examples of such tools.

AndroiTS GPS Test
Versatile positioning app that shows location and related data in a variety of ways.

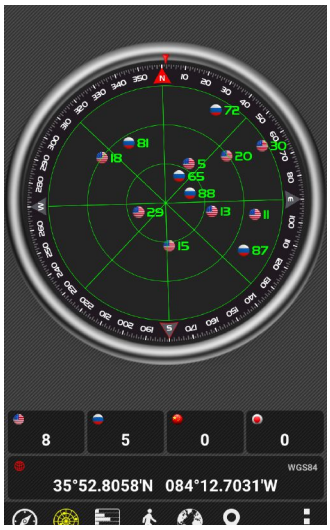
Files
Powerful file manager to locate, sort, examine, select, and manage files.

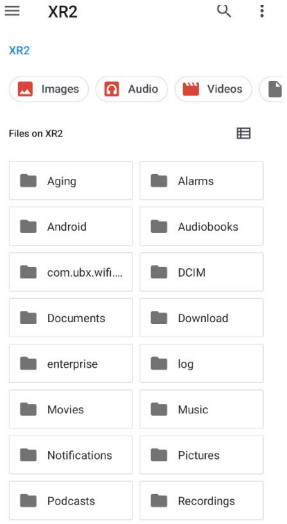
WiFi Diagnostics
Handy tool to check WiFi strength and check various network aspects.

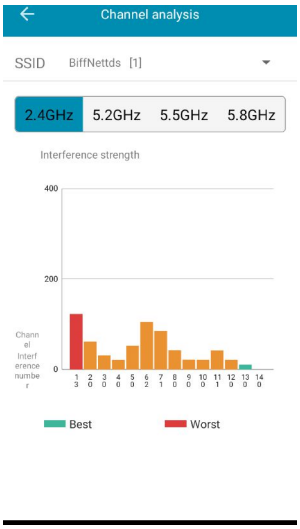
ScanDemo
Simple scan demo app that also supplies access to all scan settings.

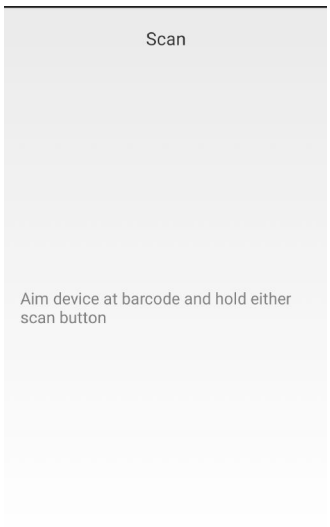
Systems Info Droid
Comprehensive system info app that provides a wealth of spec and technical info.

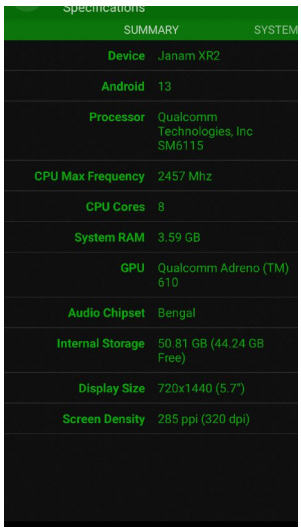
Sound Record
Quickly and easily record notes, ideas, observations on the spot.

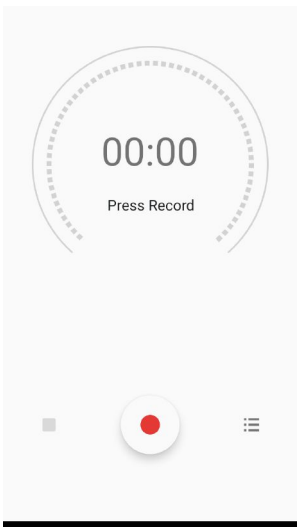












Remap Key

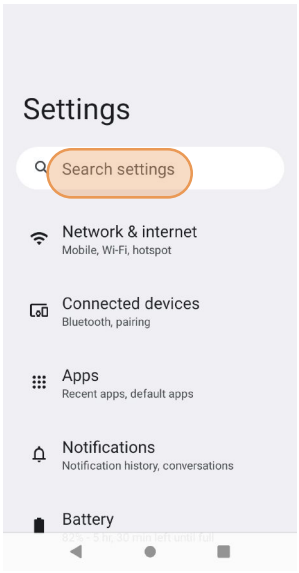
To remap keys, search for "remap" in **Settings**. Then select **Key Remap** and then **Remap Key** on the Enterprise featured settings list.

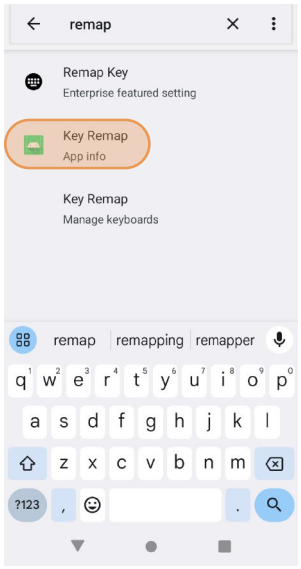
In this example, we want to remap the right scan key to launch the camera app. Make sure the **Enable intercept key** is on, then tap **Key Remap**. Push the key you want to remap. This brings up a page that shows the key's keycode (in this case, 520).

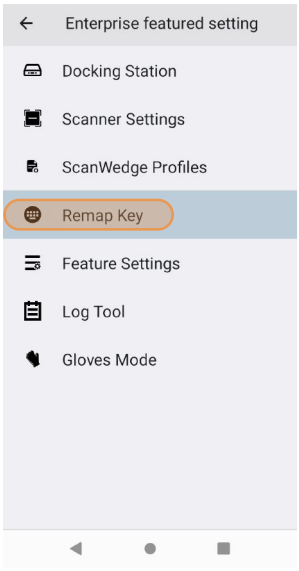
From the Key Remap options, select **Start Application**. Tap **Select application** to bring up a list of all apps that can be assigned. Select **Camera**.

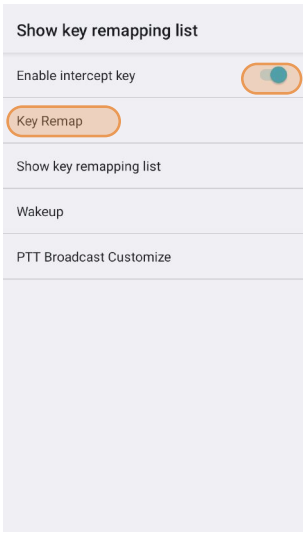
The programmable button will now launch the camera.

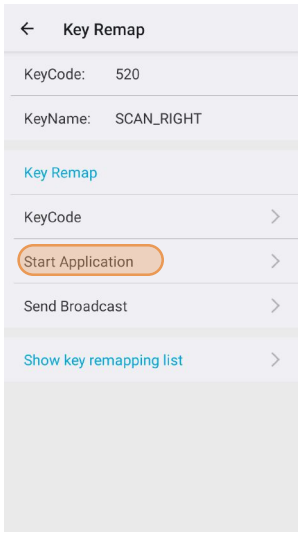
To undo, show the Key Remapping List.

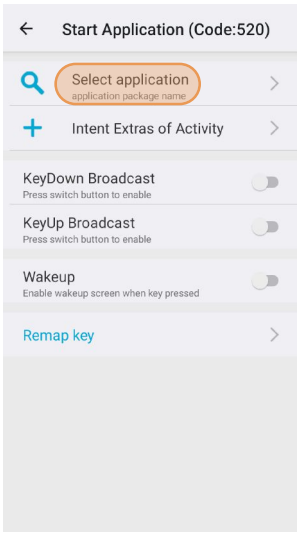


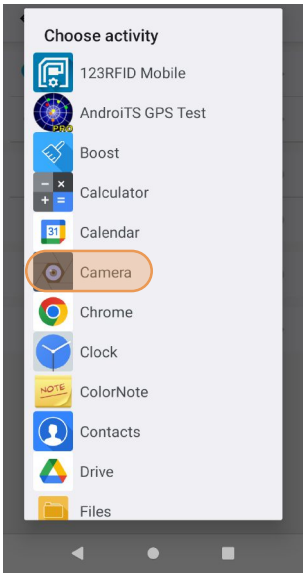


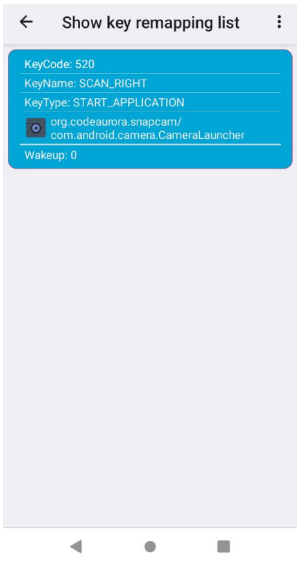


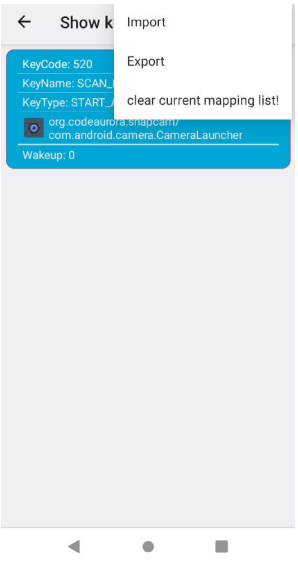












9

RFID Scanning

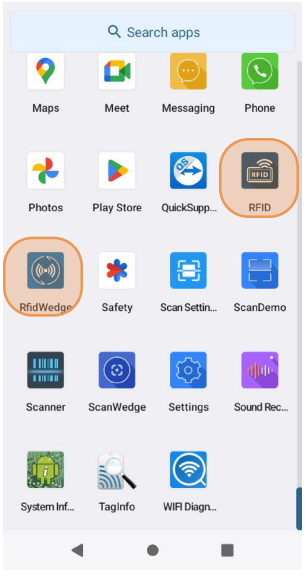
Using the UHF RFID Reader

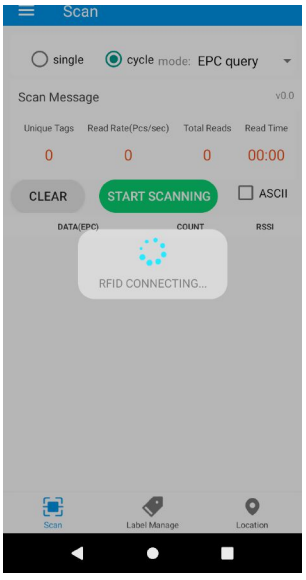
Janam's XR2 is powered by the industry-leading Impinj E710 reader chip, allowing it to effortlessly read more than 1,000 EPC Class 1 Gen 2 tags per second from up to 60 feet away. With a superior -91 dBm receive sensitivity, support for next-generation RAIN tags, 15 reader modes, worldwide region support, and a very low 0.5 watt typical power consumption, it provides XR2 users with precise, reliable and cost-effective capturing of business-critical information.

Why are UHF RFID antennae so large? That's because the 860-960 MHz UHF frequency corresponds with a wavelength of roughly a foot. For optimal reading results, the antenna must measure a significant fraction of that wavelength. Larger antennae also improve the read range and reliability of the reader.

Pre-loaded RFID scanner apps

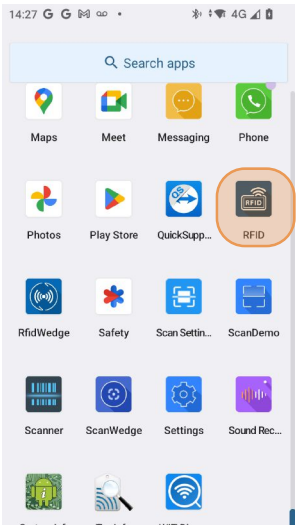
The Janam XR2 comes with a couple of RFID scanner apps covering basics. UHF RFID scanners typically use custom software that addresses customer data management, systems integration, user interface, environmental, and processing/analysis requirements.

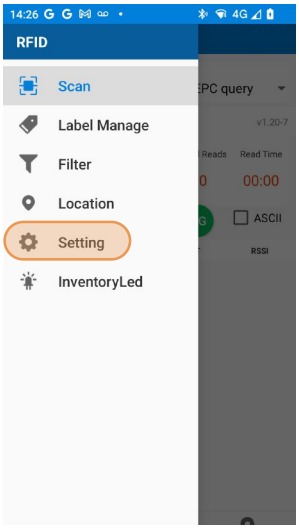


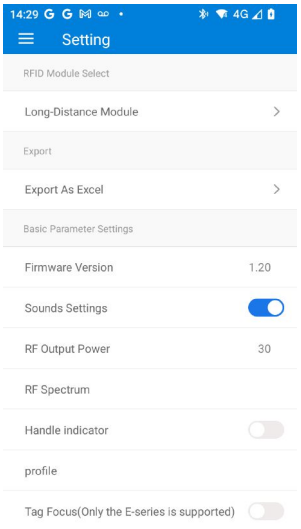


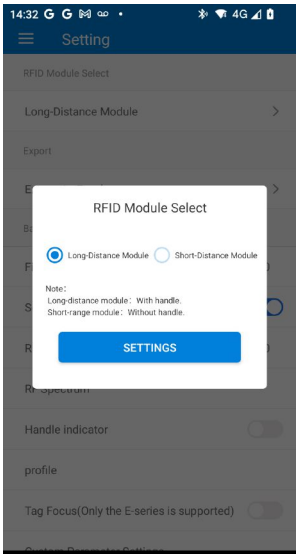
Scan Settings

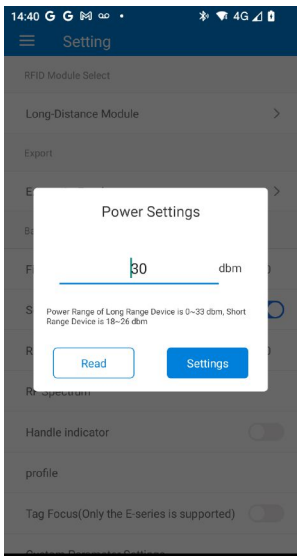
Tap **RFID** to configure the XR2's scan engine and software. This is where you set how the reader will work, and you can also specify a number of custom settings.

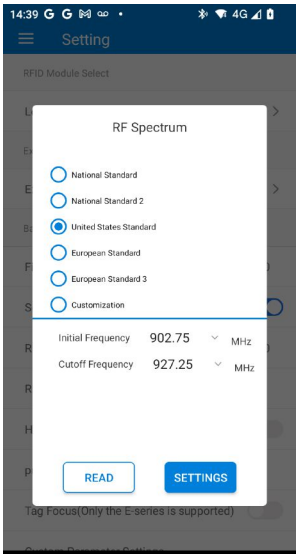


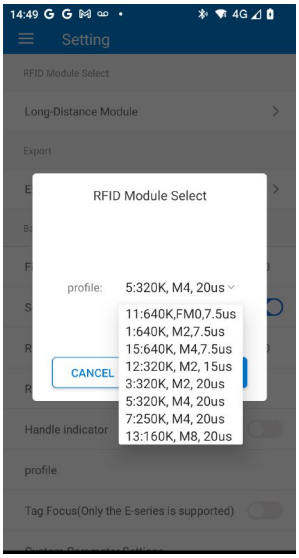




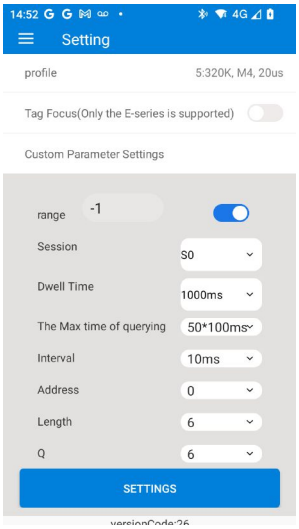






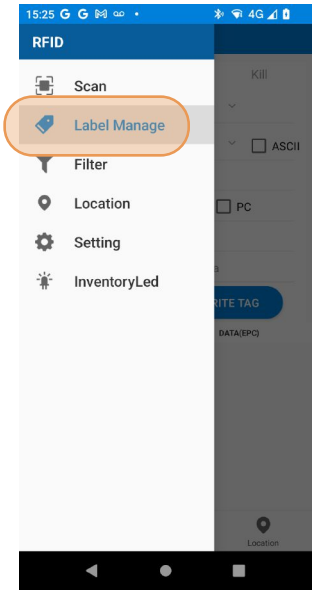


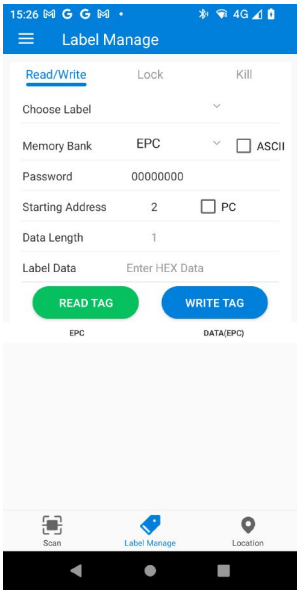
Tab	Section	Option	Description
Basic	**Firmware**		Displays installed firmware version
	Sound settings	On/off	
	RF output power	Set dbm	Antenna transmit signal power (5-30 dbm)
	RF Spectrum	Select	Select required spectrum
	Handle indicator	On/off	Device-specific
	Profile	Select	Select required profile
	Tag Focus	Select	(only default E-series is supported)
	Custom Parameters	Select	
		Session	S0 to S3, and Auto1 to Auto3
		Dwell time	200ms to 25500ms Done
		Queing max time	0 to 250 times
		Interval	0 to 200 ms
		Address	0 to 32
		Length	0 to 32
		Q	0 to 32

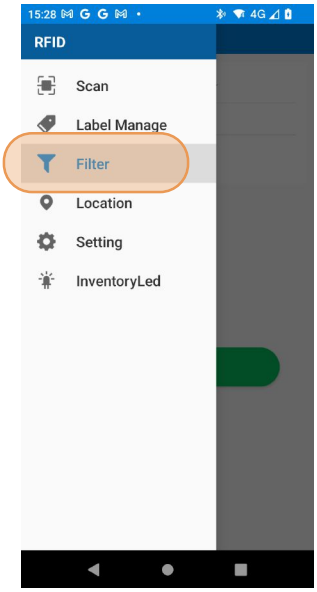


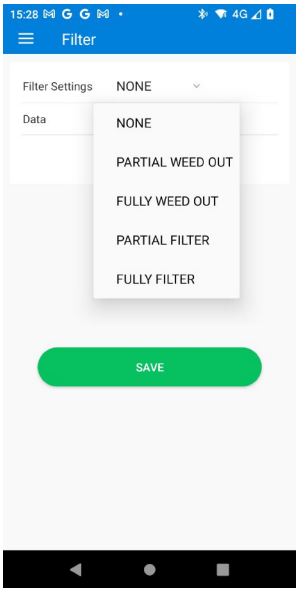
Additional RFID settings

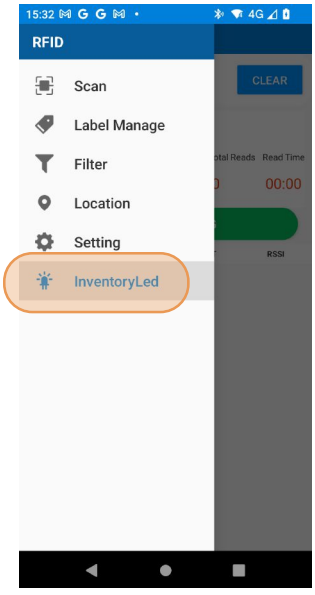
Label Manage, **Filter**, **Location**, and **InventoryLED** each have separate configuration settings.

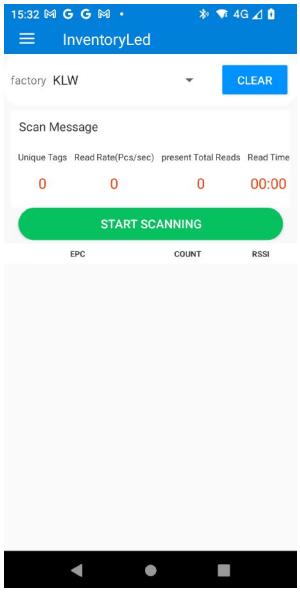


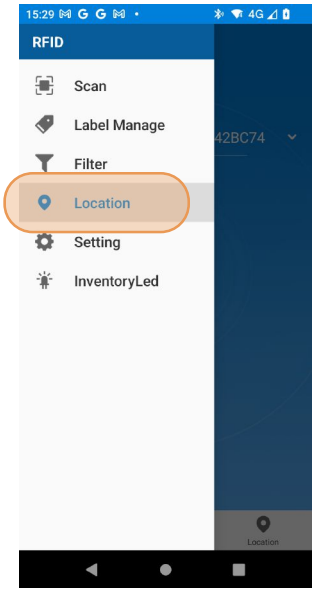


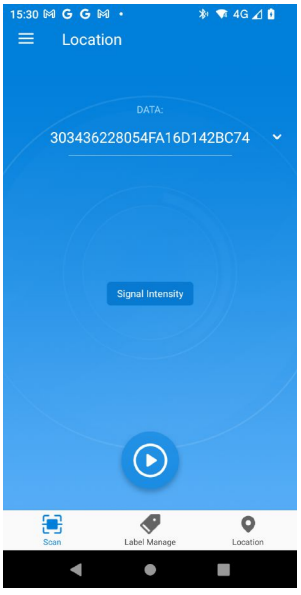






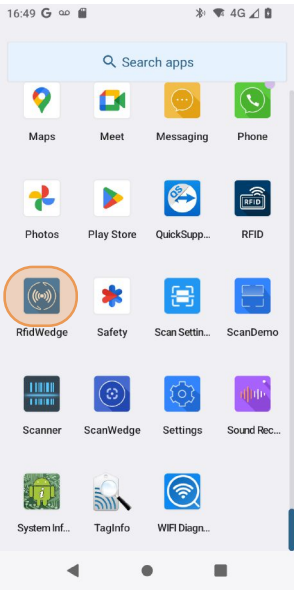


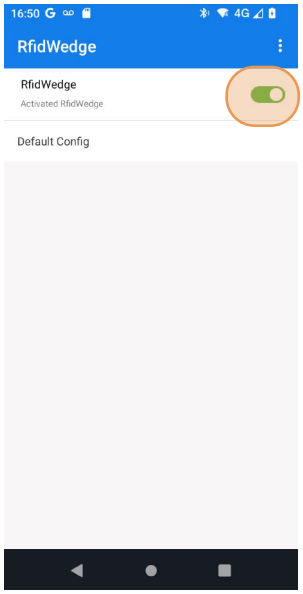


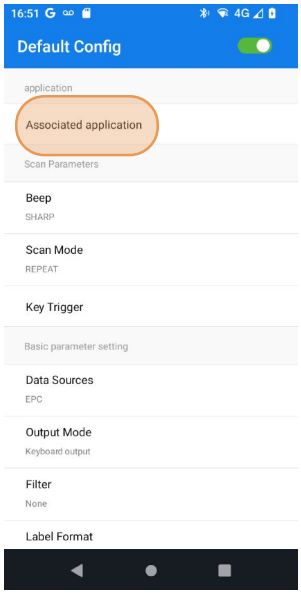


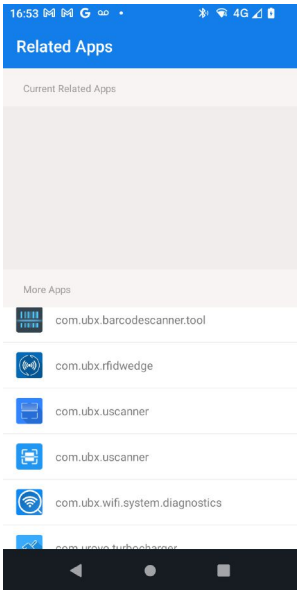
Scan Wedge App

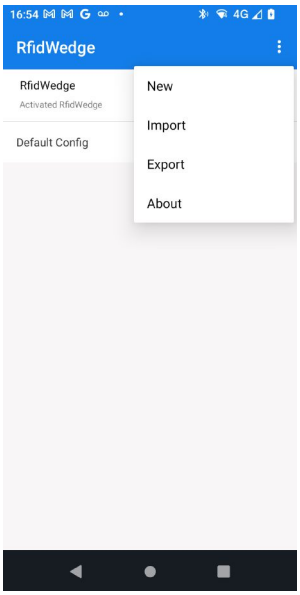
The Janam XR2 comes preloaded with the **RFIDWedge** application. The purpose of RFIDWedge is to scan RFID EPC tags without getting into programming. When active, Scan Wedge runs in the background and can send read and decoded data directly into the currently active foreground application. For example, with **RFIDWedge** active, the XR2 can be used to read RFID tag data directly into a Microsoft Word or Excel template, or any other app that accepts input data.











10

Barcode Scanning

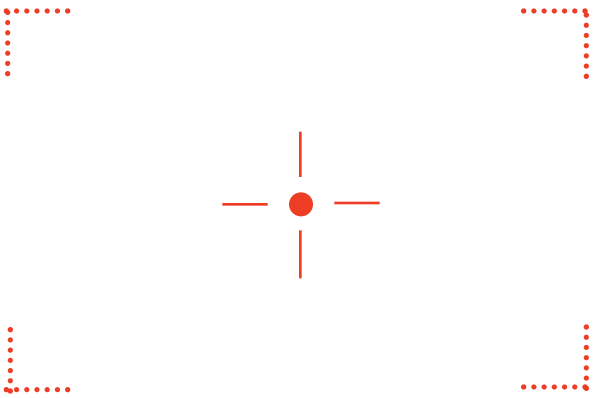
Using the 1D/2D Imager

Janam's XR2 is available with either an integrated Honeywell N5703 1D/2D barcode imager that reads all GS1 symbologies as well as poorly printed codes.

Scanning with the Janam XR2

The XR2's integrated barcode scan window is located on the top/front edge of the device.

When triggered via **onscreen control**, **one of the two blue scan buttons**, or the **scan trigger** of the XR2, the reader emits a soft-edged rectangular illuminated area with a red crosshair in a red rectangle that serves as a confirmation of scan triggering and as a general targeting guide. A bright, red aiming dot enables users to easily select a single barcode to capture in a field of barcodes.



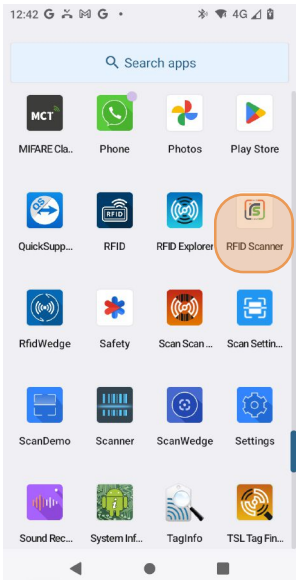
CAUTION!
Never stare directly into the barcode scan beam emitted from the barcode imager window!

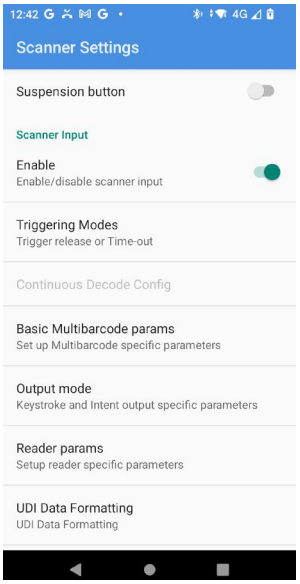
Never point the barcode beam emitted from the barcode imager window into the sightline of others!

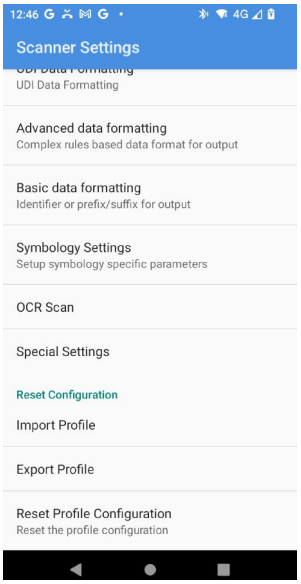
Damage to eyesight can result as a result of failure to adhere to these precautions.

Scan Settings

Tap **Scanner Settings** to configure the XR2'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. The table below shows major settings (details vary by version).







Tab	Section	Option	Description
Basic	**Suspension button**		On/off Brings up a red scan touch button.
	Trigger mode	Host, Contin., Pulse	Decode or time-out, hands-free continue, trigger release, continuous, trigger aiming
	Multibarcode parameters		On/off, number of codes per scan, full read mode, barcode separator
Output mode	Keyboard type	Can be automatic text, soft keyboard, or always physical keyboard	
		Sounds	Can be none, short, sharp, or sharp 2
		Vibrate	Can be on or off upon successful scan
		Action key character	None, Carriage return, IME Action Done, Tab
		Control character	examples: \x31\x41\x09\x0a
Intent Output	If Kbd out is off	Intent action	Intent Output packages scanned and processed data to be sent to an associated foreground application
		Intent string data	Enter a barcode data string
		Sounds	Can be none, short, or sharp
		Vibrate	Can be on or off upon successful scan
		Coding format	Can be UTF-8, GBK, BIG5, SHIFT-JIS, ISO-8859-15, US-ASCII, UTF-16, UTF-16BE, UTF-16LE
		Laser on time	Set in milli-seconds
		Security level	Linear security level can be set to 1, 2, 3, 4
		Lights configuration Exposure mode	Set various combinations of illumination and aimer lights Can be auto or fixed
		Fixed Exposure	If exposure is fixed, its value can be set
		Decode Windowing	If On, its mode and size can be set
		Debug Window	Set on or off
		GS Code Setting	Set on or off
		Label formatting	Set prefix, suffix, label pattern, replace rules, remove non-printable characters, use an app identifier or not, and apply a Code ID
		Symbology Settings	Allows separately configuring symbologies
Reset config			Import and export profiles, of reset the entire decoding subsystem.

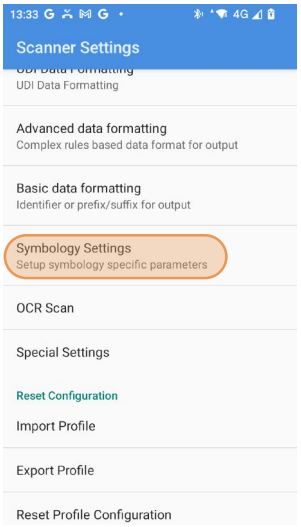
Symbologies

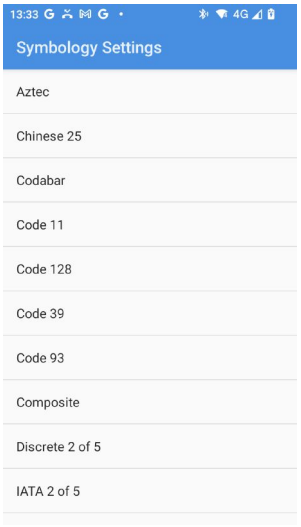
The XR2's scanner can read and decode virtually any 1D or 2D bar code in milliseconds. Go to **Settings** > **Scan Settings** > **Symbologies** to view more than 40 code types that are not only supported, but can additionally be configured with their own options and extensions (see options below).

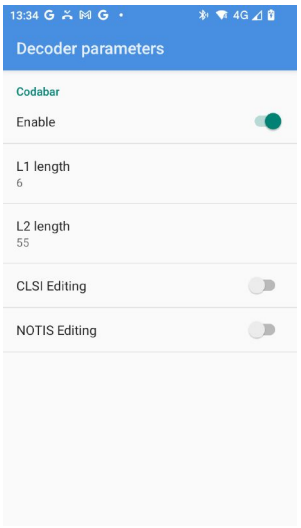
Only turn on the code(s) that you are actually using at the time. This will speed up recognition and decoding time.

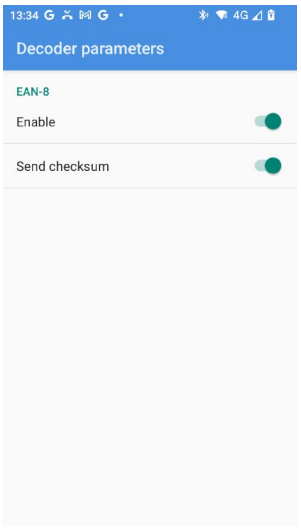
Below is the list of the dozens of 1D and 2D code types supported by the XR2:

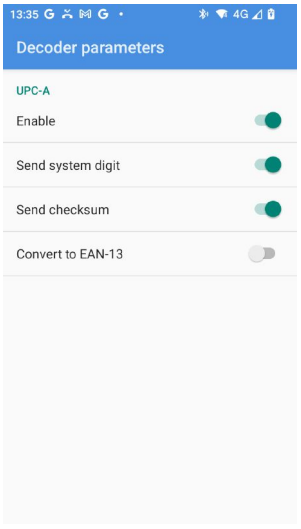
	1D Linear	2D Matrix
AZTEC		x
CHINESE 2 OF 5		
Codabar	x	
CODE 11	x	
CODE 128	x	
CODE 39	x	
CODE 93	x	
COMPOSITE CC-A/B		x
COMPOSITE CC-C		x
COMPOSITE TLC-39	x	
DATA MATRIX		x
DISCRETE 2 OF 5	x	
DotCode		x
EAN 8	x	
EAN 13	x	
GS1 128	x	
GS1 DATABAR EXPANDED	x	
GS1 DATABAR LIMITED	x	
GS1 DATABAR	x	
GRID MATRIX		x
HAN XIN		x
INTERLEAVED 2 OF 5	x	
MATRIX 2 OF 5	x	
KOREAN 3 OF 5		
MATRIX 2 OF 5	x	
MAXICODE		x
MICRO QR		x
MICRO PDF417		x
MSI	x	
PDF417		x
Postal codes	x	
QR CODE		x
TRIOPTIC	x	
UPC-A	x	
UPC-E	x	
UPC E1	x	
UPU/EAN Extensions Parameters		
DPM Decoding Parameters		

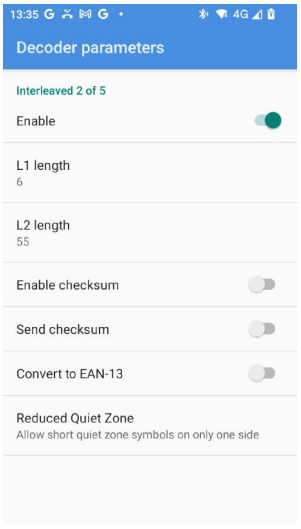










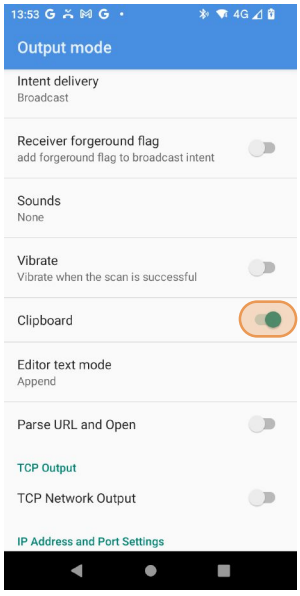


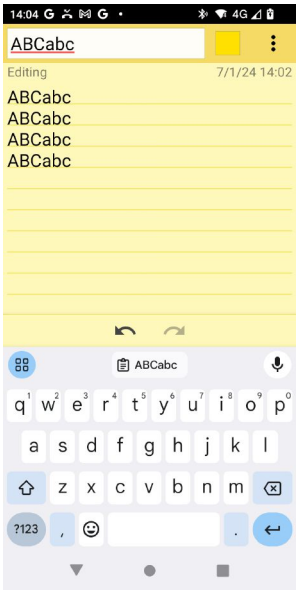
Scan Demo App

Note that a special Scanner SDK (Software Development Kit) is available for the development of custom scanning applications (inquire with your Janam sales representative).

Below is a demo of scanning with the XR2. In the **Scanner Settings** app mark **Clipboard** on. Launch the **ColorNote** app on the XR2. Position the XR2 over one of the **sample barcodes** on this page. A range of 4–10 inches (10–25 cm) from the bar code is recommended. To scan, use either the trigger or one of the XR2's two scanner buttons. Aim the barcode imager beam at the target barcode. The aiming dot should be centered in the barcode to achieve quickest and most accurate decoding. When the barcode is successfully decoded, the little **decode LED** in the upper lefthand corner flashes red and the terminal beeps.

Upon a successful scan, the scanner decoder will report the scan data to the ColorNote app (or any other app that accepts text input).





N5703 Example Read Ranges (near to far)

5 mil Code 39	2.8 to 12.2 inches (7.0 to 31.1 cm)
10 mil Code 39	1.6 to 21.2 inches (4.0 to 53.6 cm)
5 mil Code 128	3.0 to 10.7 inches (7.5 to 27.2 cm)
10 mil PDF417	1.8 to 16.7 inches (4.5 to 42.5 cm)
10 mil DataMatrix	2.5 to 11.7 inches (6.4 to 29.7 cm)

Code 39

PDF 417

11

Phone Calls

Introduction

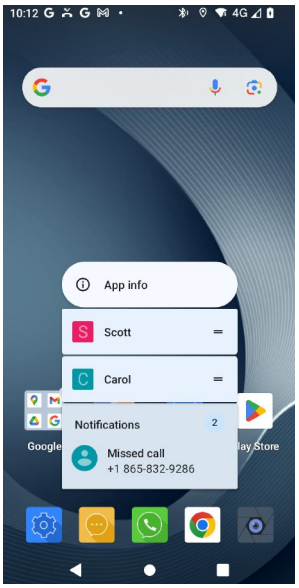
The Janam XR2, if equipped with an activated SIM card and cellular service, is a full-function smartphone in addition to a professional productivity tool.

Making a call

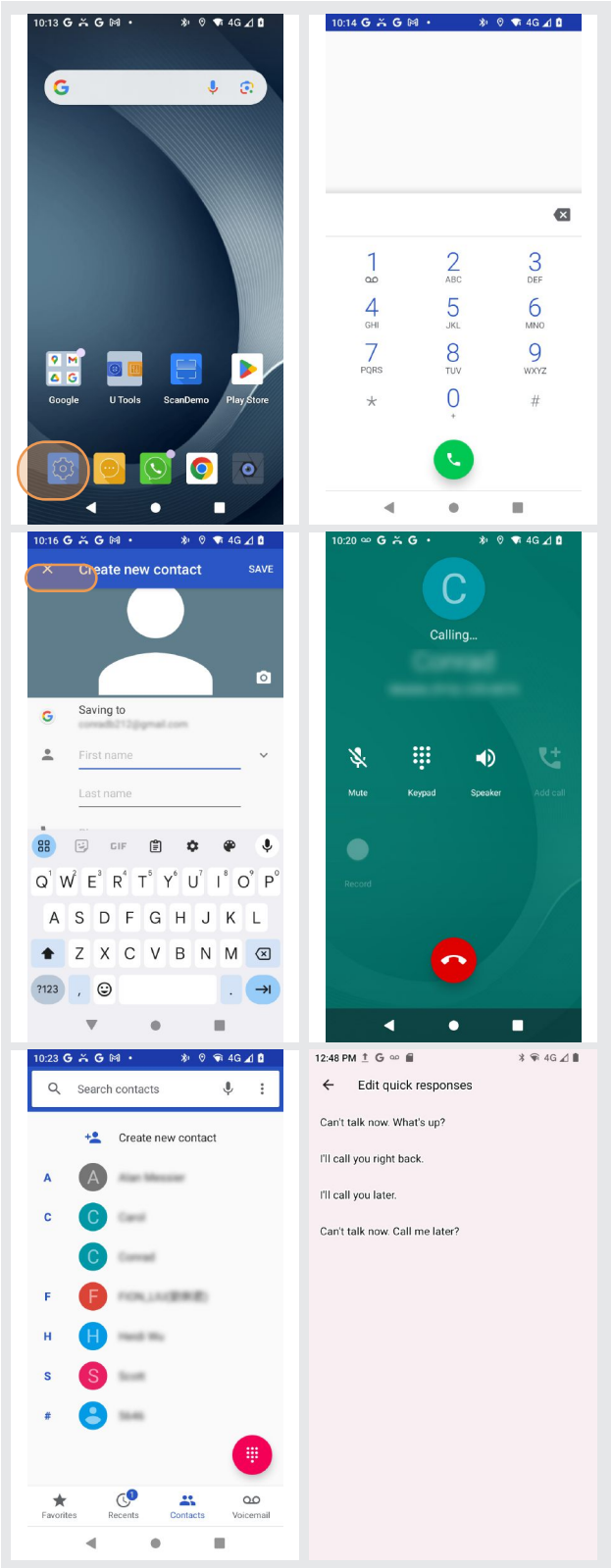
To make a call, tap the **phone receiver icon** on the bottom right of the display. The dialpad comes up to allow typing in a phone number.

To search your contacts, tap the area above the dialpad to bring up a search contacts box. Tapping a contact name will start the call. Tap icons to mute the call, bring up the keypad, put the call on speakerphone, or add a call.

If a call doesn't go through, no one picks up, or you terminate the call before it's picked up, you can send a message. Select from canned responses, or write a custom message.

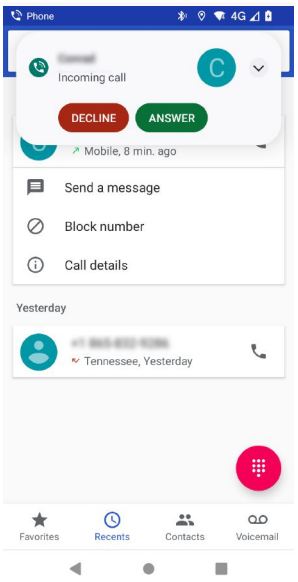


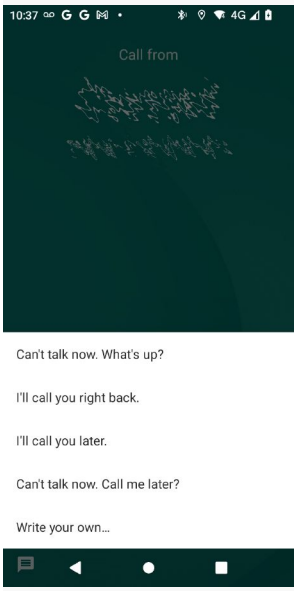
Note that calls can also be made directly from the **home screen**. To do so, press and hold the **phone receiver icon**. A pop-up will list your favorites as well as allow direct access to voicemail.



Answering a Call

The XR2 shows either the number or (if known) the identity of the incoming call. You may answer the call (**answer**), reject it (**decline**), or respond with a quick text message by tapping the **caller icon** and swipe right on the message icon.

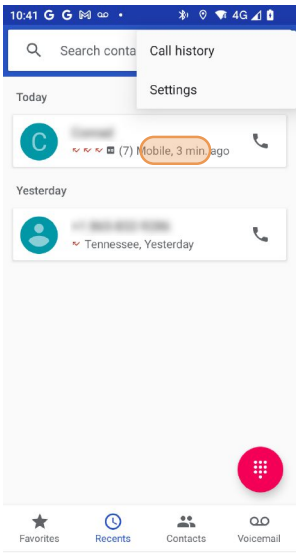


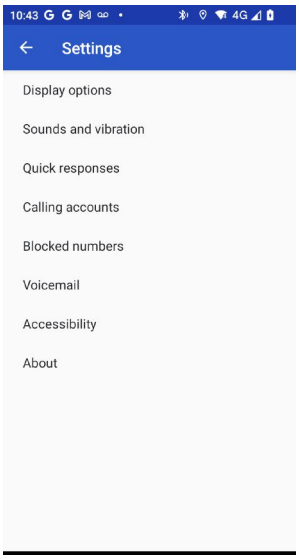


Settings

Phone options can be accessed by tapping the three dot options icon on the upper right hand of the Phone apps main screen. There are general settings (sort order, sounds, vibrate, quick responses, etc.), calling account settings, as well as blocked numbers, voicemail settings and accessibility options.)

In Settings you can also edit your **quick responses**. You'll see a list of the canned quick responses. To change these, simply tap them, then enter a new quick response when prompted. Tap OK to save your changed quick response.





Phone menu

Several of the phone-related screens will display the blue phone menu bar. It shows **Favorites** (star icon), **Recents** (clock icon), **Contacts** (people icon), and **Voicemail** (tape recording icon).

Favorites is where you add important and frequently used phone contacts.

Recents shows calls made, calls received, and voice mail. Tapping on an entry initiates a call. Tapping on the people icon opens up to more detail.

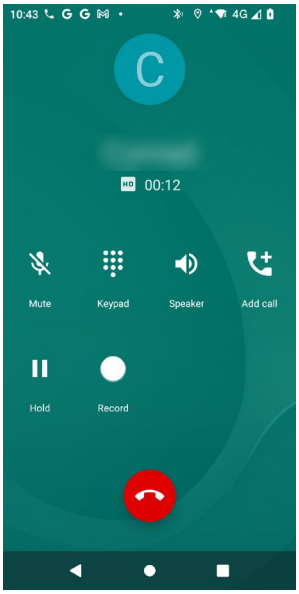
Contacts shows phone contacts. These can be created on the device. Tap options for the call history, settings, and help & feedback.

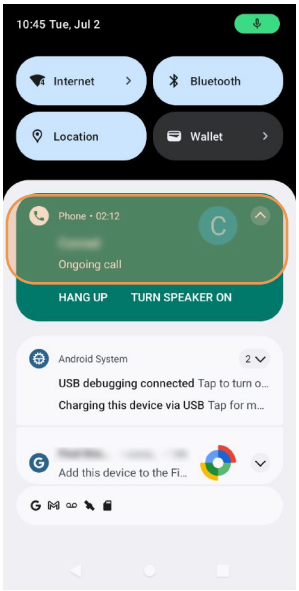
Voicemail shows a list of entries in your voicemail box. Note that you have to set up voice mail first (setup varies by carrier).

Using Apps During a Call

Depending on your carrier, during a call you may be able to launch another app to look up information while the call is in progress.

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





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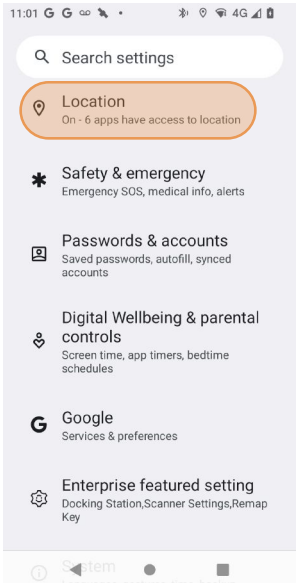
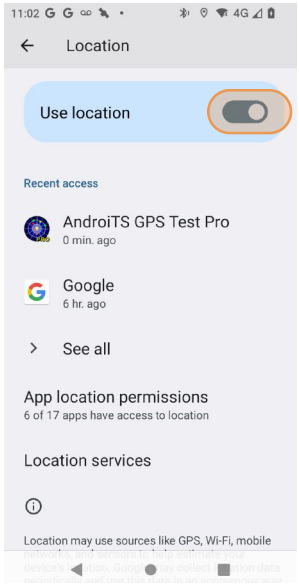
GPS

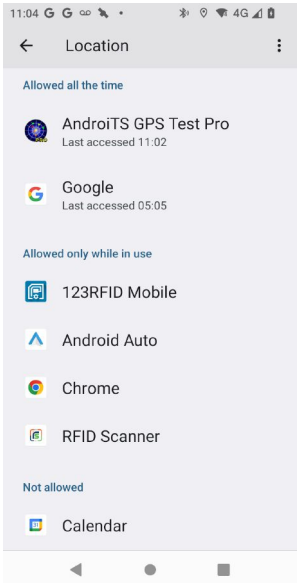
GPS and Location Services

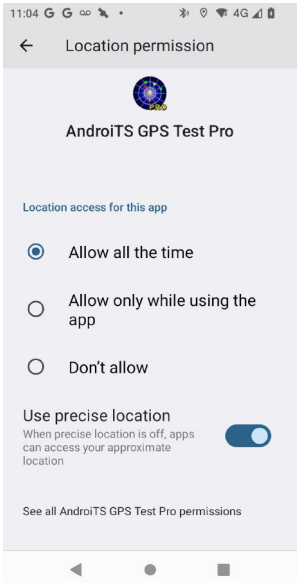
Modern Android devices like the XR2 no longer simply turn GPS on or off. That's because most modern apps use location services as part of their basic functionality. What that means is that positioning has become an inherent part of most computing devices. Maps depend on it, of course, but also search engines, voice assistants, cameras, weather, etc., all rely on it, let alone safety and security systems such as "electronic fences" or "find your device" apps.

GPS and location services have become intertwined. Modern operating systems like Android increasingly regulate access via location and privacy settings, as well as by individual app. **Settings** > **Location** allows turning location on and off for each app. And from there you can select individual apps, examine what kinds of location permissions the app has, and make changes. The screen images below shows some examples of screens relating to location services.





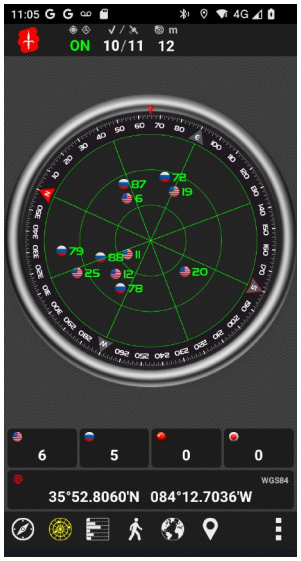




Location Service by App

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

The example to the right shows the **AndroiTS GPS Test** app, preloaded on the XR2, and given full location access.



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Update

Local ROM Update

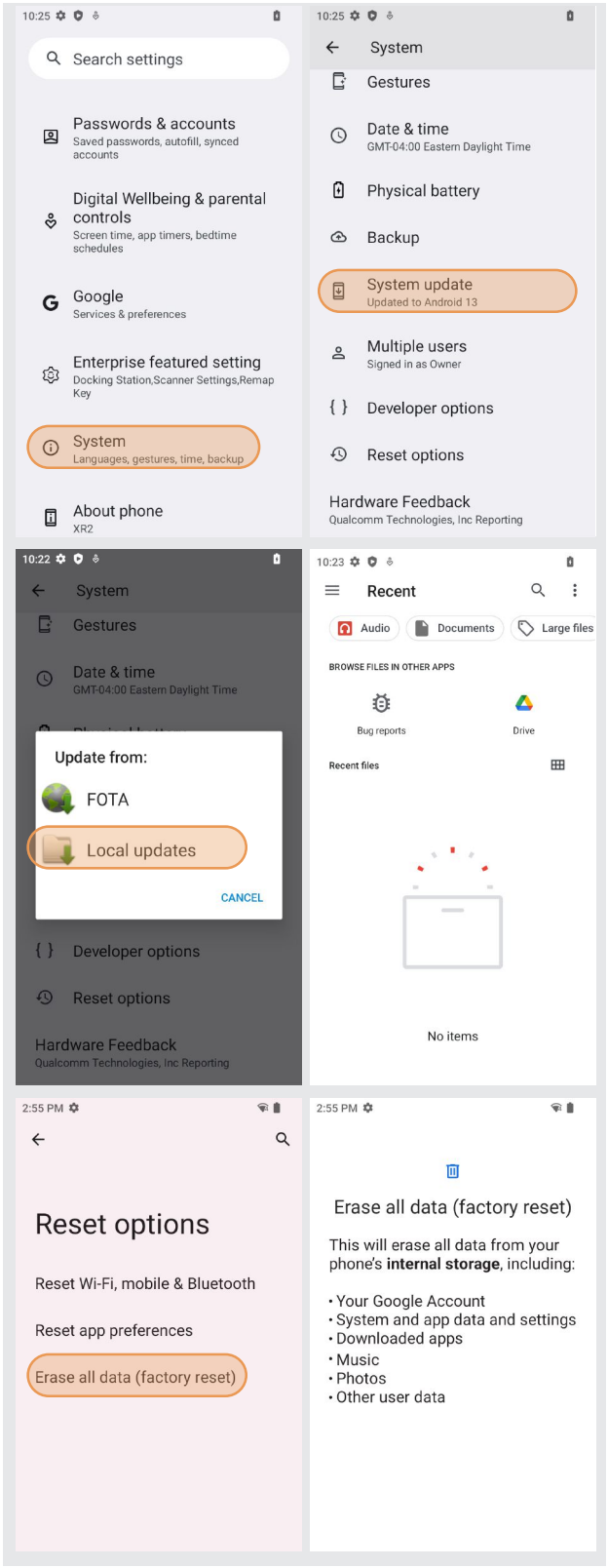
Unlike apps, firmware is permanent software that resides in a computer's read-only memory. Firmware operates in the background and makes sure the hardware runs properly.

Manufacturers may update firmware to address problems and improve functionality. These updates can be installed by users via FOTA (Firmware Over-The-Air) or via a local update process that requires the user to download an update file to the XR2 (either using USB file transfer or via download using device's Google Chrome Browser). Inquire with your systems administrator or with Janam on how to get the update firmware file.

Once you have procured the update .zip file, put it in your computer, connect the XR2 to the computer, and copy the update .zip file onto the root level of the XR2 internal storage.

Once done, go to **Settings** > **System** > **System Update**, select **Local updates**, navigate to the directory with the .zip file, tap on the file, and click on "OK" once the package has been verified. The updating process will start and the system will reboot a couple of times.

Once done with the update, Janam recommends performing a factory data reset via **Settings** > **System** > **Reset Options** > **Erase all data**.



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Janam XR2 Specifications

TECHNICAL	
Operating System	Android 13 with Google Mobile Services (upgradable to Android 15)
Processor	Qualcomm octa-core 2.45GHz
Memory	4GB RAM/64GB Flash
Expansion	User-accessible microSD card slot with SDXC support
Power	3.85V 9000mAh/34.65 Wh user-accessible rechargeable Li-ion battery
PHYSICAL	
Dimensions	5.64” H x 6.65” L x 3.56” W / 143mm H x 169mm L x 91mm W
Weight	26.2oz / 678g including battery
Display	5.7 inch (720 x 1440 pixels), daylight-readable (420 nits), Corning Gorilla Glass 3
Touch Panel	Capacitive multi-touch screen, supports dual input mode with finger, gloved finger and stylus; water droplet rejection; anti-fingerprint and anti-smudge coating
ENVIRONMENTAL	
Operating Temperature	-4º to 140º F / -20º to 60º C
Storage Temperature	-40º to 158º F / -40º to 70º C
Humidity	Non-condensing, 5% to 95%
Drop	Multiple 4ft / 1.2m drops to concrete at operating temperature per MIL-STD 810H
Water & Dust	IP67
Electro Static Discharge (ESD)	+/- 15kV air; +/- 8kV contact
INTERFACE FEATURES	
Voice and Audio	Built-in 1.5 watt speaker; noise-canceling microphone
Alerts	LED lights; audio
Motion Sensor	Accelerometer with gyroscope, Proximity sensor, Ambient Light sensor
Positioning	GPS, A-GPS, BeiDou, GLONASS , Galileo
Connectors	USB 2.0 Type-C/OTG
LED Indicators	Dual-color
External Buttons	Volume +/-, sleep/power, 2 x scan button, programmable button, pistol-grip trigger
DATA CAPTURE	
Imager	Honeywell N5703 1D/2D imager
RFID/NFC	Impinj E710 RFID; frequency range 865-928MHz; 902-928MHz; fastest read rate 1000+ tags/sec; normal read range ~60+ feet/~18.2+ meters; standard support: EPC Class 1 Gen2; ISO-18000-63
Camera	5MP/13MP rear and top-facing (respectively) cameras with flash
WIRELESS COMMUNICATION	
WWAN	Dual-SIM, dual-standby
WLAN	2.4G/5G Wi-Fi; IEEE 802.11 a/b/g/n/ac/d/e/h/i//k/r/v/w; 802.11ax ready
Security	WEP (40 or 104bit), WPA/WPA2 Personal (TKIP, AES), WPA3 Personal (SAE), WPA/WPA2 Enterprise (TKIP/AES), WPA3 Enterprise 192-bit mode (GCMP-256) EAP-TLS; Enhance Open (OWE)
WPAN	Class 2, Bluetooth v5.0, with BR/EDR and Bluetooth Low Energy Support
Fast Roam	PMKID caching; Cisco CCKM; 802.11r; OKC
ACCESSORIES	
	Single-slot charging cradle
SAFETY/REGULATORY	
EMI/EMC	FCC Part 15 Subpart B Class B; ICES 003 Class B; EN 301 489-1; EN 301 489-3; EN 55024; EN 55032 Class B
Electrical Safety	UL 60950-1, CAN/CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
RF Exposure	EU: EN 50364, EN 62369-1, EN 50566, EN 62311 USA: FCC Part 2, 1093 OET Bulletin 65, Supplement ‘C’ Canada: RSS-102
Environment	RoHS Directive 2011/65/EU; Amendment 2015/863; REACH SVHC 1907/2006

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Regulatory and Maintenance

XR2 UHF RFID Reader Regulatory Information

Copyright 2024 Janam Technologies, part of HID. All rights reserved.

XR2 UHF RFID Reader, Janam and the Janam logo are trademarks of Janam Technologies, part of HID. Other product and brand names may be trademarks or registered trademarks of their respective owners.

Janam Technologies, part of HID assumes no responsibility for any damage or loss resulting from the use of this guide. Janam Technologies, part of HID assumes no responsibility for any loss or claims by third parties which may arise through the use of this product. Janam Technologies, part of HID 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

FCC/IC labels: Users can view FCC/ID labels at **Settings** > **About phone** > **Legal & regulatory**.

CE

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.

FC

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

XR2 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 numerique de la Class B est conforme a la norm NMB-003 du Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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

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

Hereby, Janam Technologies, part of HID 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 dissemble, 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.

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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.