



# archer<sup>3</sup>

owner's manual

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**WARNING!** This symbol indicates that failure to follow directions could result in serious injury.



**CAUTION:** This symbol indicates that failure to follow directions could result in damage to equipment or loss of information.

Part Number 28226-02-C



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# 1 Getting Started



# Getting Started

The Archer 3 Rugged Handheld™ powered by Android™ features *Bluetooth*, Wi-Fi and a numeric keypad. Standard accessories include a lithium-ion battery pack, AC wall charger, USB micro client sync cable, hand strap, and a capacitive blunt tip stylus and tether. A camera, GPS/GNSS, and barcode scanner are options.

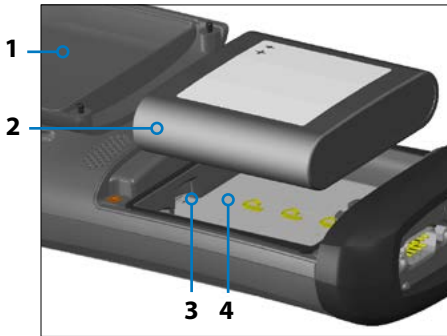
## The Anatomy of the Archer 3

## Front and Back Features



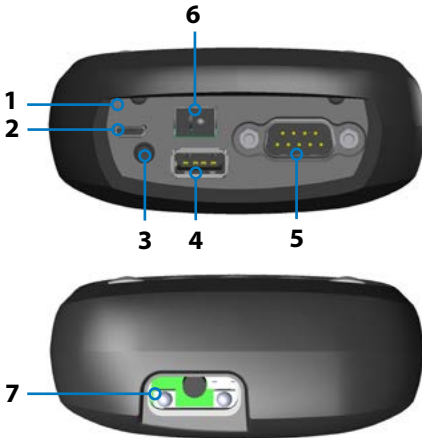
- |   |  |    |   |
|---|--|----|---|
| 1 | Bumper, Top  | 8  | Barcode Window (option)                                     |
| 2 | Touchscreen  | 9  | Camera Window (option)                                      |
| 3 | Keypad   | 10 | Camera Flash and Flashlight Window (option)                 |
| 4 | Sensor (option)  | 11 | Speaker   |
| 5 | Microphone   | 12 | Screw Holding Battery Door in Place (1 of 4 captive screws) |
| 6 | Power Button   | 13 | Hand Strap with Stylus Holder and Tether Ring               |
| 7 | Led Indicators (charging indicator on the right, programmable indicator on the left) | 14 | Door to Battery Compartment and Card Slot                   |

## Battery Compartment and Card Slots



- 1 Battery Door, Screws, Hand Strap (door removed)
- 2 Battery Pack
- 3 SD/SDHC Card Slot, Micro
- 4 Battery Compartment

## Connector Module and Barcode Reader



- 1 Connector Module
- 2 USB Client, Micro
- 3 Microphone/Speaker Jack
- 4 USB Host, Full Size
- 5 9-pin Serial Port
- 6 12-24V DC Jack
- 7 Barcode Window (option)

## Perform Initial Tasks

When you receive your Archer 3, perform the tasks outlined in this section before first use.

### Review Documentation

A direct link to this manual posted on our website is located in *Settings > Device status > User's Manual*. The manual will be updated during the life of the Allegro 3. Compare version numbers to see if a document has changed.

Other documents including a quick start guide, release notes, and product literature are available on our website in

PDF format. A wealth of other user information is also posted there. Go to: <http://www.junipersys.com>.

### **Apply a Screen Protector (Optional)**

The touchscreen is extremely scratch resistant, so a screen protector is not included with the Archer 3. If you decide to apply one, refer to the installation instructions included with your screen protector for specific details.

### **Install the Battery Pack and SD Card (Optional)**

The Archer 3 uses a rechargeable Li-Ion battery pack. Install and charge the battery pack as follows:

**!** **CAUTION:** Power-off the Archer 3 before removing the battery. If you remove the battery without powering-off the handheld, you may damage the handheld and/or lose data.

1. The battery compartment is accessed from the back of the handheld. Loosen the four captive screws holding the battery compartment door in place using a #1 Phillips screwdriver. Remove the door. You do not need to remove the hand strap.

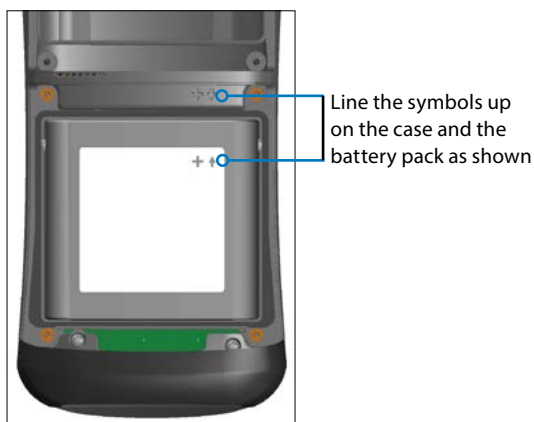
**!** **CAUTION:** The Archer 3 is not sealed against water and dust when the battery door is not installed.



2. If you are using a micro SD card for additional memory, you can install it now before you install the battery pack or at another time. See more details about installing an SD card later in this manual.



3. Place the Li-Ion battery pack in the compartment. Make sure the symbols on the battery pack label align with the symbols inside the compartment.



4. Replace the door and tighten the screws.
5. Plug the AC wall power charger that came with the Archer 3 into a wall socket. Plug the other end into the DC power jack on the Archer 3. The red LED on the keypad blinks when the battery pack is charging. Charge the battery pack for 4-6 hours at room temperature.



### **Attach the Stylus Tether**

A capacitive stylus and tether are included with the handheld.

*Note: A stylus is not required to use the touchscreen. The optimal way to make selections is by finger touch.*

One end of the tether is attached to the stylus. To attach it to the hand strap, follow these steps:

1. Pull the free tether loop through the tether ring on the hand strap. Insert the stylus with the attached tether through this loop and tighten the loop.
2. Place the stylus into the holder on the hand strap.

### **Turn the Archer 3 on**

To turn the Archer 3 on, press and release the power key. The handheld powers on and begins the startup process. This takes several seconds. When it is complete, the Lock screen is shown. Swipe up on this screen to unlock it. The primary Home screen is shown.

# 2

## Standard Features



# Standard Features

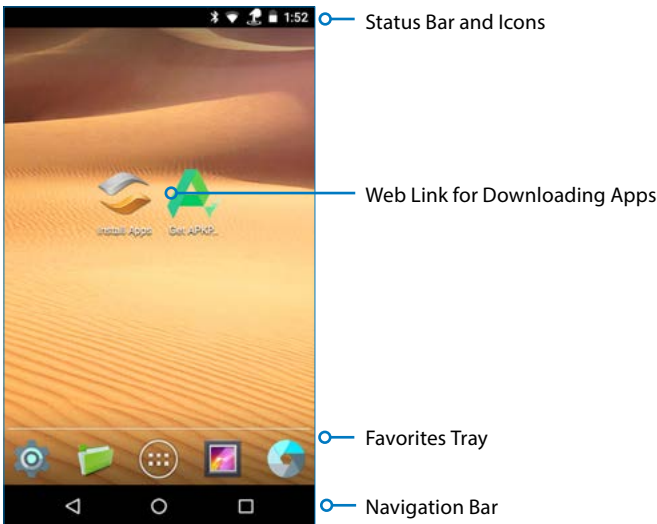
This chapter discusses the standard features included on all Archer 3 models.

## Operating System

This Archer 3 is powered by the Android operating system. If you need additional information about Android, there is a wealth of information on the internet.

## Home Screen

The Home screen consists of the following elements:



## Power Off or Restart

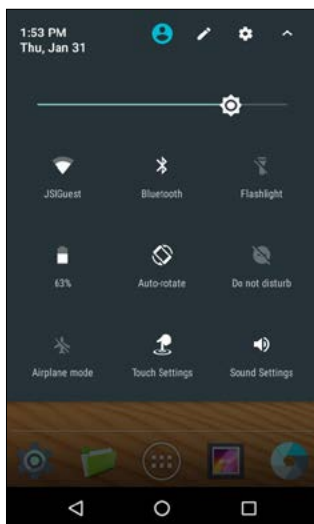
Press and briefly hold the power button. You are asked if you want to *Power Off* or *Restart*.

*Note: The display automatically goes to sleep after a set amount of time passes (you can adjust this in Settings). Press the power key and the lock screen appears. After you swipe up, the last screen that was opened is shown.*

## Quick Settings and Notifications

Touch and hold the status bar from any screen to see the Notification drawer. Any notifications you should see are

shown underneath the drawer. Swipe down twice from the drawer and the Quick Settings tray is shown which lets you to adjust some settings (screen brightness) and toggle certain apps on and off (*Bluetooth*). Swipe left to see more options. To close it, swipe the tray up.



## Operating System Languages

The Android operating system is available in multiple languages. Select *Settings > Languages & input > Language* to view the options and make a selection. Some unique Mesa 2 settings and apps like Touch Control and the Barcode Connector are only available in English.

## Display and Touchscreen

The Archer 3 has a bright color display and capacitive touchscreen. It is easy to view outdoors and is sealed against water and dust. The Archer 3 recognizes touch gestures, making it easy to use a finger to make selections and navigate. You can also use the fine tip capacitive stylus included with the Archer 3 or optimize it for wet conditions.

To adjust display settings including the font size, brightness, sleep interval, orientation, go to *Settings > Display*.

## Touchscreen Touch Control Setting

To adjust the Touchscreen Control setting, go to *Settings* > *Touch Control*. Select the profile you want the screen optimized for: Finger, Stylus, or Wet. As the new profile loads, a progress bar is shown. You can try different profiles to see which one works best for the conditions the Archer 3 is being used in.

*Note: When using the Archer 3 in wet conditions, you must use your finger or the blunt tipped stylus that is included. A hard-tipped stylus will not work. Other third party styli might work with the Mesa 2 touch profiles, but we cannot guarantee it.*

## Keyboard Features

The Archer 3 has a numeric keypad and function keys. The keys are sealed and have backlight illumination. Some keys have dual functions and are programmable. Go to *Settings* > *Keypad* to see what the keys are set to and to make adjustments

## Power Management

The Archer 3 uses a Li-Ion rechargeable battery pack.



**CAUTION:** Only use batteries designed for the Archer 3 from an approved vendor. Use of non-approved batteries may void your product warranty.

## Charging the Battery Pack

To charge the battery pack, suspend the handheld, then refer to the instructions in *Chapter 1, Getting Started*. It typically takes 4 to 5 hours to fully charge a battery pack.

We recommend that you keep the handheld battery pack charging when it is not in use for up to two weeks. When you plug the handheld into the wall charger that comes with it, the batteries are prevented from being overcharged.

The Li-Ion battery pack is charged most efficiently at room temperature (68°F or 20°C). The battery pack will not charge if it is too hot or too cold.

**ⓘ CAUTION:** The Archer 3 is not sealed against water and dust when the battery door is not installed properly.

**ⓘ CAUTION:** Power-off the Archer 3 before removing the battery. If you remove the battery without powering-off the handheld, you may damage the handheld and/or lose data.

### **Battery Life**

Battery life on a full charge is generally up to 20 hours. This can vary depending on the applications used, backlight usage, and radio usage.

Battery packs last approximately 1,000 to 3,000 charging cycles before they need to be replaced. This is impacted by applications and environmental factors.

Depending on the current charge on the battery, you may see different displays when turning on the unit. If the battery is completely discharged, you will see the following image.

The Archer 3 is designed to run in either of two power states, battery power, or external power with battery installed. The unit is not designed to run on external power without a battery. Doing so can damage internal components of your unit and void the warranty.

### **Summary of Options to Reduce Power Usage**

You can adjust some settings to preserve power:

- Turn off the display (suspend) after a set interval.
- Dim the backlight after a set interval.
- Disable radios when not in use.

## LED Activity Indicators

LED activity indicators are located on the keypad underneath the power button.



Red LED on the right (associated with power adapter):

- Blinking: AC adapter is plugged in, and the battery is charging
- Solid: AC adapter is plugged in, and the battery is full (not charging)

Green LED on the left (associated with notifications):

- When the operating system has something to notify you of, this LED behaves accordingly. For example, if you turn on GPS/GNSS the green LED blinks periodically.

Blue LED on the left (associated with shift functions):

- Solid: When you press the shift key, the blue LED lights up and stays on until another key is pressed. If the shift function is locked, the blue LED stays on.

## SD Cards

The Archer 3 has a slot for a micro SD/SDXC card located in the battery compartment. To insert or remove a card follow these steps:

1. Power off the handheld by holding the power button until the Power Button menu appears and selecting **Power Off**.



**CAUTION:** Power-off the Archer 3 before removing the battery. If you remove the battery without powering-off the handheld, you may damage the handheld and/or lose data.

2. Loosen the screws to the battery compartment, and remove the door. The hand strap remains attached.



**CAUTION:** The Archer 3 is not sealed against water and dust when the battery door is not installed properly.

3. Remove the battery pack.



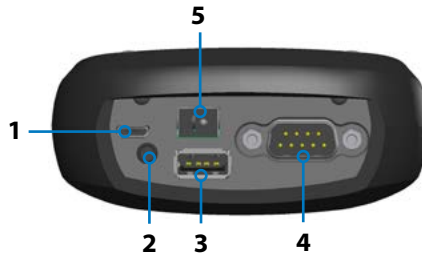
4. An image on the battery compartment label shows the correct location and orientation for the SD card (slot on the right). Push the card into the slot to insert it. To remove the SD card, pull it out.



5. Replace the battery pack, and attach the battery door.
6. Power up the handheld.

## Connector I/O Module

The Archer 3 connector I/O module has the following jacks and connectors:



1. USB client, micro B
2. Audio jack: 3.5mm; supports speaker, microphone or stereo output (pin detect)
3. USB host, full size A
4. COM1: RS-232C 9-pin D-sub connector, 5 V @500 mA available on pin 9 (ring in) under program control
5. Power input jack: 12 to 24 VDC for power input and battery charging

The connector module is user-replaceable. Contact our sales department or your supplier for details.

*Note: The connectors are sealed and do not require a connector protector to prevent water ingress.*

## Audio Features

The Archer 3 has the following audio features:

- **Speaker** - The speaker sound is loud and clear. Listen to audio notes, video sound, and music files.
- **Microphone** - Use the microphone to record audio notes or add sound to a video when using the camera.
- **Audio Jack** - The audio jack supports a stereo headset or headset/microphone combination with 3.5mm connections.

## Bluetooth® Wireless Communication

The Archer 3 has built-in *Bluetooth*® wireless technology, allowing you to connect it to other wireless devices with *Bluetooth* technology. Minimum performance between similar objects in an unobstructed environment is approximately 100 feet (30 meters).

## Creating a Partnership

To create a partnership between the Archer 3 and another device with *Bluetooth* technology:

1. Turn both devices on.
2. Place them within at least 100 feet (30 meters) of one another.
3. Make *Bluetooth* discoverable on both devices. *Bluetooth* on the Archer 3 is off by default. To activate it, go to *Settings > Bluetooth*. You can also pull down the Quick Settings Tray and tap the *Bluetooth* symbol to turn it on. Tap the word *Bluetooth* underneath the symbol. A list of discoverable devices is shown. Tap *MORE SETTINGS* to go to the settings screen.
4. In the *Bluetooth* settings screen, a list of all *Bluetooth* devices within range is shown. Tap on the name of the device in the list you would like to pair with. A *Bluetooth* pairing request box is shown. If prompted, enter the PIN or pass code of the device you want to pair with. You should now be paired with the device.

## Wi-Fi Wireless Networking

The Acher 3 has built-in Wi-Fi wireless networking to connect to the internet or an office network.


### Connecting to a Wi-Fi Network

To use Wi-Fi, you need to be in range of a Wi-Fi access point to make a connection. To set up Wi-Fi, follow these steps:

1. Go to *Settings > Wi-Fi* and tap *Off* in the upper left hand corner to toggle it on. You can also pull down the Quick Settings Tray and tap the *Wi-Fi* symbol to turn it on. Tap the word *Wi-Fi* underneath the symbol. A list of discoverable devices is shown. Tap *MORE SETTINGS* to go to the settings screen.
2. The Acher 3 automatically starts scanning the area for available Wi-Fi networks. A list is shown. Select the network you want to use and enter the network password (for locked networks). The Allegro 3 remembers the Wi-Fi network connections created.
3. Wi-Fi can be turned off and on and settings can be managed from *Settings > Wi-Fi* screen. Tap the network you selected to view information like *Link speed*. Tap and hold to view other options like *Modify network*.

*Note: Android does not support shared key WEP.*


### Suspend, Reset, Power Off, and Restore Defaults

Use the power button  to suspend, reset, power off, or restore the Archer 3 to its factory state. To access the Power Button menu, press and hold the power button.

## Suspending and Resuming the Archer 3


We recommend suspending your handheld if you plan to turn it off for less than two weeks. While it is suspended, you should attach it to a wall charger when it is not in use.

Suspending the handheld is different from powering it off. When the device is suspended it goes into a very low power mode. Some battery power is used during suspend.


1. Press and release the power button . The backlight shuts off. It can take several seconds to fully suspend, especially when the cell modem is on.
2. To resume the device from suspend mode, press and release the power button again. When it is resumed, the handheld resumes where it was before it was suspended.
3. There is also a *Suspend* option on the Power Button menu.

## Resetting the Archer 3

If the Archer 3 is unresponsive, slow, or programs won't launch, performing a reset might solve the issue. You may be asked to perform a reset when an application is installed.

 **CAUTION:** Be aware that during a reset, applications are closed and unsaved work may be lost.

Follow these steps to reset your Archer 3:


1. Save open files, and close any running programs.
2. Press and hold the power button  until the Power Button menu appears.
3. Tap *Reset*.

You can also reset the handheld by pressing the power button for 10 seconds or until the screen goes dark. After a few seconds, the handheld automatically turns on. This method is useful if your Archer 3 locks up.

## Powering Off and On the Archer 3

To preserve battery power, we recommend you power off the Archer 3 if it will not be used for two weeks or longer.



**⚠ CAUTION:** Be aware that when the Archer 3 is powered off, it closes all programs and powers down all system components except for the real-time clock. Unlike suspend mode, the device resets when it is powered on again. Any unsaved data is lost.

1. Save open files, and close any running programs.
  2. If you are using external power, unplug it.
  3. Press and hold the power button  until the Power Button menu appears.
  4. Tap *Power Off*. A warning dialog appears. Tap OK.
- To power on your handheld, press the power button.

### **Restoring the Archer 3 to its Factory State (Clean Boot)**

Follow the steps below to restore user storage, settings, and icons on your Archer 3 to their original factory defaults.

**⚠ CAUTION:** Restoring the Archer 3 to its original factory state permanently erases data saved on the handheld, any software you installed, and any changes you made to the handheld, including changes to settings.

1. Back up files and programs you want to keep onto another computer.
2. Save open files and close running programs on the handheld. Press and hold the power button  until the Power Button menu appears. Tap *Reset*.
3. When the screen turns black, press and hold the power button  again. The bios screen is shown.
4. Move the top slider on the screen to the right to set or clear factory defaults. This clean boots the handheld.
5. Tap *Exit*. The boot process continues.



# A

**Storage,  
Maintenance  
and Recycling**



## Storage, Maintenance, and Recycling

Follow the instructions in this chapter to properly maintain and recycle the Archer 3.

### Storing the Archer 3 and Battery Pack

When the handheld is not being charged and is suspended, it draws a small amount of power. This power draw is used to maintain the memory (RAM) of the handheld in the same state it was when it was suspended. We recommend charging the handheld each night or weekend when it is in suspend mode.

If the Archer 3 is not charged while in suspend mode and the battery reaches a low charge, it automatically powers off to prevent further drain on the battery.

*Note: Data and programs are secure as long as they have been saved, even if the battery pack becomes discharged. The handheld does not depend on the battery to store the data for extended periods.*

### Storing the Archer 3 for Less Than Two Weeks

To store the handheld for less than two weeks, complete the following steps:

1. Close all applications.
2. Plug the handheld into the AC wall adapter that was shipped with your unit.

### Storing the Archer 3 for More than Two Weeks

To store the handheld for two weeks or more, complete the following steps:

1. Charge the battery pack 30 to 50 percent.
2. Close all running programs, and power off the handheld by holding the power button until the Power Button menu appears and selecting *Power Off*.



**CAUTION:** Power-off the Archer 3 before removing the battery. If you remove the battery without powering-off the handheld, you may damage the handheld and/or lose data.

3. Remove the battery pack.
4. Place the battery pack in a dry location.



## Protecting the Touchscreen

Protect the touchscreen from impact, pressure, or abrasive substances that could damage it. To further protect the touchscreen, apply a screen protector (optional accessory). To apply a screen protector, follow the directions that come with it in the package.

**ⓘ CAUTION:** Be sure to replace the screen protector as often as the screen protector instructions recommend.

## Cleaning the Archer 3

### Touchscreen

1. Disable the touchscreen by pressing the power button until the Power Button menu appears. Tap on *Disable TS*.
2. Remove the screen protector if you want to clean underneath it.
3. Apply warm water or a mild cleaning solution to a microfiber cloth and gently wipe off the touchscreen.

**ⓘ CAUTION:** Do not use tissues, paper towels, soft bristle brushes, or harsh cleaning solutions on the touchscreen.

4. Rinse the touchscreen with water and dry it with a microfiber cloth.
5. Apply a screen protector if you want to (not included). To clean a screen protector, follow the instructions provided with the package.
6. Enable the touchscreen by pressing the power button until the Power Button menu appears. Use the arrow keys to scroll to *Enable TS*. Press *Enter*

### Case, Bumpers, and Connector Module

Make sure the battery door is securely installed. Use warm water, a mild cleaning solution, and a soft bristle brush to clean the case, bumpers, and connector module.

**ⓘ CAUTION:** Do not direct a high-pressure stream of water at the device to clean it. This action could break the seal, causing water to get inside the device and voiding the warranty.

### **Safe Cleaners to Use**

You can clean the Archer 3 safely with the following cleaners:

- Windex® (S.C. Johnson & Son, Inc.)
- Formula 409® (Clorox)
- Citrus Wonder Cleaner (Mer-Maids)
- Citrus All Purpose Cleaner (Wonder Tablitz)
- Greased Lightening® Multi-Purpose Cleaner and Degreaser
- Orange Clean® (Orange Glo International)
- Fantastik® OxyPower® (S.C. Johnson @ Son, Inc.)
- Oil Eater Orange Cleaner Citrus Degreaser (Kafko Intl., Ltd.)

**⚠ CAUTION:** Exposure to some cleaning solutions may damage your device, including automotive brake cleaner, isopropyl alcohol, carburetor cleaner, and similar solutions. If you are uncertain about the strength or effect of a cleaner, apply a small amount to a less visible location as a test. If any visual change becomes apparent, promptly rinse and wash with a known mild cleaning solution.

### **Recycling the Archer 3 and Batteries**

When the Archer 3 reaches the end of its life, it must not be disposed of with municipal waste. It is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. If you cannot find a location, contact Juniper Systems for information about disposal.

The Li-Ion battery packs for your Archer 3 are recyclable. Avoid placing them in the trash or municipal waste system. To find the nearest battery recycling center in the USA, visit the Rechargeable Battery Recycling Corporation, [www.call2recycle.org](http://www.call2recycle.org).

# B

## Warranty and Repair Information



## Limited Product Warranty

Juniper Systems, Inc. ("JS") warrants that the Archer 3 Rugged Handheld shall be free from defects in materials and workmanship, under normal intended use, for a period of 24 months from the date of shipment.

JS warrants that the following items shall be free from defects in materials and workmanship, under normal intended use, for a period of ninety (90) days from the date of shipment:

- battery packs,
- media containing the Archer 3 programs,
- desktop computer programs,
- user documentation, and
- accessories.

## Warranty Exclusions

This warranty shall not apply if:

- (i) the product has been set up improperly or has been improperly installed or calibrated,
- (ii) the product is operated in a manner that is not in accordance with the user documentation,
- (iii) the product is used for a purpose other than for which it was designed,
- (iv) the product has been used in environmental conditions outside of those specified for the product,
- (v) the product has been subject to any modification, alteration, or change by or on behalf of customer (except and unless modified, changed or altered by JS or under direct supervision of JS),
- (vi) the defect or malfunction results from misuse or accident,
- (vii) the serial number on the product has been tampered with or removed, or
- (viii) the product has been opened or tampered with in any way.

This warranty is exclusive and JS will not assume and hereby expressly disclaims any further warranties, whether express

or implied, including, without limitation, any warranty as to merchantability, fitness for a particular purpose, non-infringement or any warranties arising from the course of performance, dealing, or usage of trade. JS specifically makes no warranties as to the suitability of its products for any particular application. JS makes no warranties that

- its products will meet your requirements or will work in combination with any hardware or applications software products provided by third parties,
- the operation of its products will be uninterrupted or error free, or
- all defects in the product will be corrected.

JS shall not be responsible for software, firmware, information, or memory data contained in, stored on, or integrated with any products returned to JS for repair, whether under warranty or not.

## **Remedy**

In the event a defect in materials or workmanship is discovered and reported to JS within the specified warranty period, JS will, at its option, repair the defect or replace the defective part or product. Replacement products may be new or reconditioned. JS warrants any replaced or repaired product for a period of ninety (90) days from the date of return shipment, or through the end of the original warranty period, whichever is longer.

## **Limitation of Liability**

To the fullest extent allowed by law, the obligation of JS shall be limited to the repair or replacement of the product. JS shall in no event be liable for special, incidental, or consequential, indirect, special or punitive damages of any kind, or for loss of revenue or profits, loss of business, loss of information or data, or other financial loss arising out of or in connection with the sale, installation, maintenance, use, performance, failure, or interruption of any product. Any responsibility and/or liability of JS shall, in connection with a warranted product, be limited in the maximum amount to the original purchase price.

## Warranty Repairs

To obtain warranty repair or service on the Archer 3, submit a repair order on our website at <http://www.junipersys.com/Juniper-Systems/support/Repairs> or contact an authorized repair center within the applicable warranty period.

Products returned for repair or service without proper authorization may acquire an additional handling fee and/or delay in the repair. The customer is responsible to prepay all shipping costs when sending equipment to a repair center. The repair center will return the repaired equipment by the same method it was received with costs of shipping prepaid.

## Governing Law

This warranty is governed by the laws of Utah, U.S.A. and excludes the United Nations Convention on Contracts for the International Sale of Goods. The courts of Utah shall have exclusive personal jurisdiction in case of any disputes arising out of or in connection with this warranty.

## Services and Materials Provided Under Warranty

- Analysis of problem by service technician
- Labor and materials required to fix defective parts
- Functional analysis performed after repair
- Repair turnaround within 10 working days of receipt unless special circumstances exist
- Shipping costs to return device to customer

## Extended Warranties

The Archer 3 can be warranted up to 5 years (including the standard warranty period) through the purchase of an extended warranty.

Extended warranties apply only to the Archer 3, not battery packs, media containing the Archer 3 programs, desktop computer programs, user documentation, and accessories. Parts that are excessively worn are not covered under all warranty plans. These may include, but are not limited to, the keyboard elastomer and switch matrix, hand straps, touchscreens, and connector modules.

### **Warranty Information**

Warranty information for the Archer 3 Rugged Handheld is located on our website at <http://www.junipersys.com/Juniper-Systems/support/Warranty>. You can evaluate and order warranty extensions, check warranty status, and view warranty terms and conditions.

### **Repairing the Archer 3**



**CAUTION:** Do not attempt to repair the Archer 3 yourself. This action voids the warranty.

Information about repairs, upgrades, and evaluations is located on our website at <http://www.junipersys.com/Juniper-Systems/support/Repairs>. You can locate a repair center, submit a repair order, check repair status, view terms and conditions, get shipping instructions, and view lead times.

Before returning a unit, please get permission by submitting a repair order from our website and waiting for confirmation or by contacting a repair center directly. Be prepared to provide the following information:

- Product serial number (inside the battery compartment; also found in System Information screen as described on the following page)
- Your name
- Name and shipping address of company/university/agency
- Best contact method (phone, fax, email, cell/mobile)
- Clear, highly-detailed description of the repair or upgrade
- Credit card/ purchase order number and billing address (for a repair or upgrade that is not covered by the standard warranty or an extended warranty policy)

### **System Information for your Archer 3**

When you contact a repair center, you need some unique system ID information for your Archer 3 (serial number, model number, etc.). Go to *Settings > About this device*. Information about software, hardware, the battery, the network and radio, regulatory information, and legal information can be viewed.



C

# Warnings and Regulatory Information



## Product Warnings

Follow the warnings in this chapter to use the AR3 (Archer 3) and accessories safely.



### Battery Warnings

**WARNING!** This device is for professional use only.

This device comes with a lithium ion rechargeable battery pack. To reduce the risk of fire or burns, do not disassemble, crush, puncture, short external contacts, or expose the battery pack to fire.

Do not disassemble, open, crush, bend, deform, puncture, or shred.

Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.

Only use the battery for the system for which it is specified.

Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.

Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.

Replace the battery only with another battery that has been qualified with the system.


Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.

Promptly dispose of used batteries in accordance with local regulations.

Battery usage by children should be supervised.

Avoid dropping the battery. If the battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.

Improper battery use may result in a fire, explosion or other hazard.

 **CAUTION:** Risk of explosion if battery is replaced by incorrect type.

Dispose of used batteries according to the instructions.

### **Wall Charger Warnings**



**WARNING!** To reduce the risk of personal injury, electrical shock, fire or damage to the equipment:

Plug the wall charger into an electrical outlet that is easily accessible at all times.

Do not place anything on the wall charger cord or any of the other cables. Arrange them so that no one may accidentally step on or trip over them.

Do not pull on a cord or cable. When unplugging the wall charger from the electrical outlet, pull on the plug, not the cord.

Use only wall chargers intended for the Archer 3. Using any other external power source can damage your product and void your warranty.

## **Certifications and Standards**

### **FCC - United States**

In compliance with the FCC rules 47 CFR 15.19(a)(3), the statements that follow must appear on the device or in the user documentation.

This device complies with Part 15 of the FCC Rules.

Operation of this equipment is subject to the following two conditions:

1. The device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

In compliance with the FCC rules, 47 CFR 15.105(b), the user must be notified that 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.

In compliance with the FCC rules, 47 CFR 15.21, the user must be notified that changes or modifications to the Rugged Handheld that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Only approved accessories may be used with this equipment. In general, all cables must be high quality, shielded, correctly terminated, and normally restricted to two meters in length. Wall chargers approved for this product employ special provisions to avoid radio interference and should not be altered or substituted.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

This cell modem is compliant with FCC regulations when operated within the temperature range of -30°C to +50°C. Do not operate the cell modem outside of this temperature range.

## **Industry Canada**

This device complies with ISED licence-exempt RSS standard(s). 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

In compliance with Industry Canada rules, the following statement must appear on the device or in the

user documentation:

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

### **Radio Frequency Safety**

This device has been evaluated for use in close proximity to the body. Use only accessories approved by Juniper Systems. The use of third party accessories may not comply with FCC and international RF exposure requirements. To comply with FCC and other national RF exposure requirements do not co-locate this device with other transmitters.

This device operates in compliance with the radio frequency exposure limits for an uncontrolled environment. Users must follow instructions provided in the user documentation to satisfy compliance with radio frequency exposure requirements.

There cannot be any alteration to the authorized antenna system.

### **CE Marking (European Union)**



Products bearing the CE marking comply with EU Directive 2014/53/EU.

CE compliance of this device is valid only if powered with/by a CE-marked wall charger provided by the manufacturer. Cables connecting to the USB host port must use a ferrite core/bead on the cable. The ferrite core must be placed on the cable near the end that connects to the Archer 3.

## Declaration of Conformity

The Declaration of Conformity for CE Marking is available at: <http://www.junipersys.com/doc>.



### Class I and LED Product (Barcode Scanner)

CLASSIFIED EN/IEC 60825-1 2007 & AS/NZS 2211.1:2004"

Complies with 21 CFR 1040.10 & 1040.11 except for deviations pursuant to Laser Notice No. 50 dated June 24, 2007.



**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This barcode scanner is not user-serviceable. Units requiring service or repair must be returned to the factory.

This barcode scanner is not to be opened or modified by the user. This product does not require scheduled maintenance to remain compliant to the applicable standards.

This laser product is designated as Class 1 during all procedures of operation. For instructions on activating/deactivating the laser aimer and LEDs, please read the section on software operation.

#### Laser

Wavelength	650nm, nominal
Emission	Repetitive Pulsed
Pulse Energy*	7uJ
Pulse Width	9 mSec
Pulse Rep Rate	55Hz, nominal
Divergence	1 Radian XY, approximately
Classification	Class 1

#### LED (Australia New Zealand only)

Wavelength	635nm, peak
Bandwidth FWHM	20nm
Emission	Repetitive Pulsed
Pulse Energy*	≤3.1uJ

Pulse Width	0.98 mSec
Pulse Rep Rate	55 Hz, nominal
Divergence	Extents: approach hemispheric
Classification	Class 1

Laser & LEDs pulse alternately

\* Energy for Classification Purposes

A label with the unit serial number is located on the rear panel of the device





# D

## Specifications



## Archer 3 Rugged Handheld Specifications

FEATURE	SPECIFICATION
Operating System	<ul style="list-style-type: none"><li>■ Android™ 7 AOSP by Google</li><li>■ English, French, German, Spanish, Brazilian Portuguese (see complete list in <i>Settings</i>)</li></ul>
Processor	<ul style="list-style-type: none"><li>■ 1.2 GHz ARM Cortex A9 i.MX6</li></ul>
Memory	<ul style="list-style-type: none"><li>■ 2 GB RAM</li></ul>
Primary Data Storage	<ul style="list-style-type: none"><li>■ 16 GB Flash storage</li></ul>
Micro SD/SDXC Card Slot	<ul style="list-style-type: none"><li>■ Micro SD/SDXC slot, user accessible</li></ul>
Physical Features	<ul style="list-style-type: none"><li>■ Dimensions, standard: 3.6" wide x 7.25" long x 1.5" thick (91 mm x 184 mm x 38 mm)</li><li>■ Weight, with battery: Standard - 1.3 lbs (590g), Geo - 1.42 lbs (647g),</li><li>■ Durable hardened plastic in a shear-proof, shock-resistant design</li><li>■ Strong chemical resistance</li><li>■ Easy to grip ergonomic form factor</li><li>■ Impact-absorbing bumpers</li><li>■ Comfortable, wide hand strap</li></ul>
Display	<ul style="list-style-type: none"><li>■ Active viewing area: 4.3" (109 mm) color WVGA LCD TFT</li><li>■ 800 x 480 pixel resolution</li><li>■ LCD backlight</li><li>■ Outdoor viewable</li><li>■ Portrait (default) or landscape orientation</li></ul>
Touchscreen	<ul style="list-style-type: none"><li>■ Capacitive touch interface optically bonded to display to increase visibility</li><li>■ Strengthened glass</li><li>■ Scratch-resistant screen</li><li>■ Touchscreen disable function</li><li>■ Touchscreen profile options</li></ul>

FEATURE	SPECIFICATION
Keyboard	<ul style="list-style-type: none"> <li>■ Numeric keypad</li> <li>■ Modifier function</li> <li>■ Programmable keys and LEDs</li> <li>■ Backlight</li> <li>■ On-screen keyboard option</li> </ul>
Batteries	<ul style="list-style-type: none"> <li>■ Rechargeable Li-Ion battery pack, 3.6VDC 12000mAh, 43.2Whr</li> <li>■ Run time of up to 20 hours</li> <li>■ Charging time 4 to 5 hours</li> <li>■ Built-in battery intelligence</li> <li>■ User-replaceable, field rechargeable</li> </ul>
Connector I/O Module	<ul style="list-style-type: none"> <li>■ RS-232C 9-pin D-sub connector, +5VDC @ 500 mA available on ring in pin 9 via software configuration</li> <li>■ USB Host (Full A)</li> <li>■ USB Client (Micro B)</li> <li>■ 12-24VDC jack for power input and battery charging, 0-36V unregulated</li> <li>■ 3.5mm audio jack, supports speaker/microphone or stereo output (pin detect)</li> <li>■ Docking contacts for charging</li> <li>■ Connector protector</li> <li>■ OEM configurable/customizable</li> </ul>
Wireless Connectivity	<ul style="list-style-type: none"> <li>■ Bluetooth® wireless technology 4.2 BR/BDR/BLE "Smart Ready," Class 1.5, range greater than 100 feet (30 m)</li> <li>■ Wi-Fi 802.11b/g/n with extended range, U.S. and international</li> </ul>
Audio	<ul style="list-style-type: none"> <li>■ Speaker, loud and clear</li> <li>■ Microphone, low noise</li> <li>■ 3.5 mm audio jack, supports stereo headset and microphone at the same time (speaker disable)</li> </ul>
LED Activity Indicators	<ul style="list-style-type: none"> <li>■ Red: power applied/charging status</li> <li>■ Green: notification, application programmable</li> <li>■ Blue: shift function, application programmable</li> </ul>

FEATURE	SPECIFICATION
Temperature Specifications	<ul style="list-style-type: none"> <li>■ Operating Temperature: -22° to 140° F (-30° to 60° C). <i>Note: Bluetooth® wireless technology is rated to -4° to 122° F (-20° to 50° C).</i></li> <li>■ Storage Temperature: -22° to 158° F (-30° to 70° C)</li> <li>■ Battery Charging Temperature: 32° to 122° F (0° to 50° C)</li> <li>■ Max use temperature for switching the power supply is 104° F (40° C)</li> </ul>
Shock Resistance	<ul style="list-style-type: none"> <li>■ Withstands multiple 5 foot (1.5 m) drops to concrete</li> </ul>
Environmental Ratings and Standards	<ul style="list-style-type: none"> <li>■ Waterproof and dustproof</li> <li>■ MIL-STD810G test procedures: Method 500.5 Low Pressure (Altitude); Method 501.5 High Temperature; Method 502.5 Low Temperature; Method 503.5 Temperature Shock; Method 506.5 Rain; Method 507.5 Humidity; Method 510.5 Sand and Dust; Method 512.5 Immersion; Method 514.6 Vibration; Method 516.6 Shock</li> </ul>
Warranties	<ul style="list-style-type: none"> <li>■ 24 months for Archer 3</li> <li>■ 90 days for accessories</li> <li>■ Extended service and maintenance plans</li> </ul>

FEATURE	SPECIFICATION
Software Included	<ul style="list-style-type: none"> <li>■ Barcode Connector (Barcode models)</li> <li>■ Calculator</li> <li>■ Calendar</li> <li>■ Camera</li> <li>■ Clock</li> <li>■ Contacts</li> <li>■ Downloads</li> <li>■ Email</li> <li>■ Files</li> <li>■ Gallery</li> <li>■ Geode Connect (Geo models)</li> <li>■ Music</li> <li>■ Opera</li> <li>■ Search</li> <li>■ Settings</li> <li>■ Sound Recorder</li> </ul> <p><i>Note: Software on individual units may vary from this list.</i></p>
Camera (Geo models)	<ul style="list-style-type: none"> <li>■ 5MP resolution</li> <li>■ Autofocus</li> <li>■ LED illuminator</li> <li>■ Video capture</li> <li>■ JPEG image format</li> <li>■ Juniper Geotagging; embed photo with date, time and GPS/GNSS position</li> <li>■ Flash and flashlight</li> </ul>

FEATURE	SPECIFICATION
GPS/GNSS (Geo models)	<ul style="list-style-type: none"> <li>■ High-sensitivity GPS, GLONASS, Galileo, BeiDou, QZSS, SBAS receiver</li> <li>■ 2 to 5 meter typical accuracy</li> <li>■ Post processing capability for enhanced accuracy beyond 2 to 5 meters, BINR protocol</li> <li>■ Enhanced performance under heavy canopy</li> <li>■ Integrated real-time SBAS capability, support for WAAS, MSAS, EGNOS</li> <li>■ File format NMEA-0183 version 4.0 output, default strings: GGA, GSA, GLL, GSV, RMC, VTG, ZDA, GPS</li> <li>■ 72 GNSS tracking channels</li> <li>■ GPS/GNSS signal quality indicator on Juniper Home screen</li> <li>■ Geode Connect application</li> </ul>

FEATURE	SPECIFICATION
Barcode Scanner (Geo model option)	<ul style="list-style-type: none"> <li>■ Imager and Decoder: Motorola/Symbol SE4500 imager and PL3307C 400MHz decoder</li> <li>■ Sensor Resolution: 752 X 480</li> <li>■ Field of View: Horizontal 40°, vertical 25°</li> <li>■ Reading Angles: Skew &amp; pitch <math>\pm 60^\circ</math>, roll 360°</li> <li>■ Read Range: 1" to 24" depending on code type, size, and density</li> <li>■ Symbologies: All common 1D, 2D (PDF417, MicroPDF417, Composite, RSS, TLC-39, Data matrix, QR code, Micro QR code, Aztec, MaxiCode, Postal codes, etc.)</li> <li>■ Trigger Buttons: Programmable</li> <li>■ Aiming Crosshair Pattern: Visible with low light illumination</li> <li>■ Barcode Connector™ Utility: Wedge and configuration</li> <li>■ Certification: Class 1 Laser and LED Product</li> <li>■ Power: 1.49W active, 0.54W standby, 8mW sleep; by default device returns to sleep after 1 second of inactivity</li> </ul>
Certifications and Standards	<ul style="list-style-type: none"> <li>■ FCC Class B</li> <li>■ CE Marking (applicable EMC, R&amp;TTE, and LVD directives)</li> <li>■ Industry Canada</li> <li>■ EN60950 Safety</li> <li>■ Bluetooth SIG qualification</li> <li>■ USB client</li> <li>■ Waterproof and dustproof</li> <li>■ Designed to MIL-STD 810G</li> <li>■ Optional Class I, II, III Division 2 for hazardous locations</li> </ul>

FEATURE	SPECIFICATION
Standard Accessories	<ul style="list-style-type: none"> <li>■ Li-Ion battery</li> <li>■ Hand strap</li> <li>■ USB micro client sync cable</li> <li>■ AC wall charger with international plug kit <ul style="list-style-type: none"> <li>- Input: 100-240VAC, 50/60Hz, 0.5A</li> <li>- Output: 12VDC, 1.67A</li> </ul> </li> <li>■ Capacitive stylus and tether</li> <li>■ Screwdriver</li> <li>■ Quick Start Guide</li> <li>■ Owner's Manual (available on our website)</li> <li>■ Two-year warranty</li> </ul>
Optional Accessories	<ul style="list-style-type: none"> <li>■ Shoulder strap</li> <li>■ Serial cable</li> <li>■ Vehicle charging adaptor</li> <li>■ Holster case</li> <li>■ Flip cover fitted case</li> <li>■ 8GB micro SDHC memory card</li> <li>■ Premium screen protectors</li> <li>■ External GNSS antenna</li> </ul> <p><i>See your sales associate for more details on optional accessories.</i></p>

*Note: Specifications are subject to change without notice.*



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