

Parts of the Handheld



Use and Care of the Handheld

The Juno ST handheld is a non-rugged device and to protect it when not in use, Trimble recommends storing the handheld in the carry case provided.

When using the handheld:

- Keep the outer surface free of dirt and dust.
- Keep the external antenna port and the SD card slot free of dirt and dust.
- Protect the touch screen by using the stylus provided and avoid using excessive pressure and sharp or abrasive objects.
- Be careful not to drop the handheld or subject it to any strong impact. Do not place the handheld in your back pocket.
- Protect the handheld from extreme temperatures. For example, do not leave the handheld on the dashboard of a vehicle.
- The handheld is not waterproof. Do not expose the handheld to rain or moisture. To clean the handheld, wipe it with a clean dry cloth. Do not immerse the handheld in water.

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The Juno ST handheld

The Trimble® Juno™ ST handheld is a small, lightweight field computer with an integrated GPS receiver.

The GPS receiver provides accurate positioning with real-time or postprocessed differential correction.

The Juno ST handheld has built-in Bluetooth® wireless technology for cable-free connection to other devices and wireless LAN (Local Area Network) for connections to wireless networks. Powered by the Microsoft® Windows Mobile® version 5.0 software, the handheld provides mobility and flexibility between field and office.



To get started using the Juno ST handheld:

1. Insert the battery into the handheld and then charge the battery.
2. Turn on the handheld.
3. Connect the handheld to a computer and install your GPS field software. If required, transfer data files to the handheld.
4. In the field, use your GPS field software and the handheld's integrated GPS receiver to collect GPS data.

More information about each step is provided in this guide.

Additional Information

For more information, as well as additional features of the handheld, refer to the *Juno ST Handheld User Guide*. The user guide is provided on the *Juno ST Handheld Companion CD*. For additional information on the Juno ST handheld, visit www.trimble.com/junost_ts.asp or contact your Trimble reseller.

Safety Notices

WARNING—RECHARGEABLE LITHIUM-ION BATTERY

- Do not damage the rechargeable Lithium-ion battery. A damaged battery can cause an explosion or fire, and can result in personal injury and/or property damage. To prevent injury or damage:
 - Do not use or charge the battery if it appears to be damaged. Signs of damage include, but are not limited to, discoloration, warping, and leaking battery fluid.
 - Do not expose the battery to fire, high temperature, or direct sunlight.
 - Do not immerse the battery in water.
 - Do not use or store the battery inside a vehicle during hot weather.
 - Do not drop or puncture the battery.
 - Do not open the battery or short-circuit its contacts.
- Avoid contact with the rechargeable Lithium-ion battery if it appears to be leaking. Battery fluid is corrosive, and contact with it can result in personal injury and/or property damage. To prevent injury or damage:
 - If the battery leaks, avoid contact with the battery fluid.
 - If battery fluid gets into your eyes, immediately rinse your eyes with clean water and seek medical attention. Do not rub your eyes!
 - If battery fluid gets onto your skin or clothing, immediately use clean water to wash off the battery fluid.
- Charge and use the rechargeable Lithium-ion battery only in strict accordance with the instructions. Charging or using the battery in unauthorized equipment can cause an explosion or fire, and can result in personal injury and/or equipment damage. To prevent injury or damage:
 - Do not charge or use the battery if it appears to be damaged or leaking.
 - Charge the Lithium-ion battery only in a Trimble product that is specified to charge it. Be sure to follow all instructions that are provided with the battery charger.
 - Discontinue charging a battery that gives off extreme heat or a burning odor.
 - Use the battery only in Trimble equipment that is specified to use it.
- Use the battery only for its intended use and according to the instructions in the product documentation.

WARNING—AC ADAPTOR

- To use AC adaptors safely:
 - Use only the AC adaptor intended for the Juno handheld. Using any other AC adaptor can damage your product and may void your warranty. Do not use the AC adaptor with any other product.
 - Make certain that the input voltage on the adaptor matches the voltage and frequency in your location.
 - Make certain that the adaptor has prongs compatible with your outlets.
 - AC adaptors are designed for indoor use only. Avoid using the AC adaptor in wet outdoor areas.
 - Unplug the AC adaptor from power when not in use.
 - Do not short the output connector.
 - There are no user-serviceable parts in this product.
 - Should damage to the AC adaptor occur, replace it with a new Trimble AC adaptor.



Step 1: Charge the Battery

A rechargeable Lithium-ion battery is provided with the Juno ST handheld.
Note: Insert the battery into the handheld, and then charge the battery completely before using the handheld for the first time. If the battery has been stored for longer than six months, charge it before use.

Inserting the battery

- To insert the battery into the handheld:
- On the back of the handheld, use your thumb to press the gray button below the Microsoft Windows logo and slide the back cover down to remove it.
 - To insert the battery, angle the bottom of the battery into the handheld, with the label facing upwards (as shown). Press the battery flat until it clicks into place.
 - To replace the cover, slide it upwards until it snaps closed.



Charging the battery

When fully charged, the handheld battery provides enough power for 6 hours using GPS and the backlight. When using the backlight but not using GPS, the battery provides enough power for up to 10 hours.
Note: Using Bluetooth wireless technology or wireless LAN connectivity consumes additional battery power.

Charge the battery in the handheld, using one of the following:

- the AC power adaptor and the international adaptor kit
- the vehicle power adaptor
- the USB cable connected to a computer

Fully charging the battery from empty takes approximately 4 hours. You can use the handheld while it is charging. When the battery is:

- low, the LED indicator flashes red.
- charging, the LED indicator flashes green.
- charged completely, the LED indicator is steady green.

Step 2: Turn on the Handheld

- To turn on the handheld:
- Make sure the handheld is not locked. The **Lock** switch should be in the up (Unlock) position.
 - Press the **Power** button briefly.
- To turn off the handheld, press the **Power** button briefly again.
- To turn off the backlight while the handheld is turned on, press and hold the **Power** button for approximately 2 seconds.

Step 3: Connect the Handheld to an Office Computer

- Before you can install software onto the handheld, or transfer data files to the handheld, you must connect the handheld to a computer. If the computer is running:
- Windows Vista, use the Windows Mobile Device Center to manage the connection.
 - Windows XP or 2000, use Microsoft ActiveSync technology to manage the connection.
- Note: You must install the Windows Mobile Device Center or ActiveSync technology onto the computer **before** you connect the handheld.*
- To download the Windows Mobile Device Center or ActiveSync technology from the Microsoft website go to www.microsoft.com/windowsmobile.
- To connect the handheld to a computer:
- Make sure that the handheld and the computer are switched on.
 - To form a connection, do one of the following:
 - Connect one end of the USB data cable to the Power/USB socket on the handheld, and connect the other end of the USB data cable to a USB port on the computer.
 - Use the handheld's integrated Bluetooth radio to establish a wireless link to a Bluetooth-enabled computer. For more information, refer to the *Juno ST Handheld User Guide*.

CAUTION: The available space on the handheld is small compared to an office computer. To avoid synchronizing the handheld with a large amount of data on your office computer, Trimble recommends that you connect to the handheld **without forming a partnership** using the steps below:

If the computer is running...	Do the following...
Windows Vista	If the <i>Autoplay</i> window appears, close the window. The <i>Windows Mobile Device Center</i> window displays the message Connected . Click <i>Connect without setting up your device</i> .
Windows XP or 2000	If the <i>Synchronization Setup Wizard</i> appears, click Cancel to close the wizard. The <i>Microsoft ActiveSync</i> window displays the message Connected .

Install GPS Field Software

- To install GPS field software onto the handheld:
- Connect the handheld to an office computer (see Connecting the Handheld to an Office Computer above).
 - Insert the software CD into the office computer and run the installation setup. For more information, refer to the installation instructions for the software.
 - When prompted, select the install option for a Windows Mobile powered device. The software is installed to the handheld.
 - If prompted after installation, perform a soft reset of the handheld by briefly pressing the reset button.

For a list of compatible field software, refer to the *Juno ST Handheld User Guide*.

Transferring Files

- For transferring data files, please consult your office software documentation if a specific application must be used.
- In general, files can be transferred to and from the handheld following the steps below:
- Connect the handheld to an office computer (see Connecting the Handheld to an Office Computer above).
 - To transfer files using:
 - the Windows Mobile Device Center, click *File Management*.
 - ActiveSync technology, click **Explore**.

Step 4: Use GPS Field Software

To protect your data, Trimble recommends that you save data to a Secure Digital (SD) memory card or regularly copy important data to your office computer.
WARNING: The presence of any dust or moisture in the SD slot may adversely affect the device and void your Trimble warranty. The handheld is shipped with a plastic dummy installed in the SD memory card slot. To help prevent dust or moisture entering the SD memory card slot reinsert the dummy when no SD memory card is installed in the slot.

Connecting to GPS

To receive GPS satellite signals, configure your GPS field software to use COM port 7 for GPS data. For more information, refer to the *Juno ST Handheld User Guide*.
Note: To receive signals from GPS satellites, the handheld must have a clear view of the sky. GPS positions may not always be available, particularly in or near buildings, in vehicles, or under tree canopy.

Connecting to WAAS

WAAS is enabled by default, however to change this setting, select the integrated SBAS option in the Real-time Settings area of your GPS field software.

Outputting NMEA data

You can use the Juno ST handheld's integrated GPS receiver with any GPS field software that accepts NMEA messages.
Depending on the software you are using, you may be able to configure the NMEA message output settings.