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GPS Pathfinder XB Receiver Customer FAQs

What is the GPS Pathfinder XB receiver?

The GPS Pathfinder[®] XB receiver is a fully integrated GPS receiver, antenna and battery unit that provides 2–5 meter (HRMS) accuracy, real-time and postprocessed. The GPS Pathfinder XB receiver has Bluetooth[®] wireless technology for cable-free connectivity to the field computer. The receiver is compact and lightweight and can be mounted in the way that best suits how you work.

What are the key features of the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver has the following features and benefits:

- Bluetooth wireless technology for cable-free connectivity to the field computer. Eliminating cables makes it easier to traverse difficult terrain without snagging and breaking equipment.
- Improved productivity in harsh environments. The GPS Pathfinder XB receiver is designed to provide positions in hostile environments, such as under forest canopy and up against buildings, and get the best results without the need to adjust the GPS mask settings.
- Real-time differential correction with Integrated SBAS (Satellite Based Augmentation Systems) receiver providing 2–5 m (HRMS) accuracy.
- Postprocessed differential correction with 2–5 m (HRMS) accuracy.
- Supported by Trimble's range of field and office software for a seamless field-to-office workflow for GIS professionals.

What software is required to support the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver is supported by the following field software applications:

- TerraSync[™] software version 2.61
- Trimble GPSCorrect[™] extension for ESRI ArcPad software version 2.11
- Trimble GPS Analyst[™] extension for ESRI ArcGIS software version 2.00
- Trimble GPS Controller software version 2.10

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- Applications developed with GPS Pathfinder Tools Software Development Kit (SDK) version 2.10
- Third-party field software that supports NMEA input

For standard differential postprocessing, GPS Pathfinder Office software version 3.10, or GPS Analyst extension version 2.00 is required, with the latest updates applied.

What field computers can I use with the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver is designed to work with any standard Microsoft® Windows® computer with Bluetooth wireless technology that supports the Bluetooth Serial Port Profile.

The Trimble Recon® handheld with integrated Bluetooth, or with a Socket Bluetooth CF card, is the ideal field computer for use with the GPS Pathfinder XB receiver. If you prefer a full keypad, the Trimble Ranger™ handheld is also compatible. Alternatively, you can use any standard laptop, Tablet PC, or PDA with Bluetooth to connect to the GPS Pathfinder XB receiver.

Can I use postprocessed differential correction with the GPS Pathfinder XB receiver?

Data for postprocessing can be collected with TerraSync software version 2.61, GPSCorrect extension version 2.11, GPS Analyst extension version 2.00, or an application developed with GPS Pathfinder Tools SDK version 2.10. Data collected in GPS field software using the NMEA protocol cannot be postprocessed.

For standard differential postprocessing, GPS Pathfinder Office software version 3.10, or GPS Analyst extension version 2.00, with the latest updates applied is required.

Data collected with real-time (SBAS) corrections in the field can be postprocessed in the office if required.

The GPS Pathfinder XB receiver does not output carrier data, so it is not possible to use carrier postprocessing techniques.

What real-time options are available for the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver has an Integrated SBAS (Satellite Based Augmentation Systems) receiver for use within the WAAS (Wide Area Augmentation System) and EGNOS (European Geostationary Navigation Overlay Service) networks at no extra cost.

What GPS protocols are supported by the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver can output the NMEA and SiRF binary protocols. The receiver outputs NMEA data by default. If you connect to the receiver using Trimble GPS field software, NMEA output is switched off. The GPS Controller software can be used if you need to re-enable NMEA output.

How many Bluetooth connections can you have with the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver has one Bluetooth serial port, so only one device and application can be connected to the receiver at a time.

What is the range of the Bluetooth connection?

The GPS Pathfinder XB receiver has a class 2 Bluetooth device that has a nominal range of 10m. The actual range of the Bluetooth connection will depend on the field device being used, how and where the GPS Pathfinder XB receiver is mounted, and the environment you are working in.

Can I use an external antenna with the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver is designed to achieve 2–5 m (HRMS) accuracy with the integrated antenna. It is possible to connect an external antenna that has a MCX connector, but this is not necessary as the receiver is optimized for best performance with the internal antenna, and it is compact and lightweight so can be mounted in a way to have the best view of the sky.

How do I use the GPS Pathfinder XB receiver to ensure best performance?

The GPS Pathfinder XB receiver is designed to be used with the antenna (under the Trimble logo) horizontal and with a clear view of the sky. A mounting bracket with 5/8 inch screw thread for use on a pole or backpack is available as an optional accessory. Alternatively the receiver can be attached to a baseball cap.

Although the receiver will track satellites if used in a non-horizontal position such as your shirt or trouser pocket, Trimble recommends that you mount the receiver horizontally while recording GPS positions for best performance.

When collecting point features or vertices, Trimble recommends that you log GPS data for at least 30 seconds, using a 1 second logging rate. Collecting multiple positions for a static feature helps to improve accuracy by averaging out the errors in individual GPS positions. In heavy canopy, or other difficult environments, logging for 1 to 2 minutes is recommended.

Pausing briefly (5 to 10 seconds) before logging a point feature or vertex also helps to get the best performance from the receiver. This allows you to ensure that the receiver is horizontal and correctly located over the feature you are mapping, and allows the receiver to settle so that positions are not influenced by the receiver having recently been moving.

How is the GPS Pathfinder XB receiver powered?

The GPS Pathfinder XB receiver comes standard with an integrated lithium-ion battery that provides 10 hours of battery life in normal use. The battery is internally rechargeable using the international power supply that comes with the system. It takes 2 ½ hours to fully recharge the battery.

Can I use the GPS Pathfinder XB receiver as a reference station?

No, the GPS Pathfinder XB receiver does not support carrier logging and cannot be used as a reference station.

What is standard out of the box with the GPS Pathfinder XB receiver?

The GPS Pathfinder XB receiver ships standard with:

- The GPS Pathfinder XB receiver
- Power supply with international adapter kit, for charging the battery

- Vehicle power supply adapter
- Getting Started Guide

What optional accessories are available for the GPS Pathfinder XB receiver?

- Mounting bracket with 5/8 inch screw thread for use on a pole or backpack
- Backpack
- One foot pole—for backpack mounting

Where can I get more information?

Visit the Trimble website at www.trimble.com for further information or contact your local Trimble Reseller.

GPS Pathfinder XB receiver is not available for sale in the EU.