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GPS Pathfinder XC Receiver: Customer FAQs

What is the GPS Pathfinder XC receiver?

The GPS Pathfinder[®] XC receiver is a CompactFlash card based GPS receiver that provides 2 to 5 meter (HRMS) accuracy after post-processing. It can be used in field computers with Type I or Type II CompactFlash slots for a cable-free and integrated solution.

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

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

- Improved productivity in harsh environments. The GPS Pathfinder XC receiver has been specifically 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.
- Postprocessed differential correction with 2 to 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 XC receiver?

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

- TerraSync[™] software version 2.61 or later
- Trimble GPScorrect[™] extension for ESRI ArcPad software version 2.11 or later
- Trimble GPS Analyst[™] extension for ESRI ArcGIS software version 2.00 or later
- Trimble GPS Controller software version 2.10 or later
- Applications developed with GPS Pathfinder Tools Software Development Kit (SDK) version 2.10 or later
- Third-party field software that supports NMEA input

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

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

You can use the receiver with any field computer that supports Type I or Type II CompactFlash cards, and runs one of the following Microsoft® Windows® operating systems:

- Windows Mobile® 2003 software for Pocket PCs
- Windows Mobile version 5.0 software
- Windows Mobile version 6 operating system
- Windows CE .NET

The Trimble® Recon® handheld with the updated Extended CF-cap is the ideal field computer for use with the GPS Pathfinder XC receiver. If you prefer a full keypad, the Trimble Ranger™ handheld with an Extended CF-cap™ is also compatible.

When using a Trimble Recon handheld, you must also use the 2nd edition of the Extended CF-cap that has increased internal space to accommodate the GPS Pathfinder XC receiver.

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

Data for postprocessing can be collected with TerraSync software version 2.61 or later, GPSCorrect extension version 2.11 or later, GPS Analyst extension version 2.00 or later, or an application developed with GPS Pathfinder Tools SDK version 2.10 or later.

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

The GPS Pathfinder XC 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 XC receiver?

The GPS Pathfinder XC receiver is not specified to provide real-time differential corrections.

If SBAS is enabled in the field software, the GPS Pathfinder XC receiver will attempt to track EGNOS (European Geostationary Navigation Overlay Service) satellites in Europe and in some conditions may receive real-time EGNOS corrections. However the GPS Pathfinder XC receiver will *not* track WAAS (Wide Area Augmentation System) in the United States.

For best SBAS results, the GPS Pathfinder XB receiver is recommended.

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

The GPS Pathfinder XC 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.

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

The GPS Pathfinder XC receiver is designed to achieve 2 to 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.

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

The GPS Pathfinder XC receiver is designed to be used with the antenna horizontal and with a clear view of the sky.

Although the receiver will track satellites if used in a non-horizontal orientation, Trimble recommends that you orient 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 XC receiver powered?

The GPS Pathfinder XC receiver is powered from the field computer's battery through the CompactFlash card interface. When the field computer is powered off, the GPS Pathfinder XC receiver is also powered off.

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

No, the GPS Pathfinder XC 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 XC receiver?

The GPS Pathfinder XC receiver ships standard with:

- The GPS Pathfinder XC receiver
- Getting Started Guide

Where can I get more information?

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