



# Ashtech Locus

**The Easy-to-Learn, Simple-to-Use, Cable-Free GPS Survey System for High-Accuracy, High-Productivity Applications**

- Centimeter-level accuracy
- Cable-free
- Easy operability



The Ashtech® Locus™ survey system packs simplicity, reliability, accuracy and affordability into a fully integrated system ideal for a variety of tough survey applications.

## **A Comprehensive Survey Package**

With up to 100 hours of operation on standard "D" cell batteries, convenient one-button operation, and a fully automatic Windows® 95/NT processing software package, Locus allows you to perform a multitude of surveys effortlessly and economically. From centimeter-level static surveys such as control and boundary, to kinematic jobs such as topographic or as-built surveys, Locus provides everything you need for reliable, accurate results.

Locus can be used as a two-receiver system or expanded to include three or more receivers. Use it by itself for routine surveying, or team it with traditional survey instruments in instances where GPS surveying alone is not feasible.



## **Completely Cable-Free**

We've made this survey system as easy to use as possible. Locus completely does away with cables, so you're not bogged down with complicated set-up procedures. There's nothing to plug in, nothing to connect, and no heavy equipment to haul, so you can be up and running quickly. The lightweight and compact design makes it easy for one person to comfortably carry, set up and manage multiple receivers at a time.

## **Powerful Software Provides Field-to-Finish Results**

Running on a standard Windows platform, Locus Processor software provides simple and accurate data processing within a user-friendly graphical interface that provides a true representation of your fieldwork. The software is replete with quality analysis tools designed to ensure accurate and reliable results, and also includes several other useful features, such as Mission Planning, GPS data processing, least-squares adjustment, report creation tools, data export to standard formats, and more.

For example, automatic "blunder detection" tools help ensure proper processing the first time by efficiently pointing out problem data to the user. And with fully automatic processing, Locus Processor software consistently provides the best possible solutions without your having to manually process and manipulate data.

## **Built for Optimum Versatility and Mobility**

The Locus handheld data collector adds flexibility to your fieldwork while enhancing the quality of your data. The software program card fits snugly into the back of the hand-held for added convenience and versatility, making software upgrades easy. For basic surveying operation, the Locus hand-held is a valuable option that provides detailed statistics on receiver operation and data collection status. It also allows users to enter point-specific attribute information in the field, removing this task from the person processing the data. When performing high-productivity surveys such as Stop-and-Go Kinematic, the hand-held is required for entering point-specific attribute information in the field.

## **The Economical and Dependable Way to Survey**

The Locus survey system is your one-stop solution for reliable results at an affordable price. Combining ease-of-use with proven Ashtech GPS technology, Locus is today's answer for smart surveying.

Please contact your Ashtech dealer for detailed information about the Locus Survey System.

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# Ashtech Locus Specifications

## Physical

### Weight

- Unit weight: 1.75 lb / 0.8 kg
- With C Batteries: 2.38 lb / 1.1 kg
- With D Batteries: 3.00 lb / 1.4 kg

### Size

- Height: 5.70" / 0.145 m
- Diameter: 5.30" / 0.135 m

## Electrical

- Internal Memory: 4 MB
- Power: <1 watt
- Battery: Up to 100 hours of operation with alkaline D-cells  
Up to 50 hours of operation with alkaline C-cells
- Status Panel: Four LED indicators for power, satellite tracking, memory, and an Occupation Time Indicator
- On/Off: Single button power
- Antenna: Integrated microstrip
- Communications: Infrared communications link, cable-less operation  
2400 – 57,600 baud rate
- Certification: FCC and CE Mark approved

## Environmental

- Operating Temp.: -20° to +65° C
- Storage Temp.: -40° to +85° C
- Weather: Meets MIL-STD 810E
- Shock: 2.2 meter pole drop

## Static Survey Performance<sup>1</sup> (rms)

- Horizontal: 5 mm + 1 ppm
- Vertical: 10 mm + 2 ppm
- Azimuth: <1 arc second

## Kinematic Survey Performance<sup>1</sup> (rms)

- Horizontal: 12 mm + 2.5 ppm
- Vertical: 15 mm + 2.5 ppm
- Occupation: 2 – 5 epochs recommended

## GPS Performance

### L1 C/A code and full cycle carrier

- Time to First Fix (95%):  
Warm Start: <60 seconds  
Hot Start: 12 seconds

## Datalogging to internal memory

- Datalogging:  
Epoch Interval: 2 to 999 seconds  
Capacity: >110 hrs @ 15 sec. measuring time\*  
>15 hrs @ 2 sec. measuring time\*

## Standard System Accessories

- (1) Infrared Communication devices
- (1) Locus™ Processor software kit
- (2) Height measuring systems
- (2) Padded carrying cases
- (2) Field survey cards
- (2) Manuals

## Additional System Configurations

- 2-Locus Kinematic System
- 3-Locus Static System
- 3-Locus Kinematic System

## Optional System Accessories

- Rugged Transit case
- Kinematic Survey Kit
- Handheld Kit
- HP 48GX Calculator
- Locus Processor Site License

## Locus Processor Software

Locus processor is a complete Windows™ based post-processing package that includes: project management, mission planning, automatic data processing, data workbook, quality control, network adjustment, and data analysis tools.

## Software Requirements

### PC with the following operating system:

- Windows 95 / NT 4.0 or later  
35 MB disk space required for installation

### Recommended minimum system requirements:

- Pentium 133 or higher and 32 MB RAM

<sup>1</sup>Accuracies assume minimum of 5 satellites, following the procedures recommended in the product manual. High-multipath areas, high PDOP values, and periods of high-activity atmospheric conditions will degrade accuracy. Post processing with Locus Processor™.

\* based upon 5-satellite data

Specifications are subject to change without notice.

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