



**A robust, turnkey system with dynamic accuracy to 1-3 meters.**

Real-Time Differential GPS involves operating a GPS receiver (Base) at a known location, where it observes the range errors of each GPS satellite and broadcasts corrections directly to a mobile GPS receiver (Remote) by radio, phone or other communications link. The remote's software then makes an integrity assessment and computes an instantaneous position fix.

Ashtech Ranger™ or M-Series receivers equipped with the Real-Time Differential GPS option do not require an external computer or complicated setup procedures. With 12 independent channels tracking all satellites in view, one base station can service any number of remote units within the

limits of the data link. (Any receiver may be designated either "base" or "remote" unit by a single front panel key entry.)

Remote receivers use the broadcast corrections to update their positions every half-second . . . with a differential accuracy of 1-3 meters rms (PDOP≤4).

Differential corrections are output in standard RTCM SC-104 (Version 2.0) or standard Ashtech format.

The Ashtech Differential GPS systems are available on a turnkey basis with an integrated digital VHF/UHF radio communications link. Each Ashtech XII receiver is equipped with two RS232 ports

for communications link as well as for data recording, position analysis and external system interface.

While Ashtech GPS receivers include operational status monitoring, they are also designed for automatic unattended operation in the Differential Mode. If a power outage occurs, the receiver will restart automatically.



1170 Kifer Road, Sunnyvale, CA 94086  
Phone (408) 524-1400 • Fax (408) 524-1500



MULTI-SITE MISSION PLANNING

GPS/CADD

SURVEY DATABASE MANAGER

PRISM POST PROCESSING

## Precision, Power and Performance, from

Ashtech's comprehensive suite of GPS planning, processing and presentation software offer the practicing professional the best combination of interface and performance features.

### Multi-Site Mission Planning

With a keystroke or click of a mouse, users can display periods of good satellite coverage for each selected site... worldwide, along with Skyplots, satellite availability and many forms of DOP information. Advanced graphics aid interpretation and modification of individual parameters. This is the only program which automatically determines multi-site visibilities and the effects of multi-site obstructions on satellite availability.

### Survey Database Manager

Geodetic control and vector information data integrity are the primary building blocks of Ashtech's Survey Database Manager. Graphic display of stations and vectors aid project planning, evaluation of network design, and selection of tagged baselines for export. Users can print out station and vector information for reconnaissance or final reports.

### FILLNET Network Adjustment

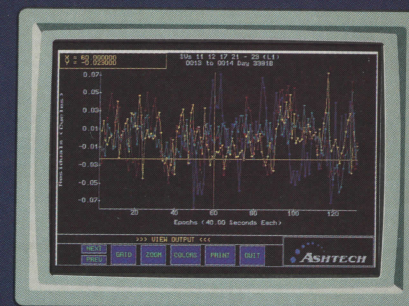
Ashtech's proven FILLNET has been upgraded to improve the performance of the Least Squares network adjustment. Input files include both Float and Fixed Double Difference solutions for all baseline vectors.

Through the graphic interface, setup parameters can be easily accessed and modified. Adjustments can be performed on many user-selected ellipsoids and geoid separations are automatically computed for each station.

### PRISM™ Post Processing

After downloading data, the user need only verify field entry information (antenna heights and meteorological data) and enter a known position prior to batch or manual processing in static, pseudo-kinematic, kinematic, or differential (DGPS) modes.

High-volume processing is assured with automatic cycle slip detection and correction algorithms. Processing parameters and observables, such as the Linear Combination (LC) and Widelaning, can be modified for flexible operator control. (Widelaning observ-



# PRISM

From downloading data to creating a final report, Ashtech's new automated PRISM™ software package assures a successful GPS survey. At the heart of the package are the processing algorithms which consistently produce precise baseline vectors and station positions from C/A code, codeless L2 and P Code single and dual frequency data.

Through a top-level, multi-graphic interface, the auxiliary packages—Mission Planning, Fillnet, GPS/CADD, and Survey Database Manager can be accessed with a simple click of the mouse. Statistical information accompanies baseline vector and station positions. Once all data is processed, output files pass to the Database for storage and/or Fillnet for a least-squares network adjustment.

Call or write for details: Ashtech, 1170 Kifer Road, Sunnyvale, CA 94086. Phone (408) 524-1400, Fax 524-1500.

## ... from Field to Finish!

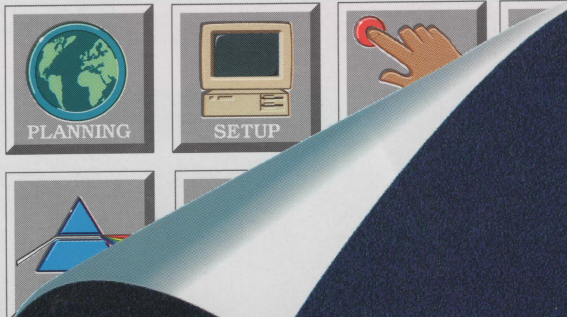
ables are especially suited for Rapid Static surveys as well as long baselines, increasing the ability to fix ambiguities with shorter observation spans).

### GPS/CADD Computer Aided Drafting and Design

The newest addition to Ashtech's comprehensive suite of PRISM surveying software is GPS/CADD—a multi-level package of advanced GPS solution modules.

Through a simple-to-use graphic interface program, point and vector information is imported directly into the Basic CAD module, facilitating the generation of survey network plots for analysis and inclusion in final reports.





ASHTECH PRECISION GPS  
SURVEYING SOFTWARE

# PRISM



Ashtech's comprehensive suite of GPS planning, processing and presentation software offers the practicing professional the best combination of interface and performance features. Call for details.

**1(800) 229-2400**



1170 Kifer Road, Sunnyvale, CA 94086 • Phone (408) 524-1400 • Fax (408) 524-1500

Circle 27