



**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

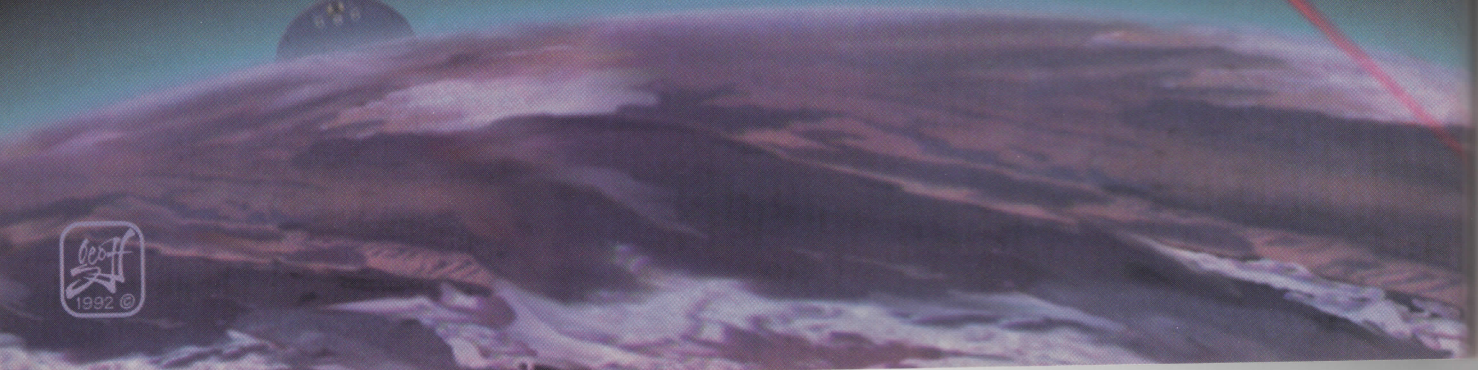
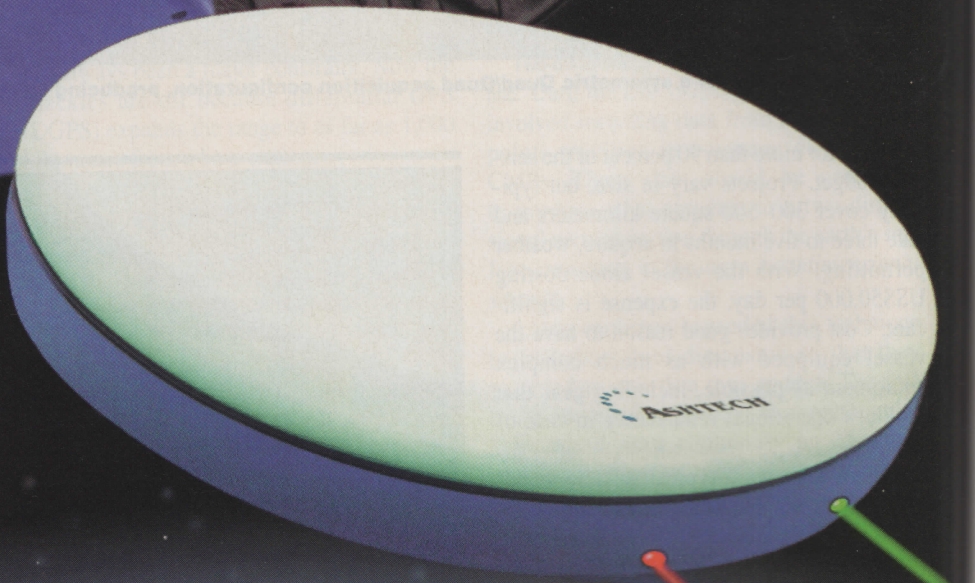
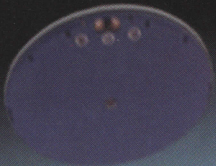
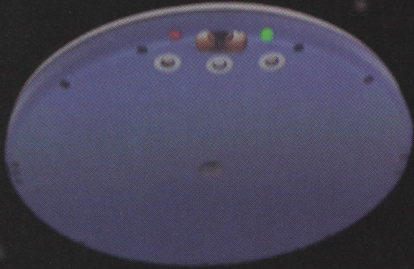
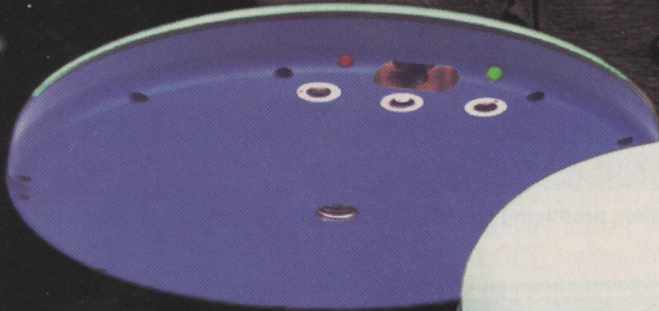
for communications link as well as for data recording, position analysis and external system interface.

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

# DIMENSION



po  
di  
me  
  
re  
lev  
su  
  
ca  
sa  
ca  
ac  
pro  
var

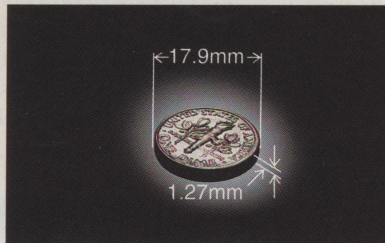
*When the green light is on...*

## DIMENSION...accurate to the dimensions of a dime

The 10-cent coin in your pocket is only 1.79 centimeters in diameter and just over 1 millimeter thick.

Ashtech's new compact GPS receiver brings this millimeter level accuracy to first order surveying ...automatically!

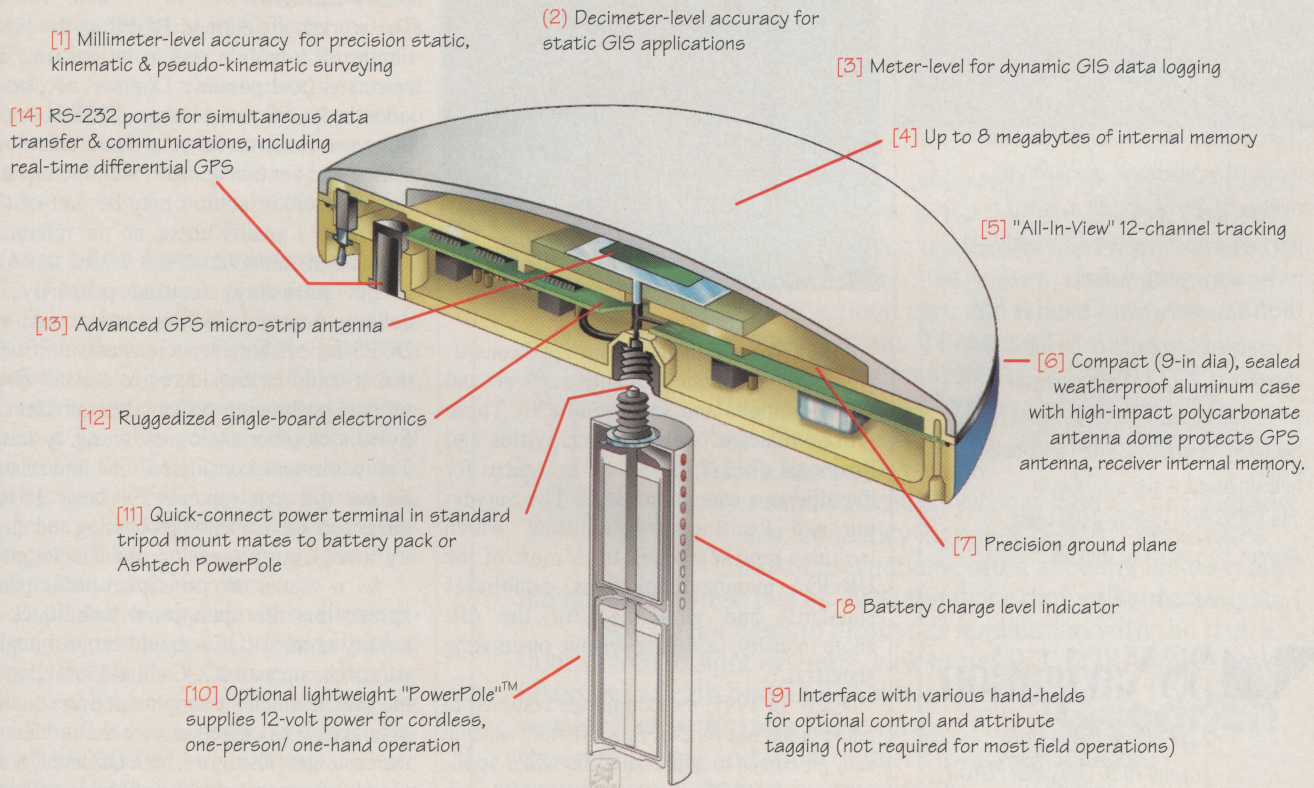
Ashtech's unique 12-channel "All-In-View" capability eliminates the need to coordinate satellite selection between sites. High precision carrier and code phase measurements assure accurate position results. Powerful post-processing software packages support a wide variety of surveying and GIS applications.



DIMENSION, the most advanced GPS receiver commercially available today, is also the easiest to use; simply turn the power ON to begin the survey; turn it OFF to end it. The green LED light indicates that all available satellites are being tracked and data recorded. In

GIS configuration, DIMENSION is ideal for easy data logging. Output files readily integrate into existing data bases for fast, accurate map updates compatible with standard GIS formats.

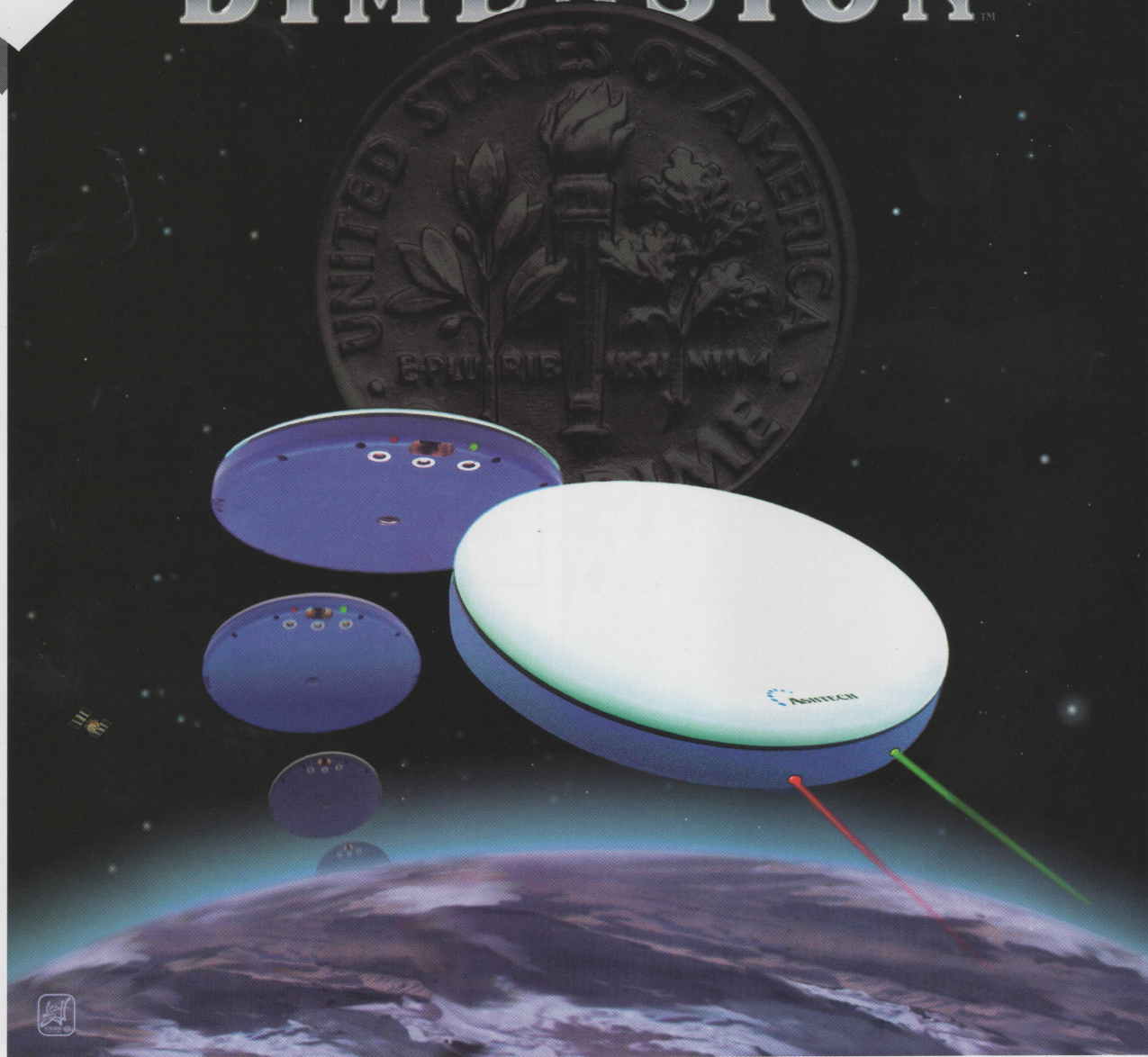
Call Ashtech for complete information about DIMENSION™ as well as Ranger™, M-XII, Dual P-Code and other Ashtech GPS receivers.



Circle 23

**GPS**

# DIMENSION™



## DIMENSION...the compact GPS receiver with accuracy equal to the dimensions of a dime!

- Millimeter-level accuracy for precision static, kinematic and pseudo-kinematic surveying
- Decimeter-level accuracy for static GIS applications
- Meter-level for dynamic GIS data logging
- "All-In-View" 12-channel tracking
- Up to 8 megabytes of internal memory
- Compact (9" dia), sealed weather-proof aluminum case with high-impact antenna dome protects GPS antenna, receiver and internal memory
- Fully automatic...green light indicates that satellites are being tracked and data recorded



- RS-232 ports for simultaneous data transfer and communications, including realtime differential GPS
  - Interface with various hand-helds for optional control and attribute tagging (not required for most field operations)
  - Optional lightweight "PowerPole"™ supplies 12-volt power for cordless one-hand operation
- Battery charge level indicator
- Call Ashtech for complete information about DIMENSION™ as well as RANGER™, M-XII, DUAL P-CODE and other Ashtech GPS receivers.