Foot Tracker

Pedestrian inertial dead reckoning



VMSENS Inertial Technologies (BeiJing) CO.LTD TEL: +86-10-85376216 FAX: +86-10-85376216 E-mail: contact@vmsens.com WEB: www.vmsens.com The Foot Tracker is a personal inertial navigation system for personnel on foot that provides the user's position relative to an initialization point. Using the VMSENS devices, the Foot Tracking utilizes advanced algorithms to track an individual's precise position in buildings, urban canyons, subterranean environments, and other GPS denied areas.

The Foot Tracker can be directly interfaced to many GPS receivers and mobile-computers. The Foot Tracking is a reliable GPS supplement for personnel on foot. The unit is small enough to be easily strap on human body,

Compared to traditional navigation system, without infrastructure/ marker build, the Foot Tracker offers greatly improved accuracy by measuring actual stride length and direction of the user.

The Foot Tracker can be used applications include personnel tracking (fire, police, and security), real-time waypoint navigation, disaster relief operations, and cell phone signal strength mapping.

Features

- Real-time computed working distance and heading
- Multi- platform support for system development
- Provides position data in GPS denied areas (indoors and outdoors)
- Compatible with aiding technologies (i.e. RF, GPS, UWB)
- No calibration needed

Performance

The Foot Tracker fuses advanced zerovelocity update algorithms (ZVU) with external positioning systems to provide accurate three dimensional positions and location coordinates. Foot Tracker also can be used to analyze walking motion to get the human body posture (stand/ fall down/went down).





The Foot Tracker is currently in development with technology demonstrations available. Contact us for strategic partnership opportunities and pre-production Foot Tracking system VMSENS Inertial Technologies (BeiJing) CO.LTD TEL: +86-10-85376216 E-mail: contact@vmsens.com WEB: www.vmsens.com



Test Result



Theory

Applications

- Training & simulation
- Mission Rehearsal
- Dismounted soldier training
- Wide-Area Walking Tracking Simulation
- Personnel tracking (fire, police, and security)
- Real-time waypoint navigation
- RF signal strength mapping



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