

TRIMBLE: Rock the World for 40 Years

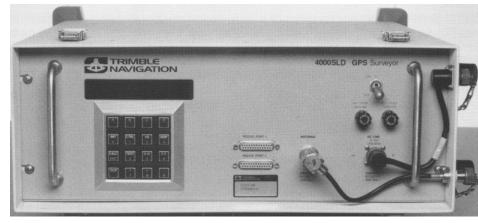
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First GPS Trimble (1983-1987)

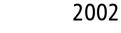






GNSS evolution









GNSS











Controllers evolution





Transforming The Way the World Works



Agriculture



Heavy Civil Construction



Building Construction



Geospatial



Transportation & Logistics



Forestry



Rail



Environmental & Waste



Electric Utilities & Telecommunications



Mining



Water Utilities



Field Service



Oil, Gas & Chemical



OEM, Automotive & Consumer



Government



Urban Survey Methods















Total station with scanner option Trimble SX10





Trimble SX10 Scanning Total Station

AND THEN THERE WAS ONE!

- Innovative
 - True merging of high-speed scanning, enhanced imaging and high accuracy surveying
- Familiar
 - Completely integrated into traditional surveying workflows in the field AND office
- Versatile
 - Expand your business opportunities with a single investment



Trimble MX9

A Mobile Mapping Solution for Large-Scale Scanning and Mapping Missions

- Very high point cloud density with complimentary immersive imagery
- Advanced Trimble GNSS and Inertial technology
- Lightest and most compact premium mobile mapping system
- Simple installation and browser based operation from any smart device
- Compatible with existing Trimble software and workflows
- Enhanced remote support capabilities







The Idea



is a photogrammetry software designed to transform

Image Raw Data to Spatial Information

i.e. Point Clouds, Surface Models, Orthophoto Mosaics, Georeferenced Images







20 years in the making...

"Never mistake a clear view for a short distance"





1997, first Trimble augmented reality patent filed 2016, first production-caliber mixed reality



Design

Problems:

Stakeholder buy-in. Design misunderstandings. Collaboration. Workflow efficiency from design -> fabrication.

Solution:

Add human context to your design by taking it off the screen and into 3D. Rapidly iterate on 3D design with near real-time sync. Advanced presentation tools enable your clients to walk through and experience their building as if it had already been constructed. Collaborate on the design with the other stakeholders with "holographic telepresence." Push your design from the office (SketchUp Viewer) to the field (Trimble Connect), remaining in 3D through the process.

Supported Hardware: HoloLens (coming soon: Rift, Vive, Windows Immersive, iOS, Android)

Active Users: 400+ (released November 2016)

Primary Target Market Segments:

- Architecture (SMB & Enterprise)
- Interior Design (Residential & Commercial)
- Kitchen & Bath Renovation
- Retail Layout



Build

Problems:

Project complexity and unqualified workers. Difficult to coordinate complex layered 3D models, clashes, rework, cost/time overruns.

Solution:

Accurately (3-5 cm) overlay <u>all</u> of your BIM data directly on site to identify issues faster, track progress, and ensure quality installs. Reduce rework by adding 3D perspective and layering to coordination, aligning the expectations of all stakeholders. Democratize the data for and provide remote collaborative support to unskilled workers.

Supported Hardware: HoloLens

Active Users: 500+ (released February 2018)

Primary Target Market Segments:

- General Contractors
- Sub Contractors (Mechanical, Electrical, Plumbing, Structural)
- Construction Management
- Engineering Firms



Trimble XR10 with HoloLens 2

- Co-announced 2/24/19 with Microsoft at MWC Barcelona
- Mixed-reality HMD using Microsoft HoloLens 2 components
 - Manufactured and sold exclusively by Trimble
- Hard hat integration to enable mixed reality workflows in safety-controlled environments
 - Construction
 - Oil, Gas, & Chemical
 - Manufacturing
 - Automotive





https://www.microsoft.com/en-us/hololens/hardware





Thank you for your attention!

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