

New Features in PhotoMesh Release 7.2

This new release introduces significant performance improvements, improved point cloud and mesh quality, loading of full motion video files, expanded build output capabilities, and an array of usability enhancements.

Improved AT Success Rate and Quality

- Better handling of unordered and low-overlap datasets.
- Improved AT result (lower median error).
- Automatic extraction of features from all levels.
- Multi-AT calculation.
- Dynamic definition of match quality.
- Support for external aerotriangulation results from professional systems (Inpho, Bingo).



Improved Point Cloud and Mesh Quality

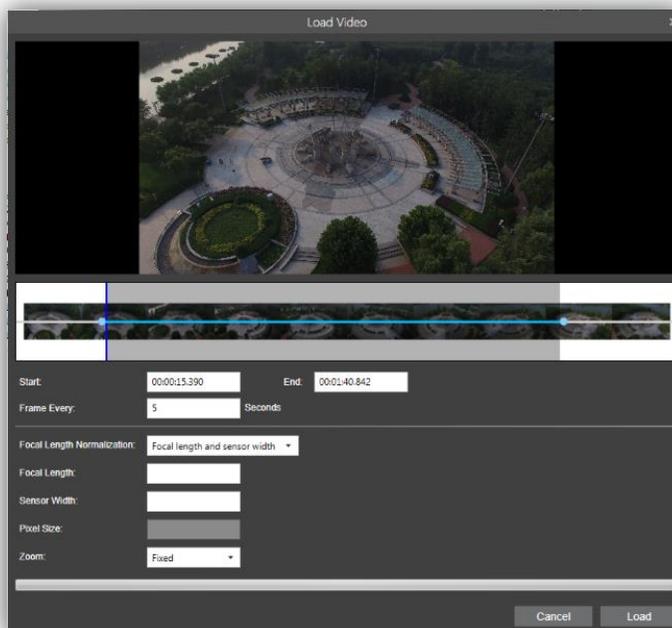
- Improved dense point cloud mechanism – Clustering avoids memory overload cases and often produces denser cloud.
- Enhanced reconstruction of trees and solid surfaces using multi-resolution point cloud model.



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Load Full Motion Video Files

Full motion video (FMV) files can be loaded, and their frames automatically extracted and added to the project. In the easy-to-use video editor, a video can be previewed and the start and end times for the extraction easily defined. All popular video formats are supported.



Water Bodies

Import and export of water body polygons and enhanced water body editing tools make it easier to accurately define your water body area.

Build Outputs

- Subset areas of a project can be defined using reconstruction area polygons.
- Accurately cut 3D model.
- SPK tool converts I3S output to a compressed SPK package.



Usability Enhancements

- Relative to Base – Supports data collection with altitude relative to base (drones).
- Reorganization of tab commands and addition of new View tab make it easier for you find the commands you need.
- Loading of raster and 3D mesh layers from SkylineGlobe Server.
- Disconnected PM - New ability to load base terrain from a local file enables you to work in a disconnected environment.
- Objects, layers, control points, and water polygons can now be added also in Review mode and even when a build is in progress, thus allowing initial build results to be immediately incorporated in the final build.
- Color-coded coverage map displays camera coverage based on either the photos' original positions or their calculated positions.
- Water body polygons can be imported from a shapefile or KML making it easier to accurately define your water body area.
- Improved stability and build fixes.

Build Settings

- New parameters added to build settings include:
- Ground control point factor
- Mesh resolution
- Tile vertical clipping buffer



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Software and Hardware Requirements

Operating System	Windows® 7 / 8 / 10 / Server 2012 R2 – 64 bit required.
System Memory	16 GB RAM (32 GB recommended).
Video Card	1GB of video memory (2GB or more recommended). Pixel and vertex shader v3.0.
Processor	4 cores (8 cores recommended). PhotoMesh works best in a multi-core environment and can utilize multiple CPU's and hyper-threaded processors.