



POWERING GEOSPATIAL IMAGING™

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DSW700 Digital Scanning Workstation



Improve your digital workflow
with high-performance scanning



The Geospatial Imaging Chain

The Geospatial Imaging ChainSM consists of geographic imaging solutions designed to capture, reference, measure, analyze and present data in a format that is useful to geospatial information professionals. This end-to-end workflow turns data into information and information into knowledge. Leica Geosystems GIS & Mapping offers the best solutions in the industry across all links in the Geospatial Imaging Chain.



DSW700 Digital Scanning Workstation

A new generation of high-performance scanning

A key ingredient in a successful digital photogrammetric production workflow is high-performance scanning. In order to meet the demands of projects that often necessitate overnight roll-film scans, production photogrammetrists require high optical resolution at a very high speed.

The Leica DSW700 Digital Scanning Workstation from Leica Geosystems GIS & Mapping meets market demands for a photogrammetric scanner with higher performance, greater functionality and improved return on investment. Building on the industry leading tradition of its predecessors, the DSW700 offers precision scanning of color or black and white film transparencies on both cut and roll film, providing digitized image data to digital photogrammetric workstations running Leica Photogrammetry Suite (LPS), ERDAS IMAGINE[®] software and any digital photogrammetry or image analysis systems.

For over 80 years, geospatial information professionals have looked to Leica Geosystems for the best in photogrammetric solutions across the Geospatial Imaging ChainSM. Continuing with that tradition of industry leadership, the Leica DSW700 is the premier scanner for commercial photogrammetric production.

Improved performance for better accuracy

Commercial scanner users rely on scanning systems to process major photogrammetry jobs with consistent accuracy, without the need for many adjustments. In order to achieve optimal results without correction, it is essential that the initial scanning process facilitate getting as true an image as possible.

The DSW700 features a new three color LED light source, to enable more consistent illumination, increasing the illuminated area to accommodate a larger sensor. The new design prevents dust and dirt accumulation during scanning, with a minimized optical path which goes directly to the digital sensor. The direct LED light source also keeps the stage and optical path free from unwanted heat sources, ultimately leading to improved image quality.



The high precision nature of imagery scanned on a DSW700 makes it ideally suited for rigorous photogrammetric mensuration tasks.



Capable of scanning either color or black & white film transparencies, a large-area 12-bit sensor scans imagery at the highest possible color fidelity.



The DSW700 has the ability to set the true optical pixel size anywhere in a range of 3-22 microns per pixel.

Increased speed and enhanced functionality

Whether processing large or small projects, the goal is to proceed from image acquisition to triangulation as quickly as possible. Scanning color or false color film presents a major time challenge.

In addition to enhancing the image quality, the new LED light source also provides a more efficient implementation of sequential color capture than ever before, resulting in three band color captures with speeds comparable to black and white captures in previous models. When combined with the high-performance sensor, the three color LED light source reduces capture noise, produces faster capture time and improves tonal sensitivity. Precise CCD image geometry and low distortion optics provide an essentially distortion free image.

The DSW700 also offers increased flexibility with optical pixel sizes that can be changed on a project, roll or film basis to obtain maximum speed capability. The entire area of each pixel is responsive to light, enabling high throughput speed.

Quality improvements – Newton Rings no more

The phenomenon of Newton rings is one of the oldest issues in film printing and scanning. These ring patterns, formed by space in between pressure plates, have become a common by-product of scanned images.

The DSW700 features anti-reflective glass on the stage and cover plates. By reducing the amount of reflection between the pressure plates, the visibility of Newton rings can be dramatically reduced, and in some cases eliminated.

Protecting the return on investment

Consistency in the basic design of all DSW models makes it easy for current Leica DSW scanner customers to upgrade their systems to DSW700 status. Old components can quickly and easily be replaced in the field with the enhanced components of the DSW700. The easy upgrade path protects the initial investment, offering customers a cost-effective way to enjoy the increased productivity and improved quality of the newest technology without replacing their entire system.

Capture the power of a better scanner

Capture the benefits of an industry leader in high-performance scanning. Improved speed and functionality, enhanced image capture capabilities, and great return on investment value combine to make the Leica DSW700 Digital Scanning Workstation a market leader in high-performance scanning. Call +1 877 463 7327 or send e-mail to info@gis.leica-geosystems.com for more information.