ESSENTIAL IMAGE PROCESSING TOOLS FOR THE TACTICAL USER

ELT/3500® software is ideal for users who need a broad range of image exploitation capabilities, but who don’t require the advanced exploitation functionality of a high-end product like ELT/5500®. ELT/3500 offers a broad range of image exploitation tools along with a high-speed processing engine. ELT/3500 runs on standard laptop or PC hardware, providing robust performance during even the most memory intensive processes. NITF-certified up to CLEVEL 07, ELT/3500 is a proven performer and sets a new standard for ease-of-use, performance, and affordability.

ROBUST PERFORMANCE

Trusted by analysts for maintaining the highest image quality standards and insuring that pixels are in the right place, ELT/3500 is specifically designed to handle large imagery with ease. In addition, the Geospatial Solutions software development teams have worked extensively with monitor and graphics card manufacturers to optimize hardware and software performance levels. These enhancements are most evident in the ultrasmooth and jitter-free roaming performance. The Multi-Window support allows users to open multiple ELT windows maximizing a computer’s resources by executing from a single instance of the application.

INTUITIVE INTERFACE

- Ribbon Toolbar Interface
- Tab-based Multiple Document Support
- Multiple Window/Monitor Support
- User Interface Theming
- High Resolution Icons/Graphics
- Rich Tooltips
- Contextual Awareness
- Enhanced Mouse Control Options
- Gallery of Open Documents
- International Language Support
- Dynamic Range Adjust Window
- Extendable through Add-In Interface

EXPORT WARNING

This document does not contain export-controlled technical data and is approved for international release. However, the products depicted are controlled under the U.S. International Traffic in Arms Regulations, and require approval of the U.S. Department of State prior to export.
**CHANGE DETECTION**

Change detection tools are ideal for identifying natural and man-made differences between images collected over time. Powerful compare tools such as colorized difference, blend, wipe, and color queue help quickly reveal changes and similarities between two images. Common applications include tracking urban and rural development, detecting environmental changes, and monitoring facilities.

**IMAGE ENHANCEMENT**

Powerful Image Processing Operations (IPOs) are available for visualizing and adjusting image display, which can be applied to the entire image or just a portion using a defined Region of Interest (ROI). The convenient Image Sampler streamlines users’ workflow by displaying previews of multiple IPOs simultaneously in a single window. For example, Brightness and Contrast, Sharpness, and Laplacian Edge Detection previews can be viewed side-by-side to compare and identify the best option prior to applying an IPO to the entire image or an ROI. The Image Sampler is customizable, and also includes zoom tools and a level adjustment slider to make it easy to fine tune user specified preview settings.

**GEOMETRY-BASED DATA DISCOVERY**

Users can open files containing specific geo coordinates right from their favorite’s directory. Geo Search enables users to quickly find relevant data resulting in a streamlined workflow. By simply selecting a point in an open document, Geo Search opens and provides the user with a list of files containing the cursor coordinate position.

**PRODUCT CREATION**

ELT/3500 offers advanced product creation support, which is valuable when generating documents for dissemination. Templates are helpful in communicating information contained in an image file in a clear and concise format, including annotations, graphics, logos, scale bars, north arrows, pixel and measured grid, text labels and text strings derived from document/image metadata. The export to PowerPoint option enables ELT/3500 users to quickly export products or the Main Window display to PowerPoint with just a single point-and-click. Users have the option to create a new presentation or add slides to an active presentation.

**IMAGE DISPLAY TOOLS**

- Crop, Scale, Rotate, and Flip
- Display Level Processing
- Brightness Adjustment
- Contrast Adjustment
- Dynamic Range Adjustment
- Gamma Correction
- Hue Reduction
- Hue Saturation
- Tonal Transfer Curves (TTC)
- Reduced Resolution Data Set Generation
- Multi-Level RRDS Support
- On-Demand RRDS Generation
- Transformal Generation
- Manually Enable/Disable Equalization

**IMAGE MANIPULATION FEATURES**

- Ultra Smooth Pan and Zoom
- Dynamic Quality Room (DQR)
- Dynamic Reduction Room (DRR)
- Pan Window
- Auto Pan
- Auto/Custom Paths Support
- Smooth Zoom
- Smooth Rotation
- Zoom Window and Chipping
- Floating Zoom Window and Chipping
- Zoom to Mouse Point
- Mouse Region Zoom

**IMAGE COMPARISON**

- Blend
- Colorized Difference and Color Queue
- Flicker
- Vertical/Horizontal Wipe
- Two-Way, Left/Right, Top/Bottom
- Reposition Layer

**IMAGE EXPLOITATION FEATURES**

- Image Processing Sampler
- Enhance: Stretch Contrast, Piecewise, Contrast, Binary Threshold, Adjust, Brightness Contrast, Color Invert, Density, Slic, Gamma Correction, Linear, Smoothing, Mean, Median, Dynamic, Range Adjust, Sharp, Blur, Mean, Median, and Pseudomedian
- Edge Detections: Cross, Diamond, Grampian, Horizontal, Vertical, Laplacian, Left/Right Diagonal, Prewitt, Roberts, and Sobel
- Equalize: CLAHE, Exponential, Gaussian, Hyperbolic, Log, Hyperbolic, Rayleigh, and Uniform
- Convert: GrayScale, Indexed Color, and RGB Color
- Interest Detection
- Region of Interest (ROI) Generation
- ROI Image Processing
- ROI Chipping
- Transparency for Multiple Images

**DRA/HISTOGRAM WINDOW SUPPORT**

- Adjust DRA Histogram Posts
- ROI, View, and Full Image Histograms
- Zoom to Increase Clarity and Granularity
- Auto Zoom in to View Active DRA Range
- Band-Independent DRA adjustment

**PRODUCT & PUBLISHING SUPPORT**

- Template creation for report generation
- Add lookup label/logo map/logo
- Define and add a grid
- Add text/graphic objects
- Publish template/image to PowerPoint®

**SESSIONS FEATURE**

- Save Main Window configuration:
  - Open Documents
  - Rotation
  - Zoom Level
  - Display Settings

**GOOGLE EARTH™ COLLABORATION**

- Synchronized viewing with EIT/3500
- Fly to locations based on EIT/3500 view
- Import Google Earth results into EIT/3500

**SUPPORTED FORMATS**

- ADF
- ADF 2.0
- ARW
- BMP
- CRW*
- CR2*
- DNG*
- DOQ*
- DSR*
- ECW*
- ENV*/
- ERDAS*
- ENVI*
- EXR
- GIF
- JPEG
- JPEG 2000
- KMOD
- LandSat7*
- McId*
- NITF 2.0 & 2.1
- NSIF 1.0 & 1.1

---

* Read Only