

# GTXImage CAD™ Series, Version 11.5



For over a decade now professionals have been using the best 'Standalone' product in the Technical Imaging industry - the GTXImage CAD™ Series. Now, there is an even newer and better release of this industry landmark product series. These new product releases, GTXImage CAD™ Version 11.5 and GTXImage CAD™ PLUS Version 11.5, will add significantly to your ability to handle scanned drawings, maps and other raster images and bring them into your modern CAD, EDM or GIS environments.

Incorporating a number of new raster drawing & editing features, and including powerful, color reduction and separation tools, automatic image enhancement and clean-up tools, the new GTXImage CAD Series, Version 11.5 is a WINDOWS® based solution. Data and format compatibilities are quite rightly a major concern for every professional user and, uniquely, the GTXImage CAD Series, Version 11.5 products are 100% compatible with the AutoCAD® DWG/DXF formats, because the GTXImage CAD products use the same internal software engine that AutoCAD does to generate these data formats.

If you use scanned paper drawings, either black and white or color, in your current workflow, then the GTXImage CAD Series, Version 11.5 is a unique, cost-effective solution for bringing legacy drawings into your on-line environment. Modify and enhance scanned raster archives with the speed and flexibility of both raster and vector editing techniques. Whether your requirement is for raster cleanup, 2D CAD drafting, hybrid raster/vector editing or full automatic raster-to-vector conversion with intelligent text recognition, total flexibility is provided by this stand-alone product series.

GTXImage CAD Series Version 11.5 products now include the option of software licensing based on the new Macrovision® FLEXENABLED™ technology.



**The GTXImage CAD™ Series, Version 11.5 consists of 2 modules:**

**GTXImage CAD V11.5 &**

**GTXImage CAD PLUS V11.5**

**USER BENEFITS & PRODUCT HIGHLIGHTS**

**MORE EFFECTIVE USE OF EXISTING DRAWINGS & DESIGN ASSETS**

Restore, clean-up and update your scanned images efficiently, using powerful raster manipulation and editing commands. Then, if required, quickly and automatically convert selected geometry and text into intelligent entities.

**REDUCE DESIGN COSTS**

Merge critical legacy archives quickly and efficiently. Save up to 75% of labor costs compared to manual drafting or overlay conversion methods.

**EASY TO LEARN, EASY TO USE**

The GTXImage CAD Series V11.5 Products contain the AutoCAD® OEM Engine. All menus and toolbars are consistent with AutoCAD. This easy to learn interface allows novice and existing AutoCAD users to be immediately productive. The GTXImage CAD Series V11.5 products are intuitive and easy-to-use, providing a professional hybrid solution for both new and expert CAD, EDM and GIS users.

**IMAGE CLEANUP**

Quickly clean the scanned raster image with commands such as deskew, despeckle and crop. Or, erase any part of the image, with raster erase and raster outline. Then draw CAD vectors over the top of the image.

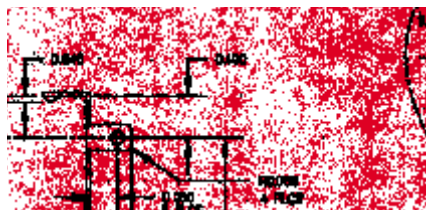
Operating either in fully automatic or manual modes, it is now possible to rapidly deskew & intelligently despeckle your scanned drawings. These

functions are capable of zoning a scanned file intelligently and applying different noise removal algorithms depending on the presence of text and other graphical elements.

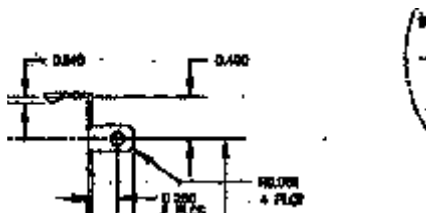
- Before



- During



- After



**INDUSTRY-STANDARD 2D CAD DRAFTING**

Complete two-dimensional CAD functionality is provided with support for multiple raster and vector layers, colors, linestyles and fonts. Anything from simple geometry such as lines, arcs, circles and text to complex CAD entities such as associative hatches, dimensions and multilines, can easily be created and or modified. Users can even modify existing DWG/DXF drawing files, including those created in the AutoCAD 2008 format.

**INTELLIGENT OBJECT PICKING™**

GTX's Intelligent Object Picking (IOP) technology allows you to work with raster entities as intelligent objects. Use this feature to select raster entities (line, arc, circle) even if touching other data. Use the All Text IOP to select all raster text entities. IOP preserves underlying geometry during erase and raster to vector conversion.

**EFFICIENT RASTER EDITING**

Raster editing features include both efficient cleanup and image restoration capability with powerful raster manipulation commands, allowing you to edit and save the raster data. Raster data can also be traced using AutoCAD design tools and stored or plotted as hybrid files. Or, convert vector entities into raster objects for archival purposes.

**AUTOMATIC RASTER-TO-VECTOR CONVERSION**

**(GTXImage CAD PLUS V11.5 Only)**  
Quickly convert any or all selected raster into rectified and accurate AutoCAD entities. Convert selected raster objects into intelligent AutoCAD entities such as lines, arcs, circles, polylines and true AutoCAD text. Its ability to recognize line styles, splines, cross-hatching, arrowheads, and also the ability to set a gap jump variable, further increase conversion accuracy.

**GTX® ICR™ TEXT RECOGNITION**

**(GTXImage CAD PLUS V11.5 Only)**  
GTX ICR provides true Intelligent Character Recognition (ICR), based on hybrid neural-net technology. Train the software to automatically recognize text characters associated with individual or company drafting styles. Train the software to automatically recognize text characters associated with individual or company drafting styles. This advanced technology even recognizes touching text and provides a dictionary and pattern matching to further improve your text conversion results.





### HANDLING COLOR SCANS

#### Easy to use **Color Reduction**

functionality to enable full color scan files to be reduced from up to 16 million colors down to between 256 & 4 colors, or even bitonal (black and white) images.

#### Before Color Reduction:-



#### After Color Reduction:-



#### A powerful **Color Separation**

facility to enable selected colors to be grouped together and separated into new layers and assigned an appropriate color of the user's choosing. Using the latest available color processing algorithms, **both GTXImage CAD V11.5 & GTXImage CAD PLUS Version 11.5** include the new gReduce, gSeparate & gBitonal commands.

#### Before Color Separation:-



#### After Color Separation:-



### GTXImage CAD Version 11.5

*Comprehensive scan clean up, color handling and raster, hybrid and vector editing capabilities.*

*The New Version 11.5 GTXImage CAD product contains a number of enhancements including:-*

- *New Raster Draw / Edit Commands*  
*gRectangle (Draw Rectangle)*  
*gLine2 (Draw Multiple Raster Lines)*  
*gSlice (Separate Raster Objects)*
- *IOP Outside (Select raster outside windowed area)*
- *Choice of Hardware or Software Licensing*

#### KEY FEATURES

*See back page for full listings within category.*

- Drawing Management
- Color Tools
- Image Cleanup
- Automatic Image Cleanup
- Raster Editing
- Hybrid Editing
- CAD Drafting
- Additional Product Features - see back page.

### GTXImage CAD™ PLUS V11.5

*GTXImage CAD PLUS V11.5 has all the raster editing and manipulation capabilities of GTXImage CAD V11.5, with the added functionality of automatic raster to vector conversion, text recognition and vector clean up tools.*

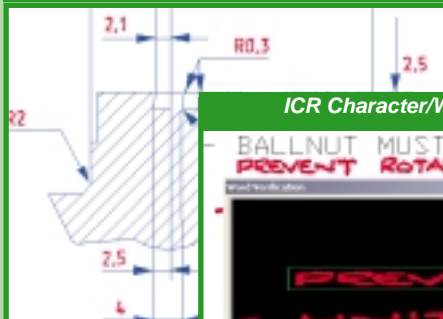
*The New Version 11.5 GTXImage CAD PLUS product contains all the new features as detailed for GTXImage CAD V11.5 in the previous column.*

#### KEY FEATURES

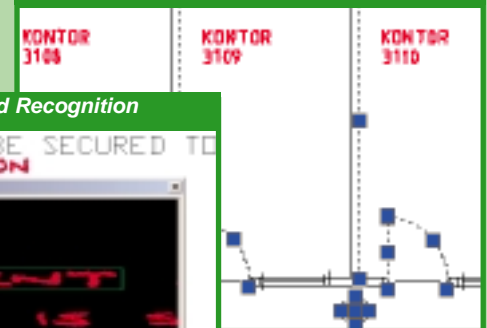
*See back page for full listings within category*

- Drawing Management
- Color Tools
- Image Cleanup
- Automatic Image Cleanup
- Raster Editing
- Hybrid Editing
- CAD Drafting
- Geometry Recognition
- Text Recognition
- GTX OSR Batch Conversion
- Vector Cleanup
- Additional Product Features - see back page.

#### Mechanical Conversion



#### Architectural Conversion



#### ICR Character/Word Recognition



#### Outline Conversion



#### Contour Conversion



## KEY FEATURES

- **The GTXImage CAD Series, V11.5 Products are based on the AutoCAD 2008 OEM engine**

### DRAWING MANAGEMENT

- Multiple Drawing Environment
- Cut raster image to file or buffer
- Insert a raster image or symbol into the current drawing
- Quick save of vector objects into the current drawing
- Convert vector objects to raster data for saving
- Create a new raster image

### COLOR TOOLS

- Color Separation
- Color Reduction
- Bitonal/Grey Scale Conversion

### IMAGE CLEANUP

- Interactive despeckle
- Image cropping
- Manual Despeckle and Noise Removal
- Turn image
- Correct distortion on warped images
- Move, copy, scale, mirror and rotate images
- Draw lines or erase raster
- Smoothing

### AUTOMATIC IMAGE CLEANUP

- AutoDeskew
- AutoClean
- Auto Deskew and Noise Removal

### RASTER EDITING

- **New Raster Draw Commands**
  - Draw Raster Rectangle
  - Draw Raster Line
- **New Raster Slice Command**
- **New IOP Outside Raster Selection**
- 20 raster selection methods (IOP), Including AllText IOP and 7 raster snap modes ensure precise editing
- Preserve intersections on edits
- Pick touching text
- Edge rasterization
- Raster symbols
- Cut-Paste between drawings
- Move, copy, scale, rotate, array and mirror selected raster data
- Change or stretch raster objects
- Convert raster entities into vector entities

- Convert vector entities into raster data
- Raster drafting commands lines, arcs, circles
- True Type Font rasterization

### HYBRID EDITING

- Drawing registration
- Migrate Raster Design 3/CAD Overlay® legacy data
- Full hybrid snap
- Import viewer redlines

### CAD DRAFTING

- Draw lines, arcs, circles
- Draw polylines, multilines & ellipses
- Draw quadratic, cubic splines NURBS
- Draw an equilateral closed polyline
- Draw a solid-filled polygon
- Fill an area with an associative hatch pattern
- Create single lines of text
- Create paragraphs of text
- Create geometric tolerances
- Create datum, ordinate & baseline dimensions
- Create linear, radial & angular dimensions
- Align dimension text
- Analyse selected objects
- Freehand polyline sketching

### GEOMETRY RECOGNITION

- Selective or full conversion
- Dashed arc recognition
- True arc/circle recognition
- Boundary/Edge tracing
- Intersection cleanup
- Ortho and angle snap
- Contour/Polyline recognition
- "Z" value (elevation) option
- Polyline smoothing
- Edge recognition and snap
- Dashed line alignment
- Cross-hatch recognition and separation
- Arrowhead recognition

### TEXT RECOGNITION

- Character recognition
- Word recognition
- Size independent
- Font independent
- Orientation independent
- Combinations of training files
- Neural network engine
- Trainable character sets
- Trainable font recognition
- Training file editing

- Open Format / Plain Text dictionary
- Pattern matching

### GTX OSR BATCH CONVERSION

- Automatic vectorization of raster files
- Full range of raster formats supported on input
- DXF, IGES, CGM & MTF output
- User specified filters for speckles, line widths, character sizes
- Line, arc, circle & arrowhead recognition
- Contour/Polyline recognition
- Rectification option
- Smoothness option

### VECTOR CLEANUP

- Post vectorizing clean up tools
- Line deskewing
- Line relimiting
- Line joining
- Circle concentric function
- Circle alike function
- Layer control

### ADDITIONAL PRODUCT FEATURES

- Automatic snap to raster or vector entities using AutoSnap™
- Seamless hybrid plotting
- Floating Network License Option
- Support for raster in paper space
- Multiple raster/vector undos
- Integrated "Save" commands
- Automatic color/grey reduction to bitonal
- GTXRastrans converts between supported raster formats.
- **Software licensing option based on the new Macrovision® FLEXENABLED™ technology.**

#### SYSTEM REQUIREMENTS:

#### OPERATING ENVIRONMENT:

Windows® XP & Vista

#### RECOMMENDED HARDWARE:

Pentium III or equivalent processor  
512MB RAM, 200MB free hard disc drive space and 512MB swap space.

#### Your GTX Reseller

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