

# Carlson Survey

**DICARLO**  
SALES - SUPPLIES - REPAIRS - RENTALS  
www.dicarlotech.com  
410-749-0112

## Surveyors' #1 Software Choice

- Get full tool kit – everything from network least squares to surface modeling
- Work seamlessly between office and field
- Establish company-wide design styles
- Create GIS links & exchange Esri® data

### Choose your platform – Carlson Survey works on:

- AutoCAD® versions 2010 to current
- IntelliCAD® (built-in)

Or choose **Carlson Survey OEM** with built-in engine  
Powered with Autodesk Technology

### Get the Power of Carlson Field-to-Finish

Carlson Survey together with Carlson's popular data collection software options, SurvCE, SurvPC and Field, provide powerful, effective and accurate Field-to-Finish:

- Symbols, points and linework are drawn automatically in Carlson Survey
- Drawings on SurvCE, SurvPC and Field process perfectly in Carlson Survey

### Find Out More NOW!

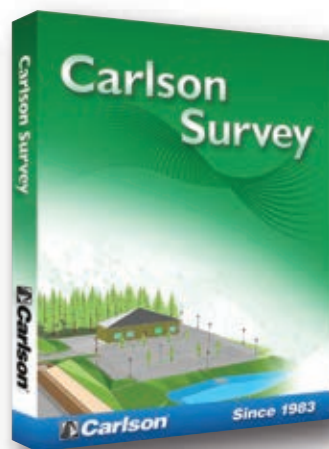
Call or visit Carlson Software:

**800-989-5028**

**www.carlsonsw.com**

*"We have been using Carlson Survey since 2007. Fantastic product at a fair price. Easy to learn and use. If you need technical support, a real person will answer the phone. I am a loyal user!"*

— Larry Medrano  
President,  
Precision Surveys, Inc.  
Albuquerque, NM



Twist to  
3D view



**AUTODESK**  
Authorized Developer

Authorized  
**IntelliCAD**  
Technology Consortium  
Member

\*IntelliCAD is a robust, DWG-compatible CAD platform that every CAD developer can build upon

Carlson Software Inc.  
102 West 2nd Street • Maysville, KY 41056 U.S.A.  
800-989-5028 • 606-564-5028 • www.carlsonsw.com

**Since 1983**

**Carlson**  
...For the Total Project

# Carlson Survey — Connects to Most Manufacturers' Proprietary Hardware and Software

## Top New Features

**Carlson Cloud:** Transfer files and messages to SurvCE users in the field

**Geodetic Mapping:** Calcs for geodetic angles, distances and areas

**Annotative Text/Points:** Auto resize for drawing scale.

**Lock Points:** Lock selected points in the coordinate database to prevent modifications

**Field-to-Finish:** New pipe network feature coding

**Google Earth:** Added export for text, images and surfaces and import for points with photos

## Survey Commands

- **Data Collection Interfaces:** Upload and download to popular data collectors
- **Traverse Adjustment:** Spreadsheet editor for raw data with graphics and processing for traverse adjustments
- **SurvNET:** Advanced network least-squares for total station, GPS and level data
- **Field-to-Finish:** Draw points with styles and in point groups set by point descriptions and draw linework by several flexible methods
- **Field-to-Finish Inspector:** Inspect all field-to-finish elements, see description source and re-draw based on descriptions edits
- **COGO:** Streamlined inverse, traverse, sideshot, intersections, interpolation, translate, rotate, scale and align
- **Coordinate Transformations:** Transform coordinates and screen entities between lat/lon and grid projections as well as local to local by Helmert and least-squares methods
- **Deeds:** Enter deed by description, read deed data from deed file, deed reports, deed correlation and generate legal description from drawing
- **Cut Sheets:** Create custom cut sheet reports with reference grades and station-offsets

## Surface Commands

- **Build Surfaces:** By triangulation or rectangular grids
- **Contouring:** One step triangulate and contour from 3D entities as well as contouring from surface files
- **Surface Manager:** Change surface display properties and adjust surface functions to add and remove points and breaklines and swap edges
- **Volumes:** Earthwork volumes between triangulation or grid surfaces
- **Pad Design:** Tie cut/fill slopes from pad perimeter to surface, build pad surface, calculate and balance volumes, and edit pad parameters

## Centerlines

- **Design and Edit Centerlines:** Design or input alignments on screen or in dialog with graphics
- **Label Stations and Offsets:** Annotate station and offsets along centerline and at selected points
- **Calculate Offsets:** Reports stations and offsets for selected points along centerline
- **Create Offset Points:** Create points at specified stations and offsets
- **Spirals:** Flexible handling of the most complex spiral curves including "spiral-only" elements going arc-spiral-arc, arc-spiral-line and line-spiral-line

## Profiles

- **Create Profiles:** From surfaces, screen entities, points on centerline, etc.
- **Quick Profile:** One step profile creation with real-time update while adjusting centerline
- **Input-Edit Profiles:** Enter profile data in dual spreadsheet and graphic window, and design in reference to controlling profile grade points
- **Draw Profiles:** Draws profiles on grids or plan-profile sheets with auto-updating based on edits
- **Profiles To 3D:** Create points and 3D polylines from profiles

## Points

- **Import/Export:** User-defined import and export of point data along with conversions with specific other formats
- **Draw Points:** Draw points with settings for symbols, layers and styles
- **Point Groups:** Point group manager to define sets of point by filters
- **Coordinate File History:** Tracks all changes to points with report and undo functions
- **Fix Point Label Overlaps:** Finds point label overlaps with rule options to fix automatically
- **Point Tools:** Utilities for modifying point labels such as move with leader, twist and resize

## Area/Layout

- **Label Areas:** Customized area label styles and several methods to select areas to label
- **Size Areas:** Sliding side area, hinged area, area radial from curve and bearing area cutoff
- **Lot Network:** Commands for subdividing a site into lot and ROW areas. Dynamically updates areas for any changes to boundaries. Includes ability to label linework and areas and to draw setback boundaries
- **Lot Manager:** Lot definitions by point numbers with functions to create lots, conduct map check for closure, edit in spreadsheet with graphics, report lots and draw lots
- **Offsets, Intersection and Cul-de-Sacs:** Layout for ROW and EOP linework

## Annotation

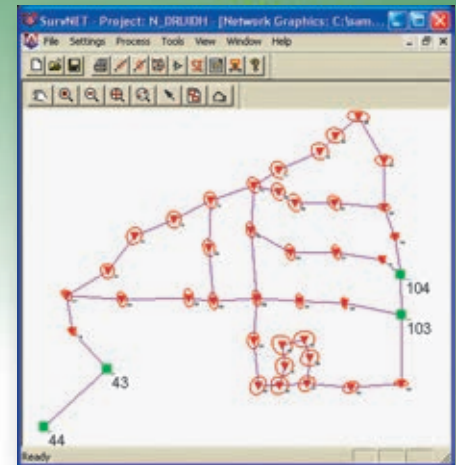
- **Angle & Distance Labels:** Flexible routines to label linework in all possible layout combinations plus available rules to automatically fix label overlaps and revise labels when entities move
- **Curve Labels:** Label curve data in stack, along arc or in table
- **Survey Text:** Routines to create typical plat labels such as offset and building dimensions
- **Linetypes:** Draw special linetypes

## GIS Commands

- **GIS Data:** Input, edit, query, report, label and inspect database data attached to drawing entities
- **ESRI:** Import/Export feature data by Esri MSC or SHP
- **Geo-Referenced Images:** Place geo-referenced images into the drawing
- **Place Camera Symbol/Image:** Draw a camera symbol with an attached image

## General

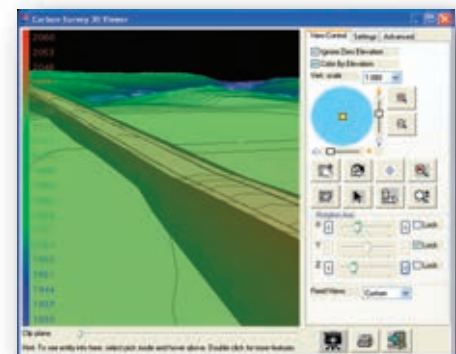
- **Coordinate Systems:** 100s of projections including SurvCE
- **CSLReport Formatter:** Create customized, professional reports
- **Symbol Library:** Hundreds of 2D and 3D symbols
- **Project Setup:** Flexible data storage methods
- **Drawing Explorer:** Manage and access project data files
- **Drawing Cleanup:** Fix common drafting errors
- **Drafting Enhancements:** Handy tools for working in Autocad® such as Join Nearest, Shrinkwrap Entities, Polyline Utilities, Drawing Inspector, Layer Inspector and Twist Screen
- **Data Compatibility:** Supports industry standard LandXML and scores of specific data conversions
- **Document Management:** Use Data Depot for sharing and archiving files
- **CAD Standards:** Draw items with standardized properties



SurvNet traverse network with error ellipses



Contour in both Carlson Survey and SurvCE



Carlson Survey 3D viewer image

