



Survey Data Collection & Interactive Mapping In the Palm of your Hand

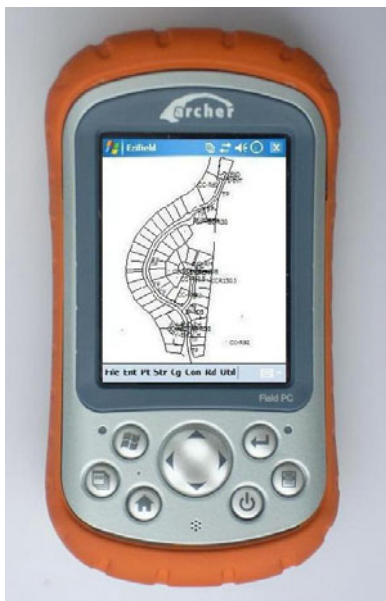
Ezifield

Ezifield is a turnkey data collection system for surveyors and engineers designed to operate on handheld computers running Windows CE.

Improve your overall efficiency as you collect, code and view the data in the field with a direct interface from Ezifield on a handheld computer to your total station or GPS.

Currently data collection has two major shortcomings with low-mid cost total stations;

- facilities to code the points as they are picked up are limited or non-existent.
- you can't see the job until you get the data back to the office.



These shortcomings arise from the fact that the data collection procedure was designed to fit what the machine could do, not what you needed to do.

Ezifield will overcome both of these shortcomings and allow you to code with ease, and see the job as it progresses.

One Picture is Worth a Million Numbers

The quickest way to verify you are collecting enough data, or the right data is to look at the picture, as seen in the screen shot above.

No matter what shape the job might be, you can arrange the window to make sure you see the data as it is captured, while always having a full view of the job.

Zoom and pan facilities are provided to allow you to see greater details in areas of interest.

Coding Made Easy

Code the point by picking from the list or typing on the keyboard, or combine both, the choice is yours.

Ezifield allows you to create your own Code Lists, in English or any other language you choose, and easily apply those codes to the point by one touch of the pen.

To improve your speed in the field, you can group the codes in the order you choose to ensure that those most commonly used are always displayed.

In addition, new or different codes can be entered individually using the virtual keyboard of your handheld computer. When you need to work for different clients, who each want their particular codes used, the code libraries can save you time, effort and mistakes.

Calculations on Call

The most commonly used calculations are included so you can check as you go with routines for;

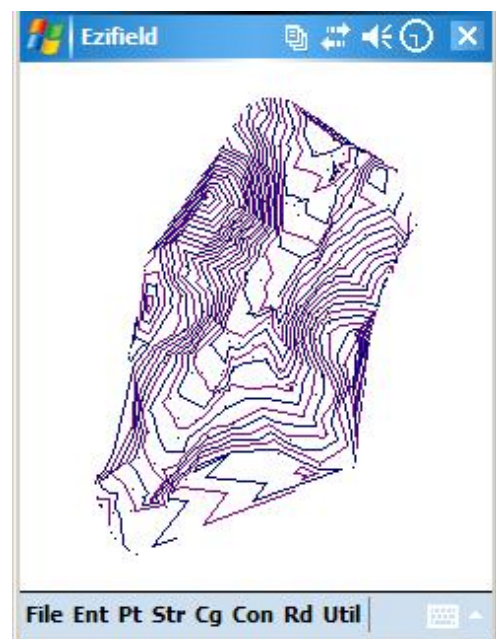
- traverse check & close
- bearing & distance calcs
- radiations
- intersect bearings &/or distances
- chainage/station & offset calcs
- parallel offset calcs

Route calcs allow quick & simple calculation of road and highway alignment, complete with spirals from horizontal IP's

Model as you Measure

Ezifield allows you to form the triangulated model and contours at your selected interval, so you can see whether the model 'looks right' as the job progresses.

You can select the points to include in the model, and the contour interval.



Roads on the Run

Ezifield lets you design the alignment, the design section templates and vertical design grading.

Section points and catch points can then be generated and staked on demand at any chainage or station you need.

Superelevation and variable lane widths are easily accommodated with simplified tabular entry.

Stake on the alignment or at any offset you choose, using a single template to simplify both cut and fill conditions. Stake points in any order to tame difficult terrain.

Simple Data Transfer

Ezifield will upload a data-file directly to your desktop computer via a serial connection or Bluetooth if enabled. The format can be raw SDR33, coordinates in SDR33 format or CSV format.

Alternatively, transfer the data file using the 'synchronization' facility supplied with the handheld computer.

If you are running Ezicad or CDS on your desktop then you can use the Ezifield database directly.

System Requirements

Handheld computer

- running either WindowsCE or PocketPC
- at least 8Mb of RAM
- serial (RS-232) cable or Bluetooth

Total Station

The measurement & recording is initiated directly from the handheld.

The measured values are displayed for verification before coding & storing, and the point is displayed on the screen.

Ezifield is designed to work with most total stations produced by the major manufacturers such as;

- Leica
- Nikon
- Pentax
- Sokkia
- Topcon
- Trimble

GPS

Ezifield should work with any GPS unit that supports the NMEA interface and can output a GGA sentence/string.

Ezifield has been known to operate with the following units;

- Garmin (GPS 12, GPS 12XL etc)
- Holux
- Javad/Topcon
- Magellan (2000XL, GPS Tracker & ColorTRAK)

And should work with any similar unit regardless of the manufacturer.

Overview

Ezifield operates on handheld computers running either Windows CE or Pocket PC operating systems. Handheld computers are known by various names, for example Field PC's, PDA's, Palm PC's, Pocket PC's. Some common handheld computers are Archer Rugged PDA, TDS Nomad, TDS Recon, Allegro CX, HP Ipaq and even new windows CE based phones.

Ezifield interfaces directly to low cost GPS, Total Stations and Digital Levels from the major survey equipment manufacturers.

Operation of the instrument is controlled from Ezifield on the handheld computer and the raw data is transferred to your screen and displayed, together with the coordinate values of the point.

You can then **feature code** the point. This is done either with a single *tap* to select a code you have pre-defined in a code library, or by using the *virtual keyboard* on the handheld computer to type in whatever code you require.

Once you elect to store the point it is immediately displayed on the graphic screen, giving you instant pictorial verification that the point is correctly located.

You can connect points with strings as you collect them to create *instant maps*.

Ezifield also incorporates commonly needed **COGO** routines to allow you to close a traverse, calculate and inverse points, intersect bearings & distances to locate points and offset calculations.

Ezifield also incorporates routines to calculate a TIN, and form a **contour model** of the surface, instantly in the palm of your hand.

Ezifield allows you to **stakeout with confidence**. Simply load in the picture of the job to be set out so you can quickly identify the points you need to stake.

For **road stakeout**, Ezifield allows you to calculate the stake point *on the fly* from a design alignment and design templates. Stake what you need, when you need it all from the palm of your hand.

Your Local Ezifield Dealer is:

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