

## RMS PC Software

### Installation & a brief look at Surmenu4

#### Installation:

Download the installation. (Surmenu4.zip)  
Unzip to a temporary folder.  
Double-click on Surmenu4Lite.exe.

As the installation routine proceeds default folders for storing data are displayed. I suggest you accept these.

The program should now appear in your main "Start" menu.  
Click on "Start\All Programs\Surmenu4.exe"

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Default folders are displayed "Resource Directories" - accept these. They may be changed later if you need to.

The main configuration screen is then displayed. For the moment I suggest entering your company name to replace RMS Software which will appear on some print outs.

Click "OK" to accept these defaults.

#### Test Data:

Sample data for a test job 999 is included in the installation in order to familiarise yourself with the software.

I suggest you run through the job:

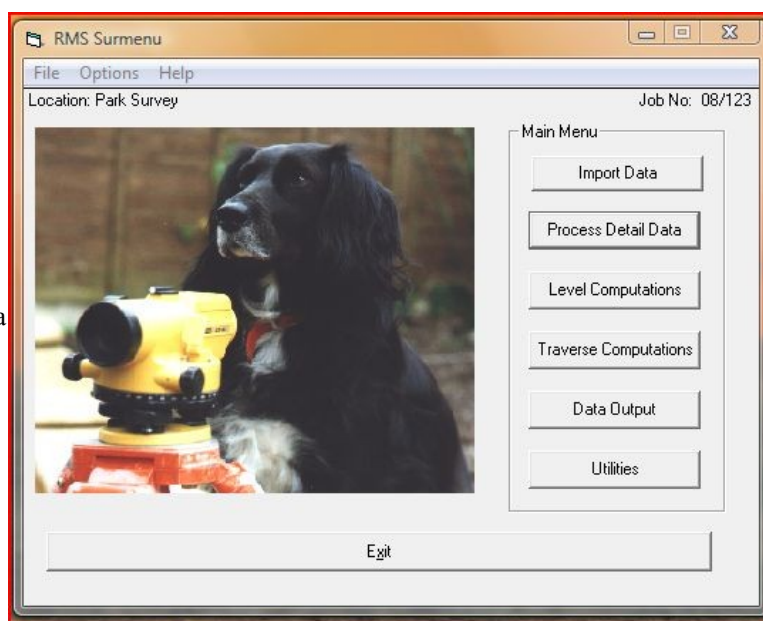
Click "Process Detail Data".

Use "Edit Observation Files" to look at one of the files.

Use "Detail Computations" to create a Job Database, use "File\Import Data" to bring in TI files, then compute them using "Compute\Compute All" ( a Control File was included with the data).

Exit back to the main menu, then select "Data Output" & "Create DXF". Click on "Open File" and select "JF999.mdb" the job file you have just created. Again, use the defaults as you proceed then create the DXF.

If you accepted the default folders the DXF file will be stored in "C:\Survey\Data\999\DXF". Have a look at the drawing, not very exciting, but it shows something of what the software can do.



#### Processing a "real" Job:

Start Surmenu4.

The first thing we need to do is change to the relevant job number – the one you used on the RMS Data Logger.

Let's assume it's 2008/123. Click on the drop down menu "File/Change/NewJob No". Click the "Add New Project" button.

This brings up the spreadsheet style Project Database screen.



In the Project Database screen type your job number into the 1<sup>st</sup> column of the last (blank) row - "2008/123" You can then add more data into the relevant columns as required

*Note: This data is stored in a comma delimited text file (projectlist.txt) in the Survey\Common folder*

Click on "OK" (at bottom right) & return to the Select Job window.

Double click on "2008/123" to return to the main Surmenu screen.

*Note that the current Job No now appears at top right, with the job name at top left.*

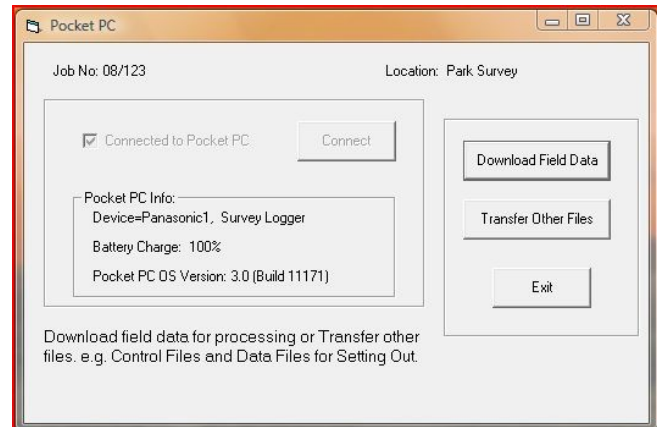
## Download data from the Pocket PC

### Preparations:

I shall assume that you have software installed to link with the Pocket PC. If you have Windows Vista, your synchronization settings will be managed through the Windows Mobile Device Center. Otherwise you will need Microsoft's ActiveSync software. This will either have been supplied with the pocket PC or you can download it from the Microsoft website

Ensure your Pocket PC is in its cradle or connected to your PC.

On the main Surmenu Screen, click "Import Data", then "Pocket PC" in the following screen. You should see a "Please Wait..Connecting to the PC" message, then this screen:



### Click on "Download Field Data"

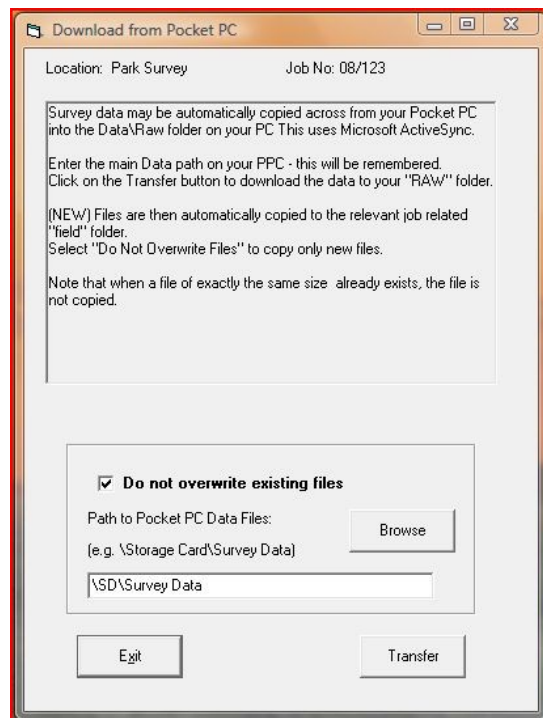
Before first downloading data you will need to enter the main data folder on the Pocket PC.

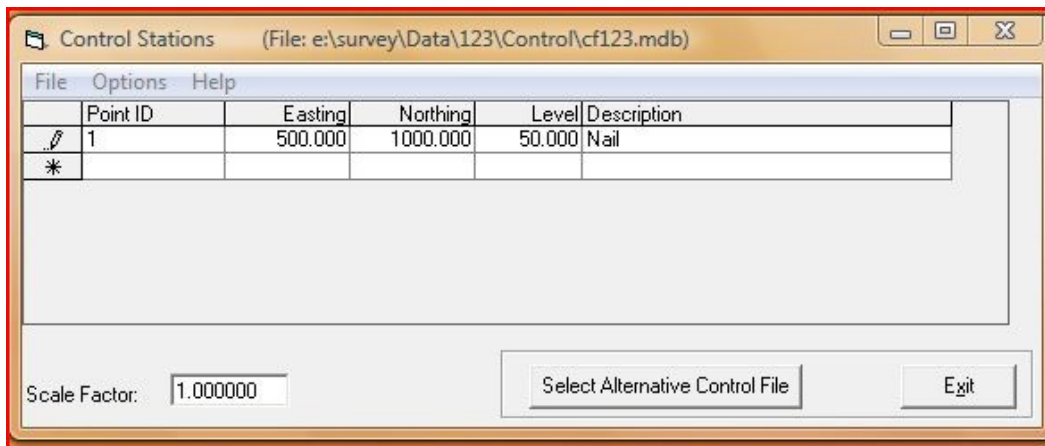
The exact name will depend on the name of your memory card - this will be something like "SD" or "Storage Card". Use the Browse button to find it - Double-click on a card or folder to enter it, then single click on the data folder name & click "OK". It will probably be a folder such as "\SD\Survey Data".

Click on "Transfer" & all files from the current job will be downloaded.

*Note: the files are copied into your "\Survey\Data\Raw" folder on the PC, then copied into the specific job related folders. If files already exist you will be warned. The files in the Raw folder provide an unedited back up copy.*

Click "Exit" in this & following screens until you return to the main Surmenu Screen.





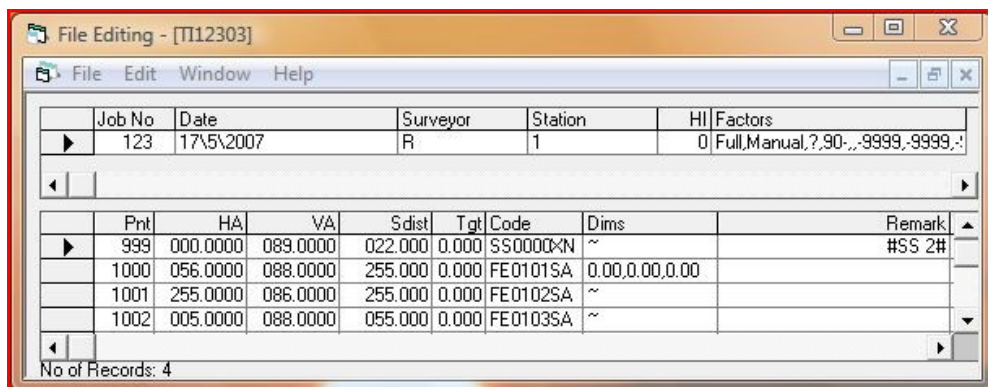
### Control

You will need to enter survey station coordinates into the Control file.

*Note that the "Lite" version of the software does not include the traverse computation module.*

In the main Surmenu screen click on the menu "Options/Control".

The Control screen is displayed – enter station coordinates as shown above. When finished click "Exit"



### Edit Field Data

*Note: Data from each set up is stored in a separate file. These have a name beginning "TI" (Tachy Input in case you were curious.) e.g. TI12301.*

If you need to edit the data you recorded in the field or simply want to look at how it is stored, then click "Edit Observation Files" & select a file.

A small example is displayed above. The top part of the screen shows set up related data, with observations below.

Make any edits with care, then click "File\Exit" - don't worry you will be asked if you want to save any changes.

## Processing Field Observations

In the main Surmenu screen click on “Process Detail Data”. Accept the default Job File name, jf123.mdb, & click “OK”.

We then need to import the observation files. Click “File/Import Data”, select “Tachy Input Files (TI\*.\*)” as shown below. In the next window highlight all the files you require – ignoring .bak back up copies. You can select multiple files by holding the Ctrl button down as you click each file name. Then click “Open” & the data will be displayed.

The first Tab shows the set up data for each file. Click the “Observations” Tab to see the readings for each point.

Click on “Compute”, then “Compute All” and (assuming all control has been entered) coordinates will be calculated, which can be viewed by clicking the “Coordinates” Tab.

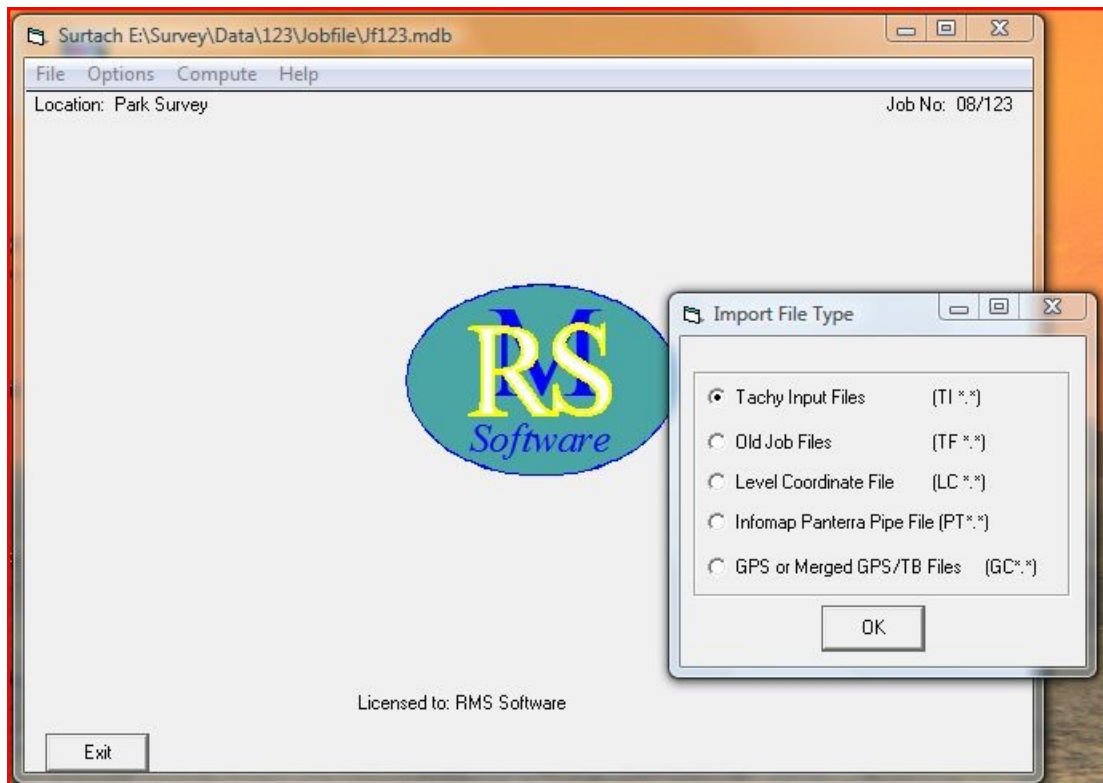
*Note that if control coordinates are not found for a particular set up, you will be warned, & given an opportunity to enter data, or skip computation of that file.*

It is also possible to compute one file at a time. On a very small job you might have a main station with two or three “hanging leg” stations. In this case you could have coordinates entered for the main station, compute only that file, entering a back bearing to the reference station when requested. Coordinates will be computed for the secondary stations which can then be entered in the control file allowing computation of the other files. *N.B. If you highlight a station observation record it's coordinates can be added to the Control File by clicking “Options/Add to Control File”.*

***Please remember it is vital to check that Control file data is accurate as this will affect your results.***

*Note that if required, data in the Jobfile can be edited directly in the grid – remember to recompute especially if measurements are changed.*

*Click on the “Exit” button to return to the main Surmenu screen.*



### Create a DXF File

In the main Surmenu screen click on “Create DXF”.

(You will be asked to select a job related DXF configuration file – click “OK” & select DXF.cfg.)

This brings up the main RMS DXF screen. Click on “Open File” & select “jf123.mdb”

Information about the job file is displayed as seen below.

*Note that the main effect of “Plot Scale” is to change the size & position of the text to suit that scale.*

Click “Compute” & a DXF file will be created – remember where it is stored.

Exit the DXF module & Surmenu.

Open the DXF file in your CAD package for editing & plotting.

DXF Main Menu

File Settings Help

Location: Park Survey Job No: 08/123

Plot All Control  
 Plot Control Within Limits  
 Plot Selected Control  
 Plot Curves  
 Plot Points Only  
 Create 3D File  
 Create DGM  
 Create Schedules

Plot Scale: 200  
Grid Interval: 20  
Dec Places: 2

Drawing Limits

	Min	Max
X	446	595
Y	989	1099
Pnt No	1	222

File Details

Data : JF123.MDB Recs : 222  
Control : CF123 Recs : 1

DXF File Name: DW12301.DXF

Cancel Compute

### Built in Help

There is help available in the software by clicking “Help/Help Contents” or by pressing “F1”.

Some of this refers to the full version of the software.