

Precision Geomatics

DETAIL SURVEY FUNCTION ON SET310/SET510/610

Set up and level the instrument over ground mark in the normal way, switch on, the circles are initialised automatically. Or set up and roughly centre, switch on, then centre and level using the electronic bubble.

In Measure Mode, FUNC, TILT, bring bubble to centre of circle or use the X,Y tilt values to zero the bubble.

1. Detail surveying saves data into a job so it is necessary to set up a job before proceeding.

Front Screen, MEM

Job, Job Selection, List, scroll to next available job. Enter.

Leave S.F.= 1.0000. Enter, ESC, then scroll to JOB name edit, Enter, and give name, Enter.

Repeat for Coord search JOB to select another job for recall of control coordinates, if required.

ESC to main screen. MEAS.

2. In MEAS mode, select REC.
3. Stn. data -- Enter the co-ordinates of the set up point. Edit to enter by hand, selecting the values from the bottom of the screen, FUNC key switches values. Or Read the required point number from the Memory. Enter Instrument, Target height, Code and other details by scrolling down. OK.
4. To set Back Sight.
ESC. FUNC, FUNC to H.Ang. If using an RO azimuth select H angle, Enter, and then enter the azimuth. If using a back sight coordinate, select Back sight, and then enter co-ordinates of Back Sight point / RO point, by Edit or Read. OK, this then displays Stn co-ordinates. OK.
Set H angle -- Take BS -- YES,
This calculates back bearing, and displays value of HAR.

5. Select EDM to set measuring mode, i.e. Rapid "s", Prism and PC - 30, scroll down to check ppm = 0. ESC.
6. FUNC, REC.
Select data type, and Enter. Angle data – angles only.
Dist data – angles & distances; Coord data – coords only.
Dist + Coord data – angles & distances, + coords.
Scroll down to enter a Note or View observed data.
7. DIST (F2) to take an observation. Use for initial observation. REC – enter Pt. no, Tgt.h and scroll to Code. Edit to enter values or in case of codes the \uparrow \downarrow to select from code stack. Enter, keeps code for next obs. and then OK. If use OK it saves the data and the code for that record only and default to previous code for next obs.
* Add codes to Code Stack from MEM. Code.
AUTO (F1) to automatically observe point, increment point no and keep code, and save automatically.
OFFSET (F3) allows offsets by distance or angle.

ESC Scroll to View to look at data. Scroll to point, Enter.
8. Download data. MEM, JOB, Enter. Scroll down to Comms setup, set communication parameters.
Baud rate: 9600, 8bit, Not set, 1bit, No, No. ESC.
Set receiving package to the same settings.

Scroll up to Comms output.
Scroll to job, Enter, Out appears next to Job, OK.

Memory:

Set310/Set510/Set610 10,000 pts.

Data can be input by hand into a defined job, and then recalled when that job is selected under the Coord Search Job option. Data can also be entered into a job via a computer using Mapsuite+, or ProLINK Comms,