

Precision Geomatics

CO-ORDINATE 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. If the co-ordinates are to be saved it is necessary to set up a job before proceeding.

Main Screen, MEM

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

Enter, leave S.F.= 1.0000. S.F. to edit if required. Enter.

Cursor jumps to Coord search JOB.

List and select a job from which coords can be recalled if required, ie a control job. Enter.

Or ESC, scroll to JOB name edit, Enter, and give name, Enter.

ESC to Main Screen. Check Job selected. MEAS.

2. Select COORD function, FUNC, FUNC, COORD.

3. Stn. Orientation -- Enter

Stn Coordinates – Enter, enter the co-ordinates of the instrument station.

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 and Target height for 3-D coordinates. OK.

4. Scroll to Set H angle. 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 automatically calculates back bearing. ESC.

5. Scroll to EDM to set measuring mode, i.e. Rapid “s”, Prism and PC - 30, scroll down to check ppm = 0. ESC.

6. Scroll up to Observation.
This will measure to the prism and give the co-ordinates
OBS will take another reading.

HT will allow changes to instrument and target heights.

REC will save the co-ordinates, the next screen will then allow editing of point number, target height and code.

Scroll down to Pt., Tgt.h, and/or Code (EDIT or ↑ ↓).

The arrows scroll through the Code Stack, set up by MEM

Enter saves code, OK saves data.

If the target height and code remain the same, press OBS, REC and then OK each time.

7. 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.

Comms output, SDR, Enter.

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, a free program available from PGL