

PRECISION GEOMATICS

SETTING OUT FUNCTION ON SERIES100 INSTRUMENTS

Set up and level the instrument over ground mark in the normal way, switch on and initialise the circles.
Or set up, Shift (SHF) and then the Decimal Point, centre and level instrument using the electronic bubble. Press DIGIT, then precisely level by bringing X,Y tilt values to zero. ESC and initialise the circles.

1. Select Setting Out function, FUNC, S-O, then scroll to:
2. Stn data -- Enter the co-ordinates of the set up point through the keyboard. Record if required, REC.
Or Read the required point number from the Memory. Enter Instrument and Target height if required.
OK.
3. Scroll to Set H angle, and then BS. This shows the EO, NO, ZO co-ordinates of the set-up point.
Scroll down to EBS.
Enter co-ordinates of Back Sight point / RO point, by Keyboard or Read from the Memory.
OK, -- Take BS -- YES.
This calculates and displays back bearing.
Enter.
4. Scroll up to S-O data.
Either enter the setting out data; SO dist and SO hang by scrolling to relevant position and using Keyboard.
Or, if using co-ordinates, enter co-ordinates by Keyboard, or READ from memory.
The SO dist and SO Hang are displayed.
OK.
5. Setting out can be undertaken in different ways, dHA, with H, S, V, Ht distances, or by E,N,Z co-ordinates. Select by scrolling using Δ S-O key. Normal mode is S-O H, with H dist shown at bottom left of screen.
6. Then press F3 the double arrow key.
7. This displays the direction to turn the total station to the correct line (countdown to zero), then when prism is on line at approximate position press the HDIST key. The distance to move back or forward will be displayed.
8. When point positioned, ESC and repeat for next point.
9. At any time it is possible to change the EDM settings. Press EDM, bottom right of screen
Normal settings would be:
ppm: 0, Reflector: Prism and PC: - 30, scroll down to mode: Rapid "s".
ESC, to return to setting out.

Memory:

Series100 instruments have a 3000 pt memory.

Data input by hand and recorded goes into a central memory for later recall. Data can also be entered into the memory via a computer using SDRMap & Design, or ProLINK Comms, a free program available from Sokkia or from the Sokkia web page (www.sokkia.co.nl).