

GTS 220 RESECTION (also for use with GTS210 series)

Press MENU, F2<layout>, select a file then F4<enter>. F4 (to screen 2 of 2)
Press F2<new point> then F2<resection>. At prompt for new point name press F1<input> then F4<enter>.
Press F1<input> at prompt for instrument height then F4<enter>.
Press F2<dist> at prompt for first known point and select the known point from the library then press F3<yes> at the ok? prompt

(if the known point is not stored in the point library press F3<meas>, input the co-ords, at prompt to record F3<yes> then input known point name and press F4<enter>).

Press F1<input> at prompt for reflector height then F4<enter>.
Sight known point then press F3 for ANGular solution (to a minimum of 3 known points) or F4 for a DISTance solution (to a minimum of 2 known points).

After first measurement is complete, the display prompts for the second known point.
When minimum number of observations are complete press F4 <calc> then F4<meas> to display the coordinates of the resected point.

The final prompt is to record the computed coordinates.

COGO Functions

Remote Elevation

Enables elevation measurement of points inaccessible to prism

Access Via : Press (menu)

Press (F4) P ↓

Press (F1) Programs

Select: Press (F1) REM

Press (F1) Input R,HT
<input prism height and collimate>

Press (F1) Meas - HD (Horizontal Distance) will be displayed

Press (F4) Set - Sets the horizontal distance

VD (Vertical Distance) will be displayed.
Sight target at which height is to be measured and
vertical distance will change accordingly

menu

F4

P ↓

F1

Programs

F1

REM

F1

Input RHT

F1

Measure

F4

Set

Setting out Using the Topcon GTS220 Series (also for use with GTS210 Series)

Level instrument using plate bubble

Power on using green button

Turn horizontal/vertical axis



menu

Press (menu)

Press (F2) Layout - Selecting setting out program

Select a file - to recall setting out data from

F2

Layout

Choices are :-

(F1) Input a known file name or (F2) list to pick an existing file from list or
(F3) Skp to skip file use and input information manually

F1

Input

Or

F2

List

Or

F3

Skp

Orientating Instrument

Press (F1) OCCUPIED POINT

F1

Choices are:-

(F1) Input a known point number in file or (F2) list to pick an existing point
from file

or (F3) NEZ to manually input co-ords, then (F4) Enter and after the >REC?
Prompt (F3) Yes then (F4) Enter

Input instrument height if level is required.

F1

Input

Or

F2

List

Or

F3

NEZ

Press (F2) BACKSIGHT

F2

Backsight

Choices are:-

(F1) Input a known point number in file or (F2) list to pick an existing point
from file or (F3) NEZ/AZ to manually input co-ords, press (F3) AZ again to
manually input backsight bearing

Sight backsight point

Press (F3) yes

F1

Input

Or

F2

List

Or

F3

NEZ

Setting out Co-ordinated points

Press (F3) LAYOUT

Choices are:-

(F1) Input a known point number in file or (F2) list to pick an existing point
from file or (F3) NEZ to manually input co-ords

Confirm co-ord info from file with (F3) Yes if correct

Input reflector height if level is required

Instrument now displays calculated bearing & distance

F3

Layout

F1

Input

Or

F2

List

Or

F3

NEZ

F3

Yes

Press (F1) Angle

Turn the instrument so that DHR display indicates 00°00'00"

You are now on the correct bearing.

F1

Angle

Press (F1) Distance

Instrument will now display in track mode distance to move prism back or
forward to set-out point, distance is displayed to 10mm

F1

Distance

Press (F1) Mode

To change distance display to 1mm reading

F1

Mode

F4

Next

After setting out this point press (F4) Next and repeat as from # above.