

Leica DISTO™ D5 & D8 Training



- when it has to be **right**

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This is a

Step-By-Step Guided Tour

of the most important functions

Take out your Leica DISTO™ D5 or D8
follow the instructions...and

Let's start!



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Turn it On!



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The New Display, Full Color and Lots of Information

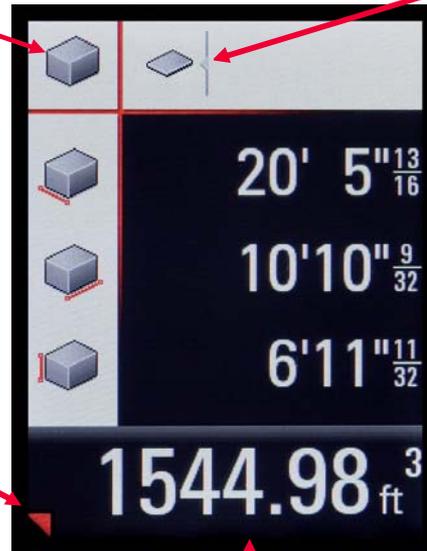
There are different sections which show different things:

Currently selected function is always in the top left corner

Additional functions available by pressing function button again

If this corner has a red triangle in it, this means there is a second page of information available.

3 lines of history, partial results, or next measurement to be taken



Actual measurement or result.



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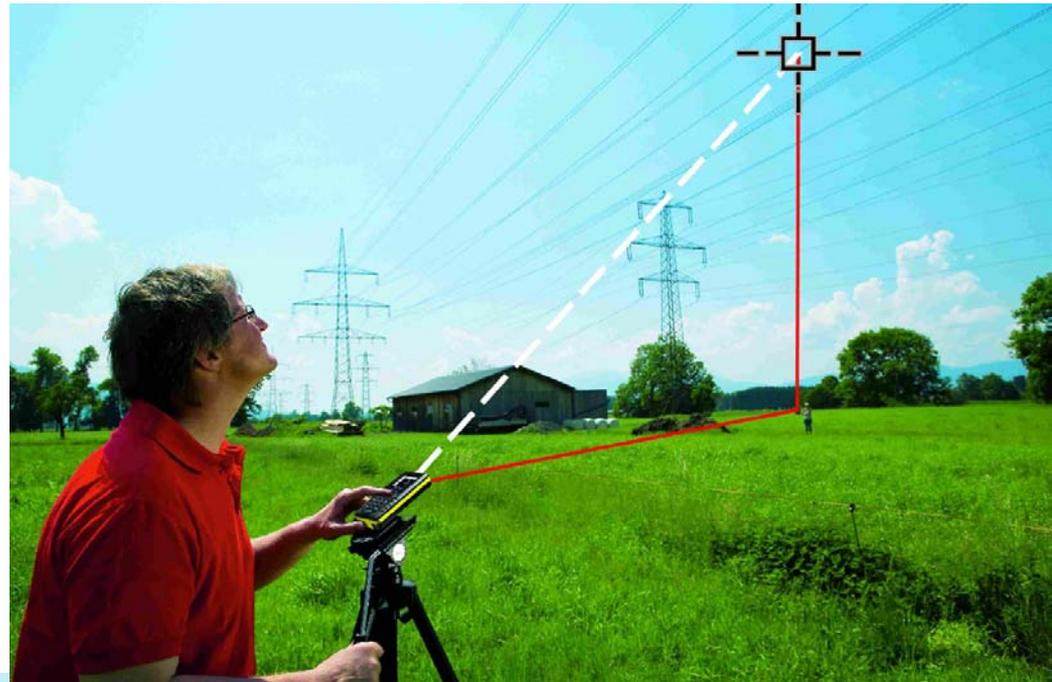
D5/D8 Digital Point Finder with 1x, 2x, 4x Zoom



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Who needs a digital point finder?

- Every professional who makes any measurements outside has a huge benefit!



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Digital Point Finder Operational Details

- The display screen will self adjust for light levels but you can also press  and  to manually adjust the screen brightness indoors or outdoors.
- Point finder can be used in any measurement mode to target objects
- Press  again to toggle through zoom levels and return to 1x zoom.
- The crosshair in the display shows the target and the DISTO™ will measure exactly in the middle of the crosshair. If the red laser dot is invisible to the human eye, the DISTO™ D5/D8 can recognize the laser waves and measure the distance.
- Aim the crosshair on the object you want to measure and press  .
- The measured distance is displayed on the bottom line of the screen.
- To switch point finder off, press  .



Digital point finder at short distances

The point finder and laser may not align perfectly at distances less than 45 feet due to a slight Parallax error. In this case you should rely on the actual laser point for your measurement.

D5/D8 Area and Volume Calculations

Calculate area, volume, wall space, perimeter.



1. Press  to measure length
2. Then aim and press  to measure width
3. DISTO D5/D8 calculates the area

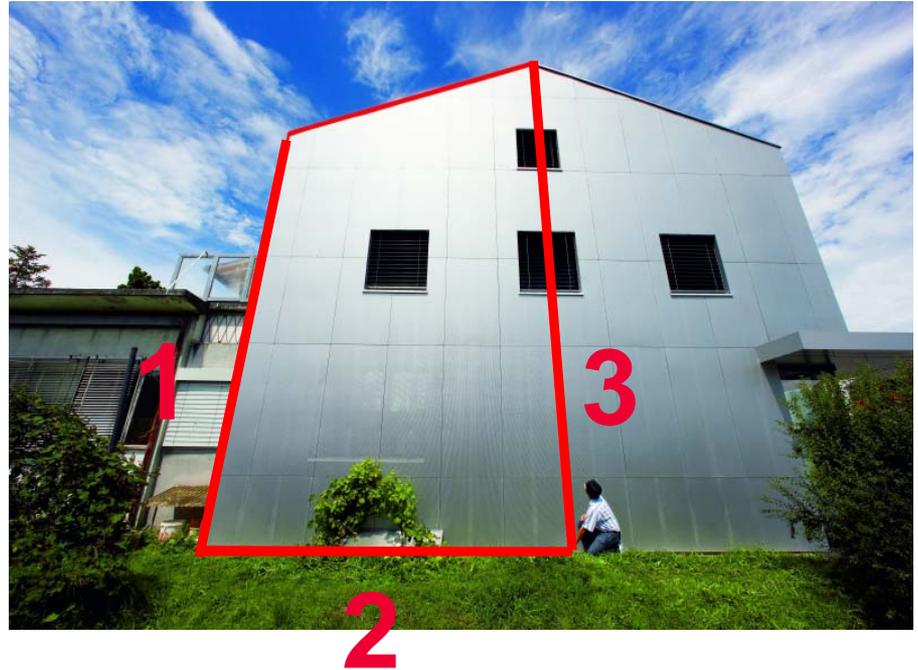
1. Press  to measure length
2. Then aim and press  to measure width
3. Lastly, press  and measure the height. It's important to always measure height last!
4. DISTO D5/D8 calculates the volume

Extra Feature: Upon completion of area or volume calculation, press and hold the area/volume button and the DISTO will calculate the perimeter in the area mode and the perimeter, wall area, and floor/ceiling area in volume mode

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D5/D8 Trapezoid Calculations, Method 1

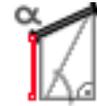
Calculate the area, roof slope, and rafter length with three measurements



Press the  button to capture the three measurements as indicated above. The result at the bottom of the screen is the rafter length. Then press hold the  button until you hear a beep. The second screen will display additional information including roof slope and the area of the measured trapezoid.

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D5/D8 Trapezoid Calculations, Method 2



Calculate the area, roof slope, and rafter length with just 2 measurements



Press the  button to capture the two measurement as indicated above. DISTO will result the rafter length in the bottom of the display. Then press hold the  button until you hear a beep. The second screen will display additional information including roof slope and the area of the measured trapezoid.

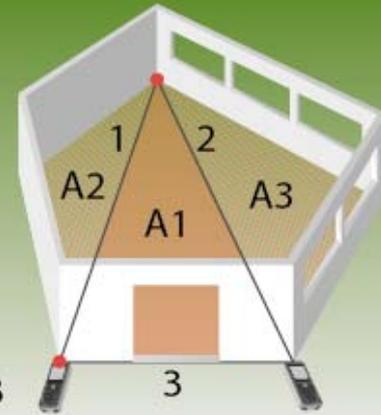


As this measurement is indirect, it is not as accurate as the 1st Trapezoid function. The D5 tilt sensor only measures up to +/-45° so can not be used for steep roofs or high angles!

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D5/D8 Triangular Area

Calculate the area of odd shaped spaces and determine angles



Press 3x on the D5 and 1x on the D8 to access the function. This symbol will appear in the top left corner 

Enter the triangle mode and measure 3 distances as follows:



and the area of the triangular is displayed in the main line.

If you want to add multiple triangles together then press  to add a second triangle and again to add a third. When you are complete, then press  to add the total area of the triangles

2nd result display screen:

Press long  and additional values such as angle and circumference are displayed. The measured angle will always be the one that is opposite to the third measured side. To get back to the first screen press and hold  until beep

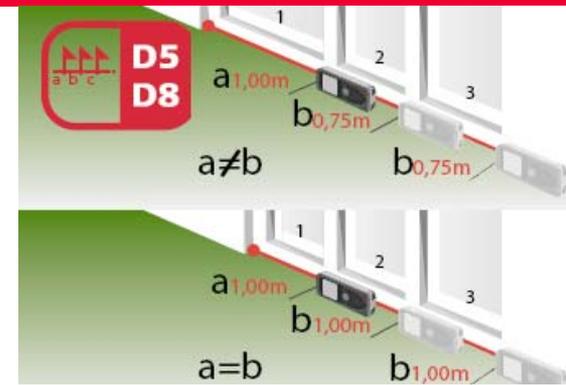
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D5/D8 Stake Out Function

Layout equal distances across a given distance



Press 4x on the D5 and 2x on the D8 to access the function. This symbol will appear in the top left corner



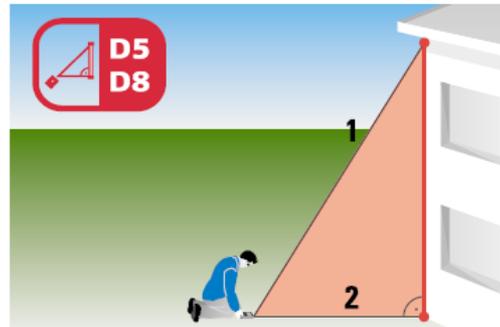
- Press function button until the symbol  appears:
- Adjust the first stake out distance (a) with  and  to the desired length. You can also leave this at zero and just use the “b” value. Holding the button makes selection quicker.
- Confirm distance (a) with 
- Now select the second, repeating distance (b) with  and  confirm the selection with . Holding the button makes selection quicker.
- Press  and the distance measurement starts. Move the DISTO™ slowly away from the wall. The arrows in the display indicate in which direction the DISTO™ needs to be moved to achieve the defined distance. A Beeping sound indicates that you are near the next staking out point.
- The third row gives you the absolute distance of the next staking out point.
- Press  to get back to the standard mode.

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D5/D8 Pythagoras Measurements

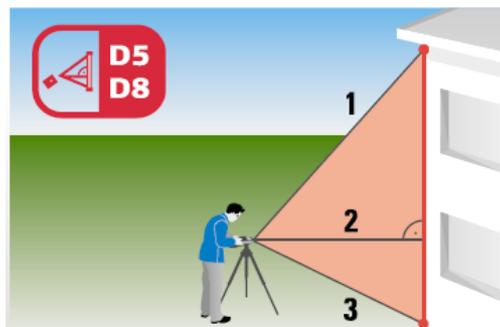


D5/D8 Pythagoras button.
Press 1, 2, or 3 times to
select your desired method



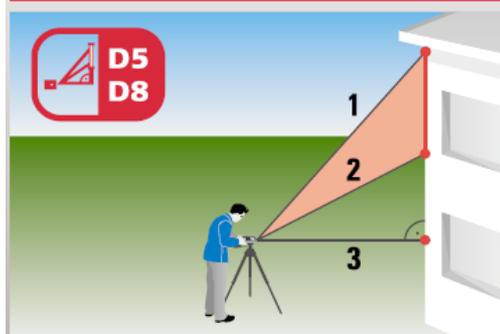
Single Pythagoras measurement

Just two measurements are enough to indirectly calculate the horizontal or vertical distances. It is important to ensure the 2nd measurement is at right angles to the target object – easy with minimum measurements.



Double Pythagoras measurement

Using a tripod you can measure horizontal and vertical distances. The Leica DISTO™ determines the results for you out of three measurements. Functions such as minimum and maximum measurement help you find the correct measuring point.



Double Pythagoras measurement (chain values)

With just three measurements, you can also determine partial heights, e.g. balcony or window heights. This is, of course, possible horizontally and vertically.

► Don't forget to access the second screen for more details about your measurement by pressing and holding the Pythagoras button for a few seconds after completing your measurements

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D5/D8 Pythagoras Examples

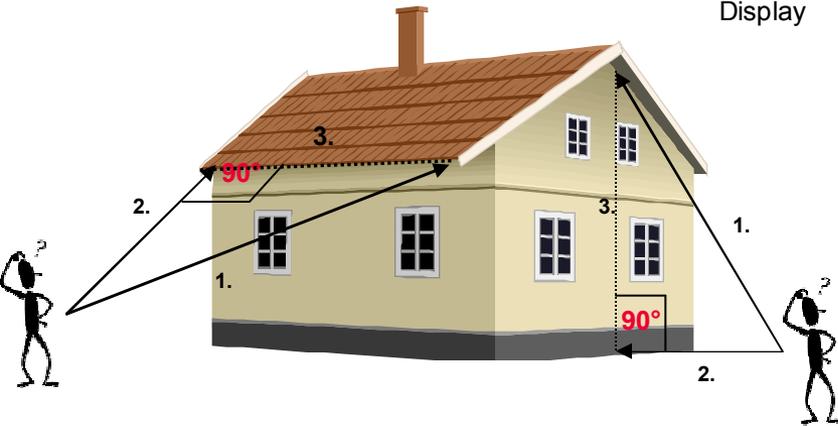
Calculate distances from the ground or safe locations

Two Point Pythagoras

Vertical or Horizontal

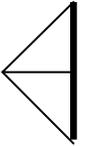


Symbol in
DISTO
Display

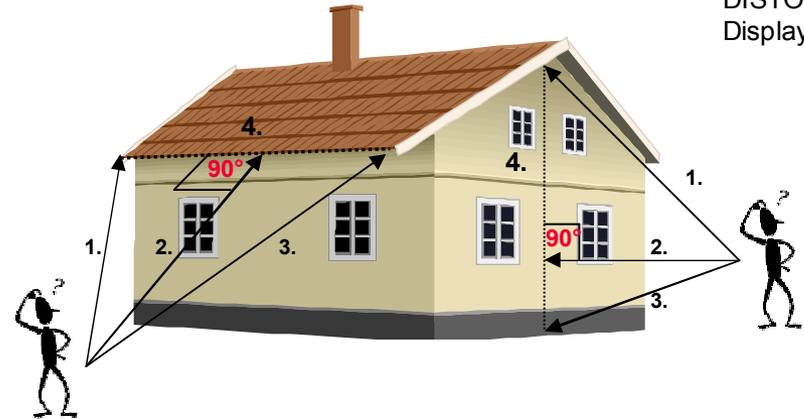


Three Point Pythagoras

Vertical or Horizontal



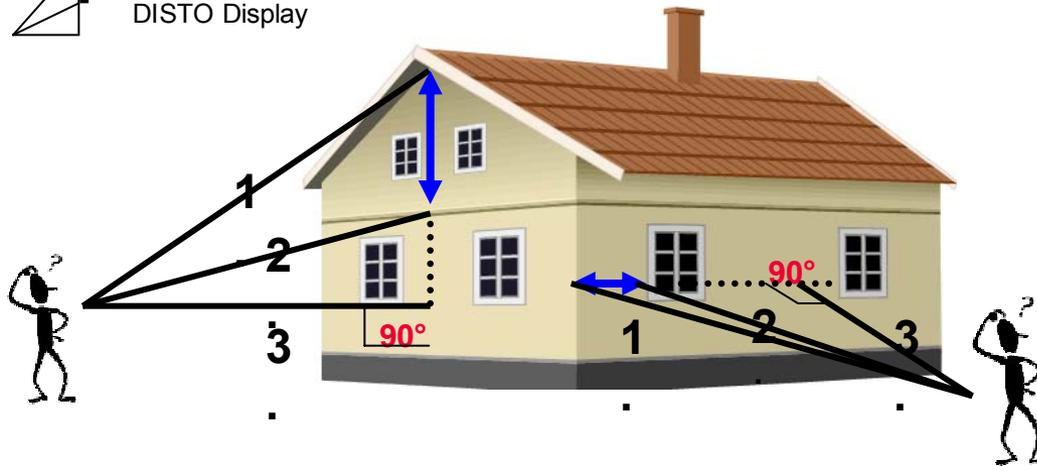
Symbol in
DISTO
Display



Three Point Partial



Symbol in
DISTO
Display



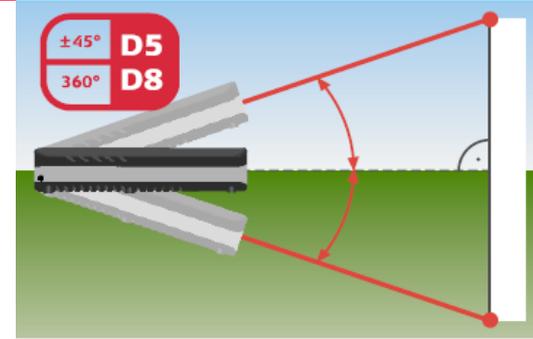
Tripod highly recommended for accurate results in all three methods

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D5/D8 Tilt Sensor

Remember the D5 measures +/- 45° and the D8 has a full 360°



By accessing the menu, you can set the tilt sensor to display in percent, degrees, or inches/feet (rise over run). You can also activate the degree sensor to be active all the time in the point finder display at the top right hand corner.

NOTE: The D5 and D8 tilt based measurement buttons are in different places on each unit.

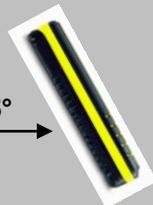
If you tilt the DISTO on a transverse angle more than 10 degrees, you will receive an error code on the screen. Error code 160 will appear if you tilt the D5 beyond the 45° limit



D5/D8 Tilt



D5 > 45° Angle

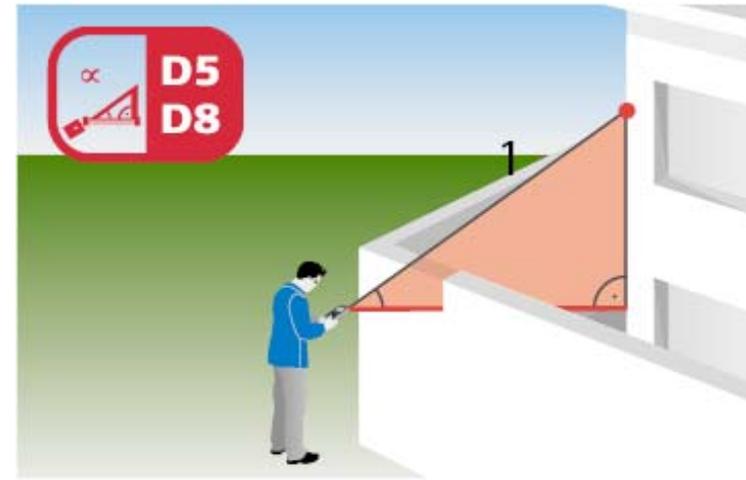


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D5/D8 Direct Horizontal Distance

Measure over or under an obstruction to obtain the horizontal distance

1. Press the tilt button on the D5/D8 two times
2. This symbol will be in the top left corner 
3. Aim using the laser or point finder display and then press  to capture your measurement.
4. The bottom line will show the direct horizontal distance.



This little red triangle means there is a second screen with additional values. Press and hold the tilt button to access the second screen. Press and hold again to return to the first screen.

Angle measured

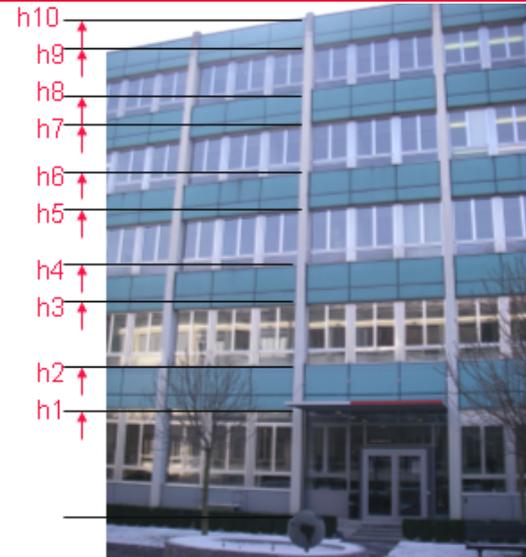
Slope distance

Horizontal distance

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D8 Exclusive! Double tilt measurement with one measured distance

Measure tall or deep objects on the same vertical plane where only one reflective point is possible



- Press  until the  appears.
- Measure the following:
 - Distance and angle  by pressing  to the top, bottom or any target point
 - When moving the Leica DISTO™ D8 up or down, you instantly get the corresponding height or depth distance from your starting point
 - Lock the second point (angle and distance) by pressing  and then have access to secondary display values if desired
- The result line will display the distance between the two points.
- **2nd Result:** Press and hold  to get , ,  (slope distance, horizontal distance, altitude above the right angle)



Please note that both measurements are in the same vertical plane. It doesn't matter whether the first measured point is above or below the second one.

Use the Point finder display to target your object
And watch the values change as you pan up or down from your start point



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D8 Exclusive! Double tilt measurement with two measured distances

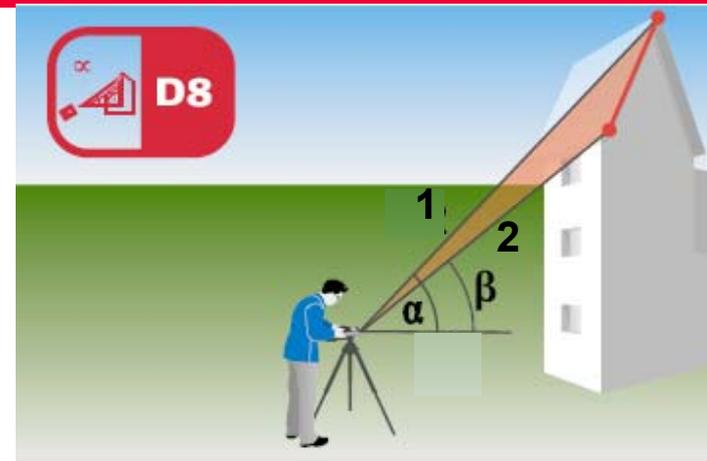
Measure the distances between ANY two vertical points

- Press  until the symbol  appears.
- Measure the following:
 - Distance and angle  by pressing 
 - Distance and angle  by pressing 

- In the main line the slope from the base point (first measurement) to the secondly measured object is displayed.
- 2nd Result: Press and hold  to get , , 
(horizontal distance between measured points, height difference between the two measured points, pitch of the object)



Please note that if you are measuring the pitch of an object (roof) you need to stand straight in front of the object and measure on a vertical line for an accurate calculation. If you are measuring the height difference of the two measured points you do not have to be directly in front of them. It doesn't matter whether the first measured point is above or below the second one or whether the object is pitched back or forth



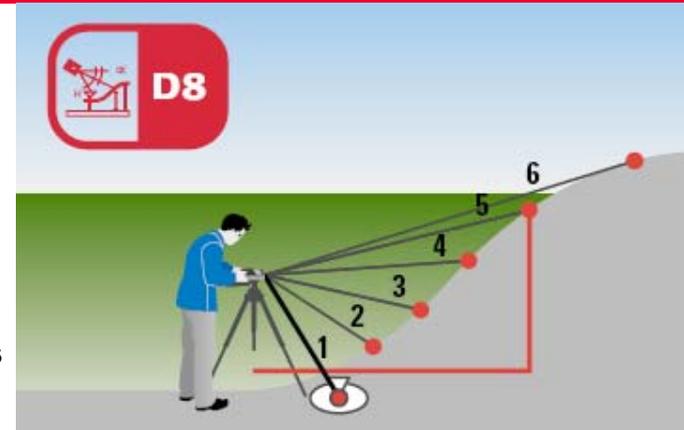
Don't forget to use the Point finder and a tripod for this!

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D8 Exclusive! Profile Measurement

Measure the profile of an object and the DISTO will calculate distance and elevation from your starting reference point

- Press  until the  appears.
- $\pm H$ 0.00ft appears in the display. You can now enter a height like e.g. height above sea level or to another reference point by pressing the plus or minus keys. Leave 0.00ft only if you only want to compare to the reference point measured next.
- Confirm reference setting by pressing 
- Measure the following:
 - Distance and angle  to reference point by pressing 
 - Distance and angle  to measuring point by pressing 
 - Just press again  for further measuring points ...
- In the main line the height difference from the reference point (first measurement) is displayed. The distance from the DISTO™ reference to the measuring point  is shown in line 3 of the measurement field.



Please note that for a profile measurement the measurements need to be in one line. For general leveling tasks this is not necessary.

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