

The DISTO D3a BT (Bluetooth) model - FAQ and Answers

Which system requirements does my PDA need to work with DISTO™ transfer?

The DISTO™ transfer works on PDAs with Bluetooth® interface as long it has Windows Mobile 2003 SE respectively 2005 or Windows Mobile 5.0 and Windows Mobile 6.0 installed. Very good experience we have with PDA devices from HP. Of course to install DISTO™ transfer on a PDA a PC is required. On this PC Microsoft ActiveSync needs to be installed in order to download DISTO™ transfer to the PDA.

Does DISTO™ transfer support the use of Apple Mac computers?

No it doesn't. To use your Leica DISTO™ with an Apple Mac you need to buy a software from a third party developer.

Does DISTO™ transfer support the use of Palm pocket PC?

No it doesn't. To use your Leica DISTO™ with a Palm you need to buy a software from a third party developer.

Does DISTO™ transfer support the use of mobile phone like Blackberry or Smart phone with Windows Mobile 6.0?

DISTO™ transfer does not work on mobile phones except of Smart phones with Windows Mobile 6.0. Please note that these Smart phones only have a reduced version of Excel which limits the comfort for use with the Leica DISTO™. Another limiting factor is the T9 predictive text technology.

What is DISTO™ transfer and how does this work?

DISTO™ transfer is a program which once started is running in the background. Data which are send from a Leica DISTO™ device are collected by the transfer software and this simulates a keyboard entry to the active window. So the value will be transferred in any application window that is active in the position of the cursor. This very versatile procedure that you can use your Leica DISTO™ with almost every Windows application. You only need to select the format you want to receive the data (with units, enter (in Excel the cursor jumps to the cell below), tabulator (in Excel® the cursor jumps to the cell to the right)).

How accurate is the tilt sensor in the Leica DISTO™ D3a BT?

The accuracy of the inclination sensor in the device is $\pm 0.3^\circ$ to the laser beam respectively $\pm 0.3^\circ$ to the housing of the device.

How can I check if the tilt sensor of my device is still within the described specifications ($\pm 0.3^\circ$)?

The tilt sensor has to be switched on. On an absolute flat surface the first measurement has to be made. (please note angle a). Afterwards the device has to be turned around 180° and the second measurement has to be made. (please note angle b).

Now angle a and angle b are added up and divided by 2. If this value falls within $\pm 0.3^\circ$ the tilt sensor of the device is within the described specification.

What is the angular range of the tilt sensor in the Leica DISTO™ D3a BT?

The integral tilt sensor in the Leica DISTO™ D3a BT functions in the range $\pm 45^\circ$ and at a transverse tilt of $\pm 10^\circ$. The display indicates if the tilt is in the range $> \pm 50^\circ$ a line appears on the display with the text max. and an info code i 160, which means that the device is being used outside its permissible range.

If the device is held at $> \pm 10^\circ$ transversely, a similar line appears on the display, which indicates the transverse tilt with the text "max". The info code i 156 indicates that the device is tilted too much.

What units of tilts are integrated into the Leica DISTO™ D3a BT?

You can set the Leica DISTO™ D3a BT to use different tilt units. The user can select between $^\circ$ and %. These can be changed in the menu.

Can the inclination sensor of a Leica DISTO™ D3a BT be calibrated by the user?

The user can calibrate the device's tilt sensor. The angle sensor is switched on by pressing the "Function key" once. Take two measurements on an absolutely flat surface. The first measurement is taken and a note is made of the measured angle a. The device is then turned through exactly 180° , the second measurement is taken and a note is made of the measured angle b. The value x to which the device must be corrected is calculated as follows: $x = (a+b) / 2$

The calibration mode is then entered by pressing keys "Clear Off" and the "Function key" both at the same time for 2 seconds. The correction value x can be entered here using the "Plus" and "Minus" keys. The entered value is stored and implemented by pressing the "Menu/= " key.

Is it possible to obtain detailed information about the measurements taken?

Yes, it is possible to obtain detailed information within the Leica DISTO™ D3a BT about the measurements of areas and volumes. After the measurements have been taken (area/volume), the "Area/Volume" key must be held down and then detailed information is shown in the display.

What accessories are recommended for the Leica DISTO™ D3a BT?

For long distances we recommend using a tripod, even indoors. A tripod provides additional steadiness and therefore allows accurate targeting, especially over long distances. We particularly recommend the Leica TRI100 tripod. You will need to set within the menu button that the Leica DISTO™ D3a is now measuring from the tripod thread.

Can the Leica DISTO™ D3a BT also be used to measure horizontal angles?

No, the integral tilt sensor can only measure vertical angles. If the device is held at a transverse tilt angle greater than $\pm 10^\circ$ the display shows an info code 156, which means that the device is required to be held level (transversely).

What is the measuring accuracy when using the direct horizontal measuring function?

For example, if a distance of 10m is measured at an angle of 10°, the error on the direct horizontal distance (fd) is 9mm.

If a distance of 10m is measured at an angle of 45°, the error on the direct horizontal distance (fd) is 37mm.

In order to have best results with indirect measurements considering the deviation of the inclination sensor use the Leica DISTO™ D3a BT as follows. For measuring distances use the instrument as flat as possible.

The horizontal distance error (fd) and the height error (fh) can be calculated as follows:

fd = horizontal distance error

fh = error in height

d = measured distance

a = angle at which the distance is measured

fa = possible angular error

$fd = d * \cos(a) - d * \cos(a + fa)$

$fh = d * \sin(a) - d * \sin(a + fa)$

Which customer segment would find the Leica DISTO™ D3a BT of most use for everyday tasks?

The Leica DISTO™ D3a BT is a great measurement aid for a wide range of target groups and is a superbly multi-talented device for indoor tasks. The device is particularly suitable, but of course not exclusively, for the following users: architects, interior surveyors, electricians, carpenters, kitchen installers, flooring contractors, joiners, heating engineers, window installers, decorators and many others.

Can the display illumination be switched off from the device?

The display illumination can be switched off in the menu.

Can the historical storage memory in the device be erased?

The historical storage memory in the device can be erased by pressing the “Clear Off” and “Storage” keys (both pressed at the same time and held for 2 seconds).

How can I get an extra year's warranty for the Leica DISTO™ D3a BT ?

The standard warranty of 2 years can be extended by one additional year if you register your device on www.disto.com within eight weeks of the purchase date. If the product is not registered, a two year warranty applies.

Which system requirements does my PC need to work with DISTO™ transfer?

Generally the Leica DISTO™ transfer works on all desktops, laptops, tablet PCs and UMPCs equipped with Microsoft Windows SE, ME, XP or Vista. Of course the computer must have a Bluetooth® interface or you have to install a Bluetooth® stick. Using an external Bluetooth® stick the computer must fulfill the requirements of the Bluetooth® stick.