Leica DISTO™ transfer v6

Quick Start Guide

Leica DISTO™ transfer v6

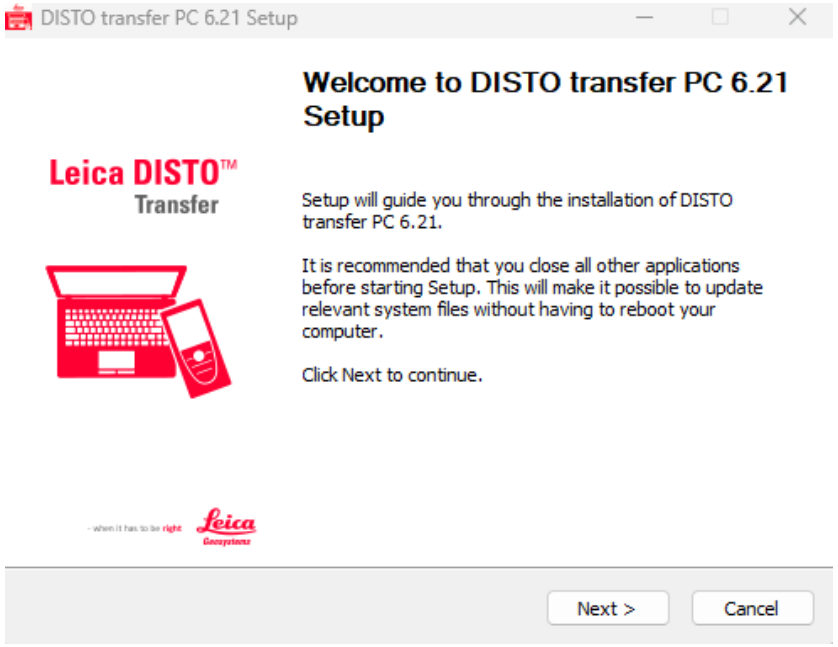
Content

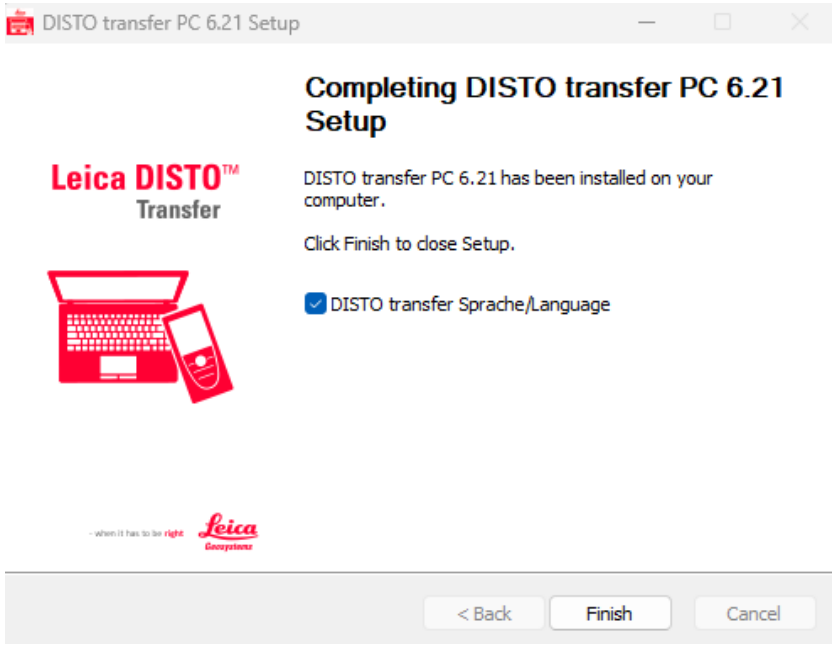
- when it has to be right

Leica Geosystems

Leica DISTO™ transfer v6
Installation

- An Installation Wizard is displayed on the screen to guide the user, through the whole process.





Leica DISTO™ transfer v6

Installation

- DISTO transfer Sprache/Language allows the user to select different languages, accordingly to the user's preference.
- This setting can be changed later by clicking on the icon DISTO transfer 6.0 Sprache Language.

Leica DISTO™ transfer v6

Connection with DISTO's

- The Leica DISTO™ transfer v6 is compatible with all Leica products which have Bluetooth® Smart and Wi-Fi technology.


D1


D110


D2


X3


X4


D510


D810


S910

Bluetooth SMART

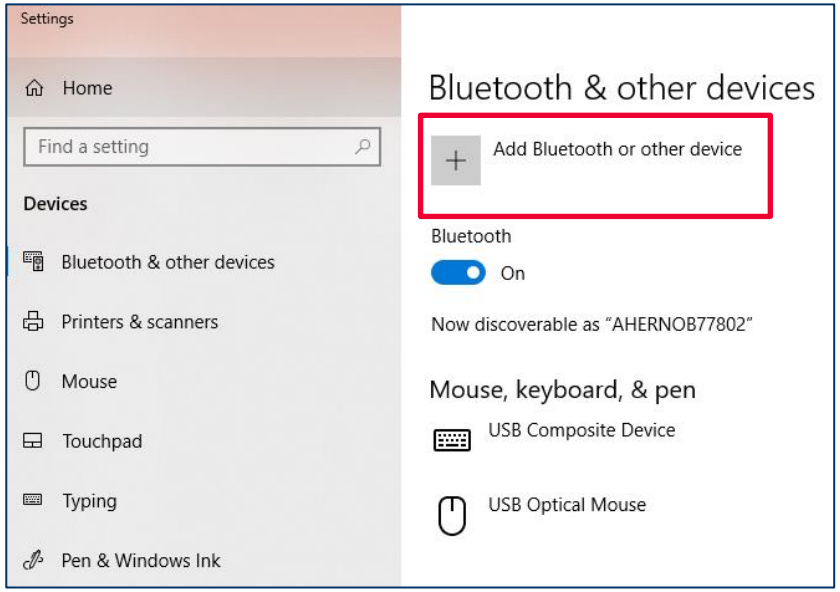

S910

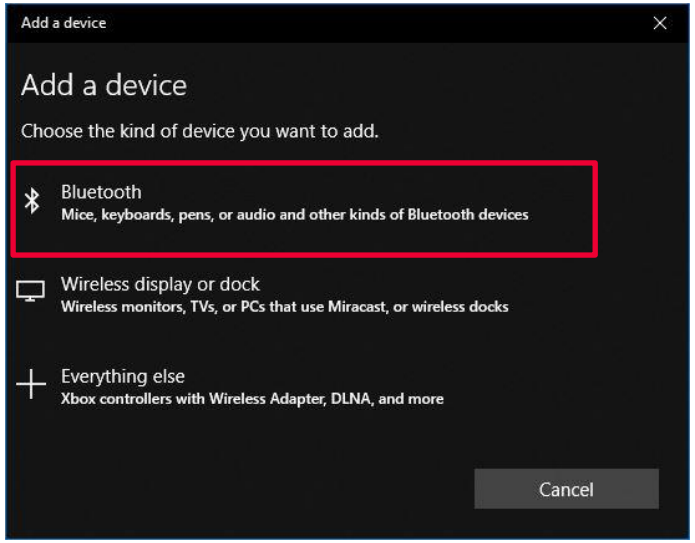
Wi-Fi

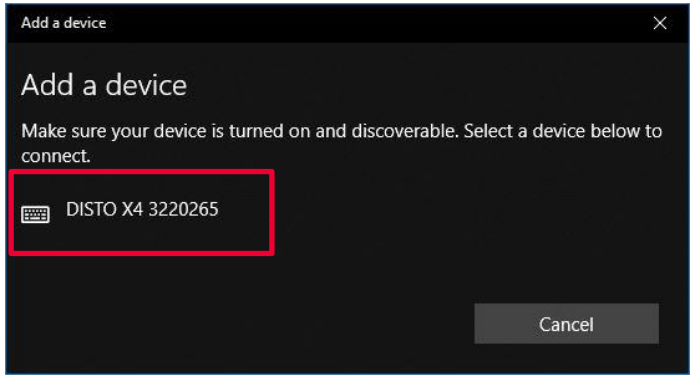
Leica DISTO™ transfer v6

Bluetooth Connection

- **Establish a Bluetooth connection between your Leica DISTO™ device and your tablet/laptop, via Windows Operating System.**



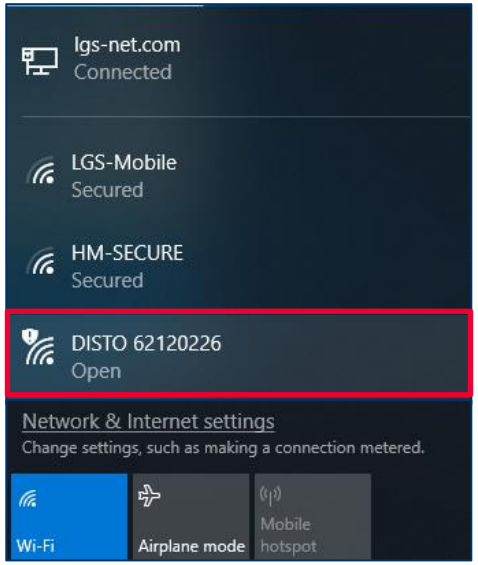


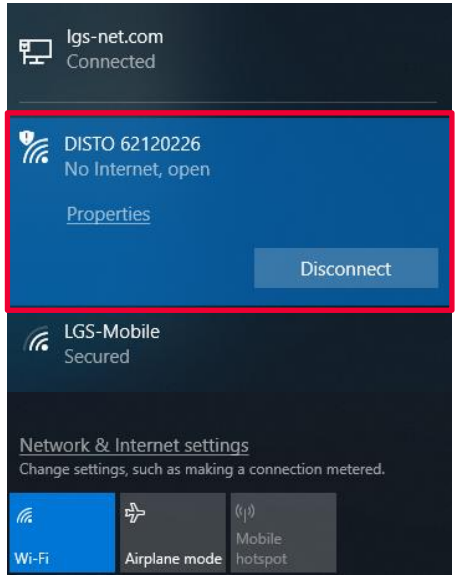


Leica DISTO™ transfer v6

Wi-Fi Connection

- **Establish a Wi-Fi connection between your Leica DISTO™ device and your tablet/laptop, via Windows Operating System.**





Simplified View

DISTO™ is connected

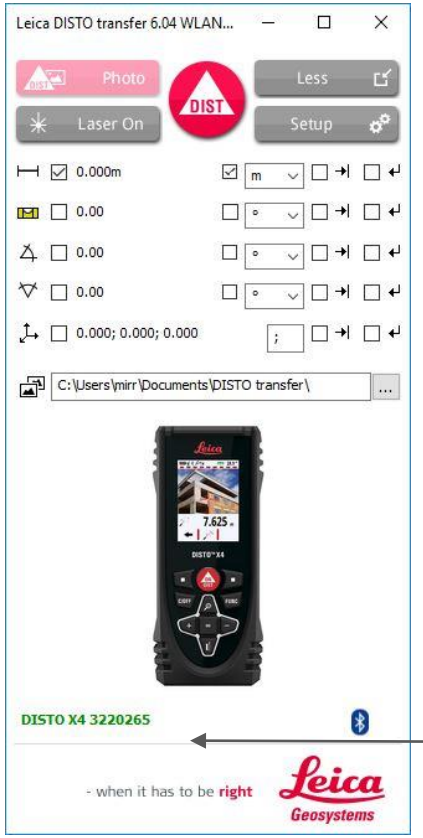
Please ensure that you have the latest firmware version installed (https://lasers.leica-geosystems.com/global/firmware-update-s910)

Leica DISTO™ transfer v6

Start screen – Connection Status

- When the software is started, the initial screen is displayed and starts immediately to look for a Leica DISTO™ device.

Looking for DISTO™



DISTO™ connected

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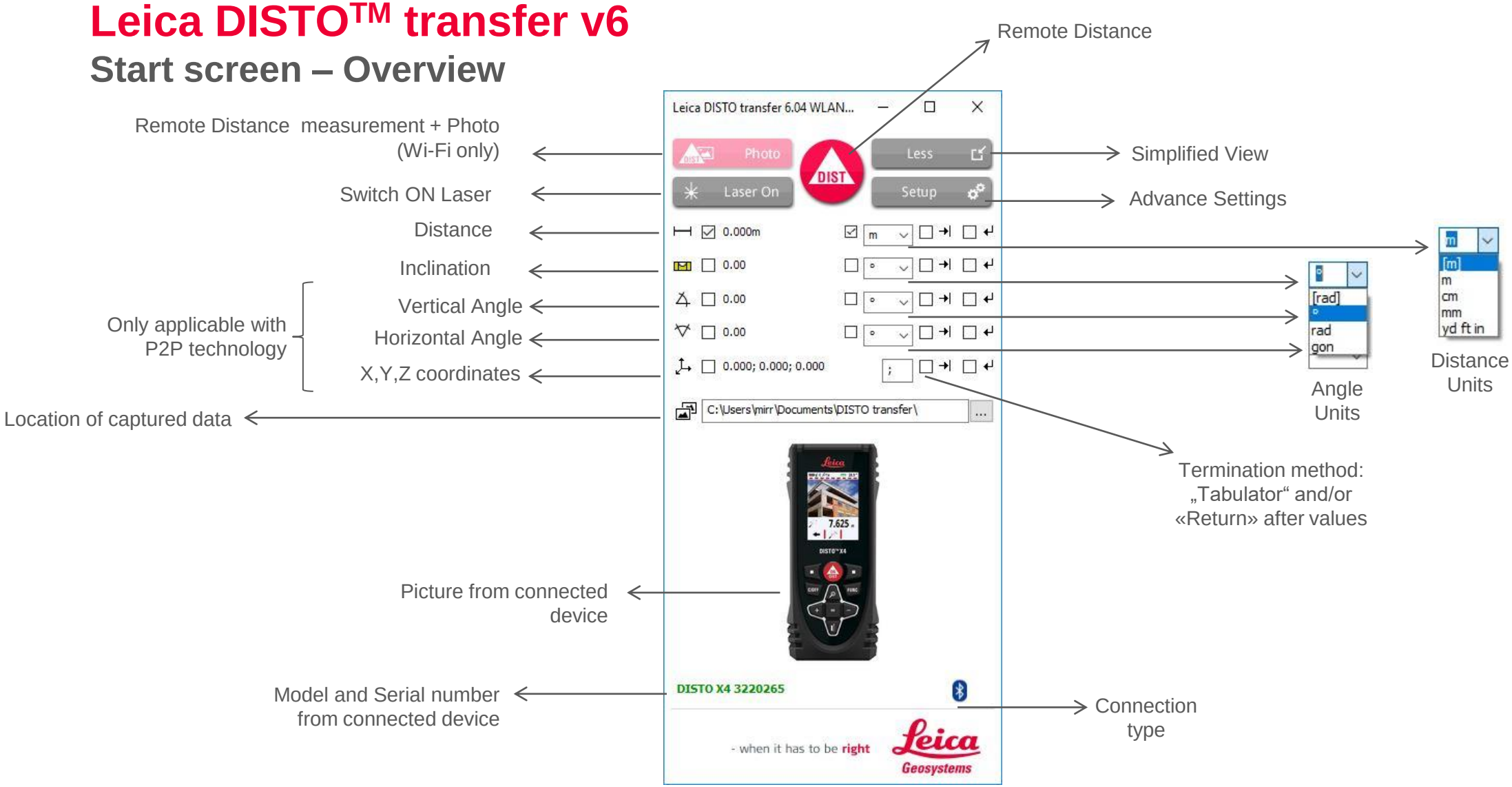
Start screen – Overview



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Start screen – Overview

- Please note that, when DISTO™ X3 / X4 are mounted on a DST360 adapter, the levelling process is automatically started and the levelling status is displayed on the Start screen.
- The same is applicable when the DISTO™ S910 has got the Smart Base folded down.
- These two modes, allow you to use P2P technology.

Connection type

Levelling Status

- Levelled – horizontal and vertical information correct
- Move Alert – DISTO™ has been moved
- Not Levelled – no information about horizontal and vertical

Leica DISTO™ transfer v6

Start screen – Overview

- **If you have connected previously, more than one Leica DISTO™ device to your tablet/laptop, the DISTO transfer software will display a multiple selection window.**
- **Inside this window, you will be offered the chance to select the desired DISTO™ and to switch between Wi-Fi and Bluetooth.**

Devices which are paired with the Windows Operating System

Displays the devices which support Wi-Fi

Confirm selection

- when it has to be **right**

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Basic Measurement Process

Measurements sent to Measurement Log only

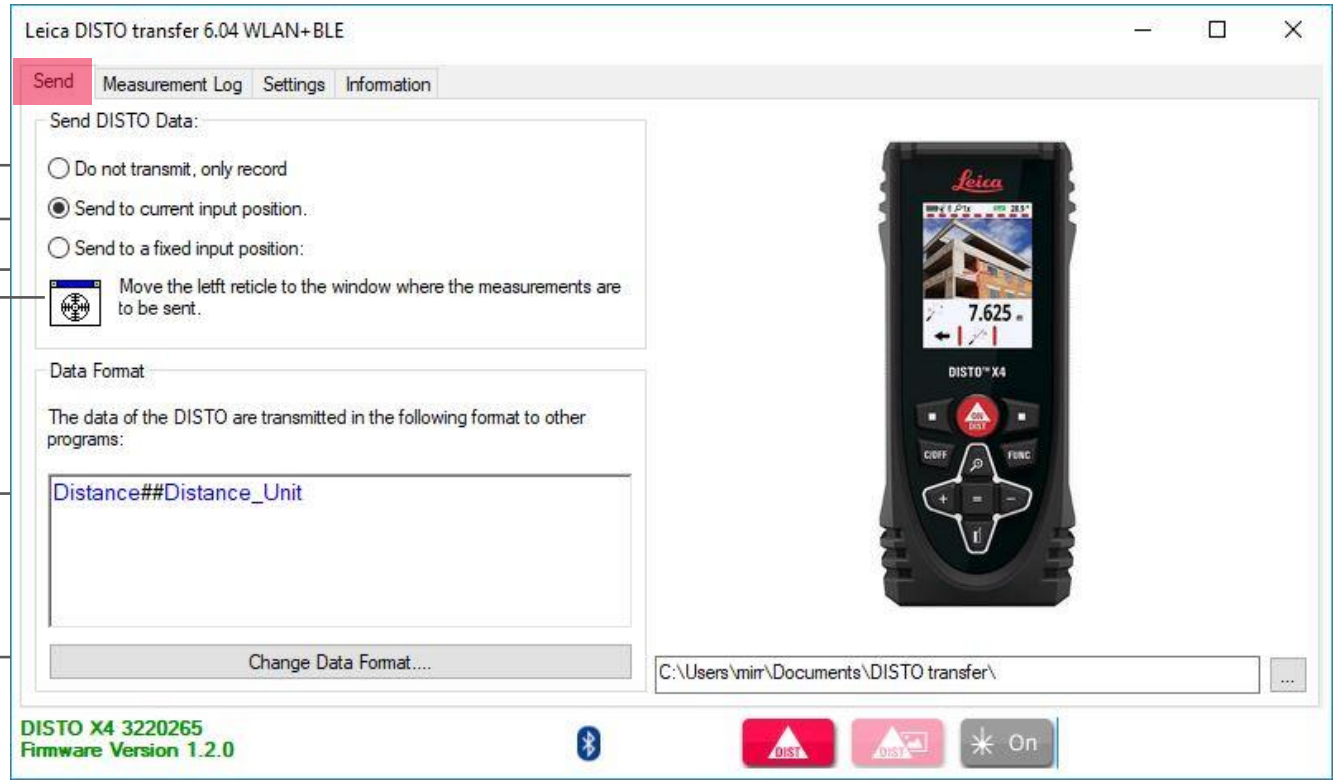
Measurements sent to active window

Measurements sent to a pre-selected window

Window selection

Characteristics sent to other programs

Customized Data Format
(see next page)



Leica DISTO™ transfer v6

Basic Measurement Process

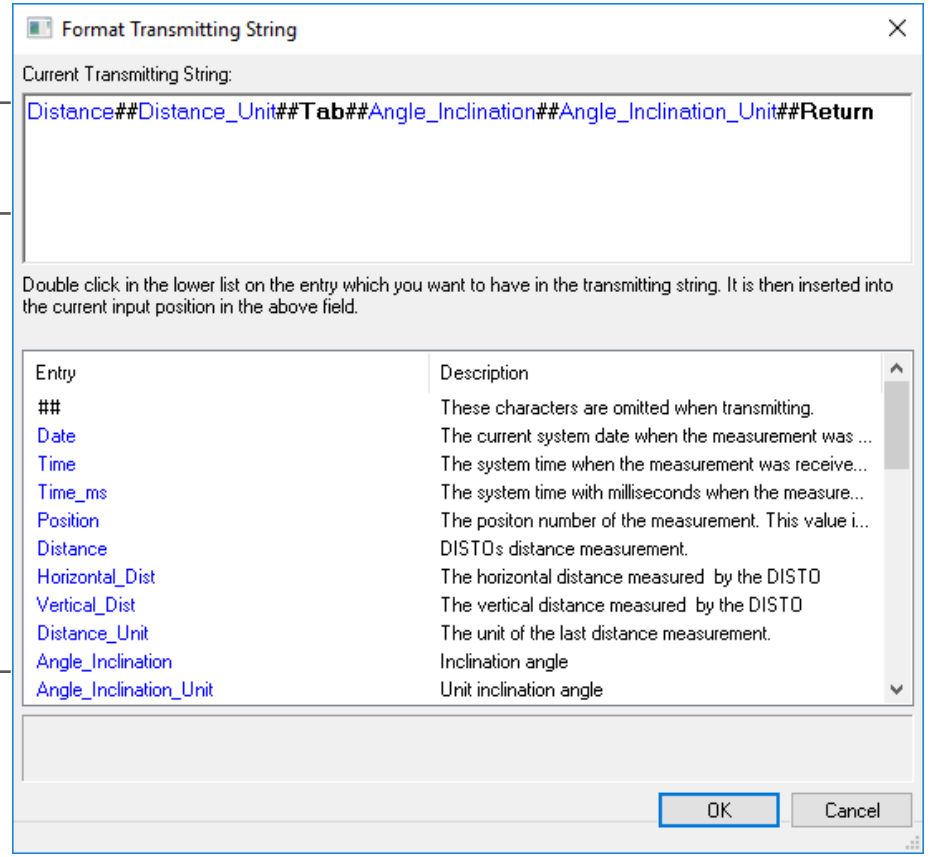
In this scenario the following characteristics will be sent:
Distance, Distance unit, Inclination, Inclination Unit

Active Configuration Window

Blue:	**Value format**
##	**Separators**
Black	**Control Signs**

Separators are mandatory between every item

Double click on the item in this list to move it into the active configuration



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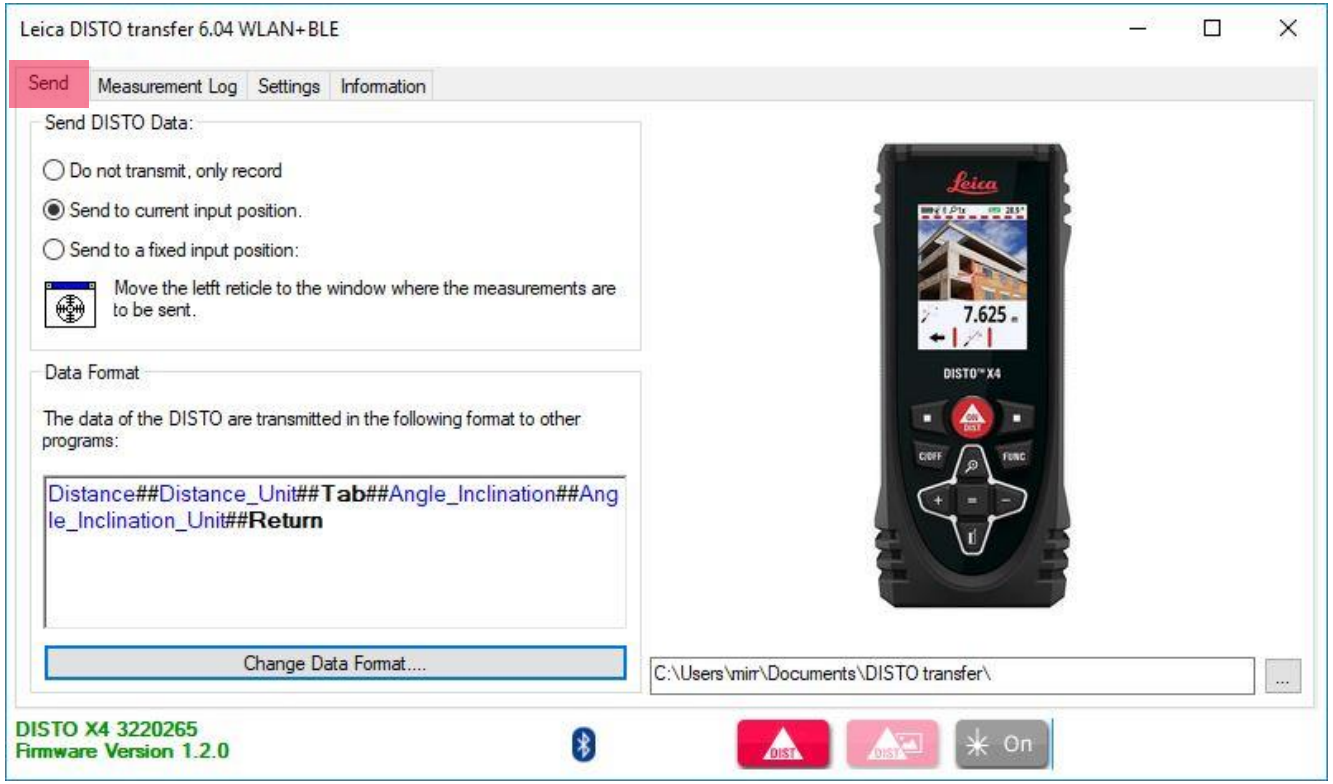
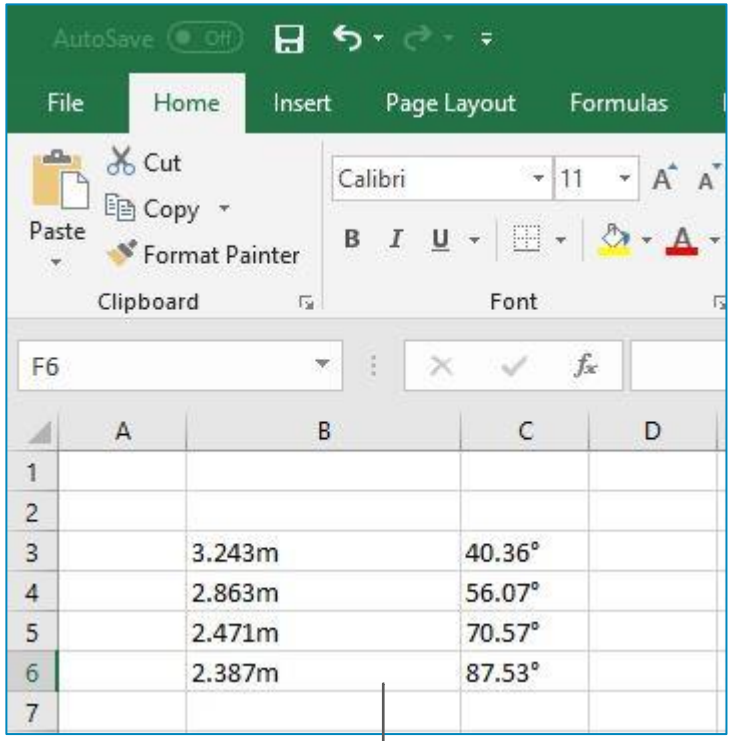
Basic Measurement Process





Data format sent to an Excel spreadsheet

- when it has to be **right**

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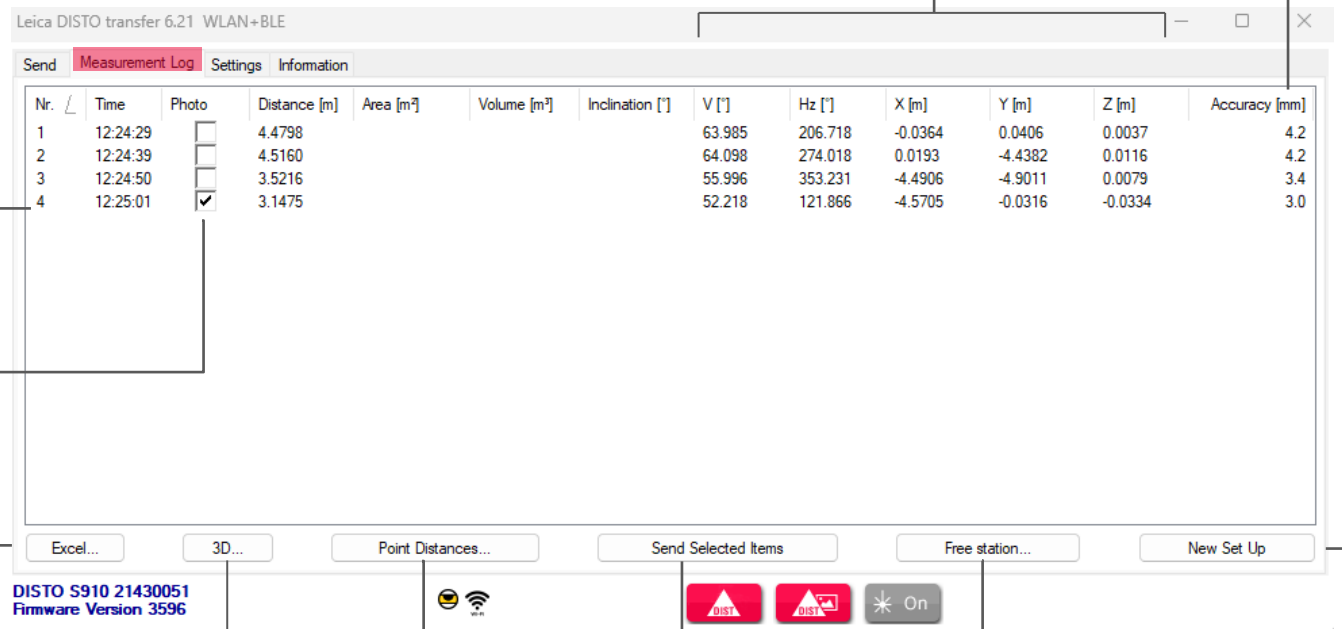
Basic Measurement Process

Vertical & Horizontal Angle, X,Y,Z, coordinates
(with P2P measurements)

Accuracy of measurement



Measurement record

Photo only available for Wi-Fi connection

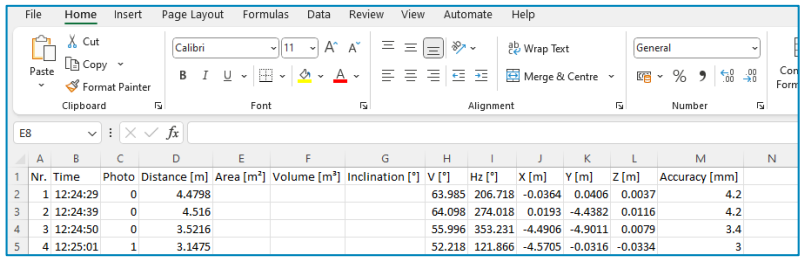
Open Microsoft Excel

New Set Up function

Free station function

Send Selected Items to another program (e.g. Excel spreadsheet)

3D Viewer & P2P Calculator



- when it has to be **right**

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Leica DISTO™ transfer v6

P2P Measurement Process

- **To perform P2P Measurements, a DST360 adapter is required or the Smart Base from the DISTO™ S910 must be folded down.**

Bluetooth SMART

DISTO™ X4 + DST360
or
DISTO™ X3 + DST360

Connection type
Levelling status

Wi-Fi

DISTO™ S910

Connection type
Levelling status

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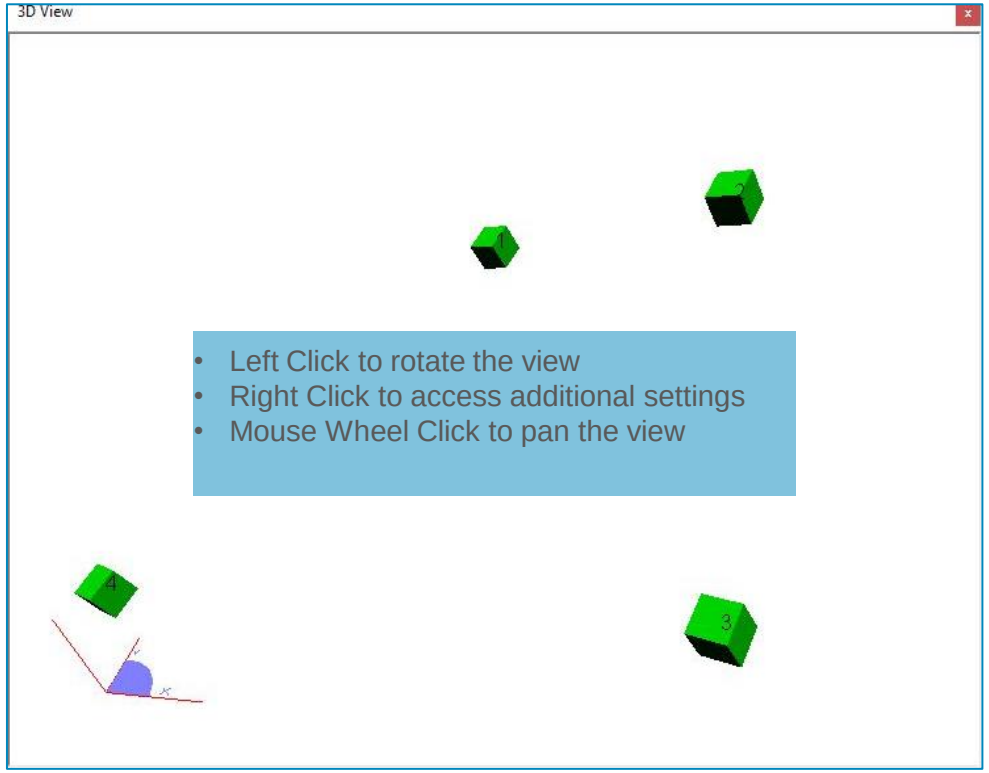
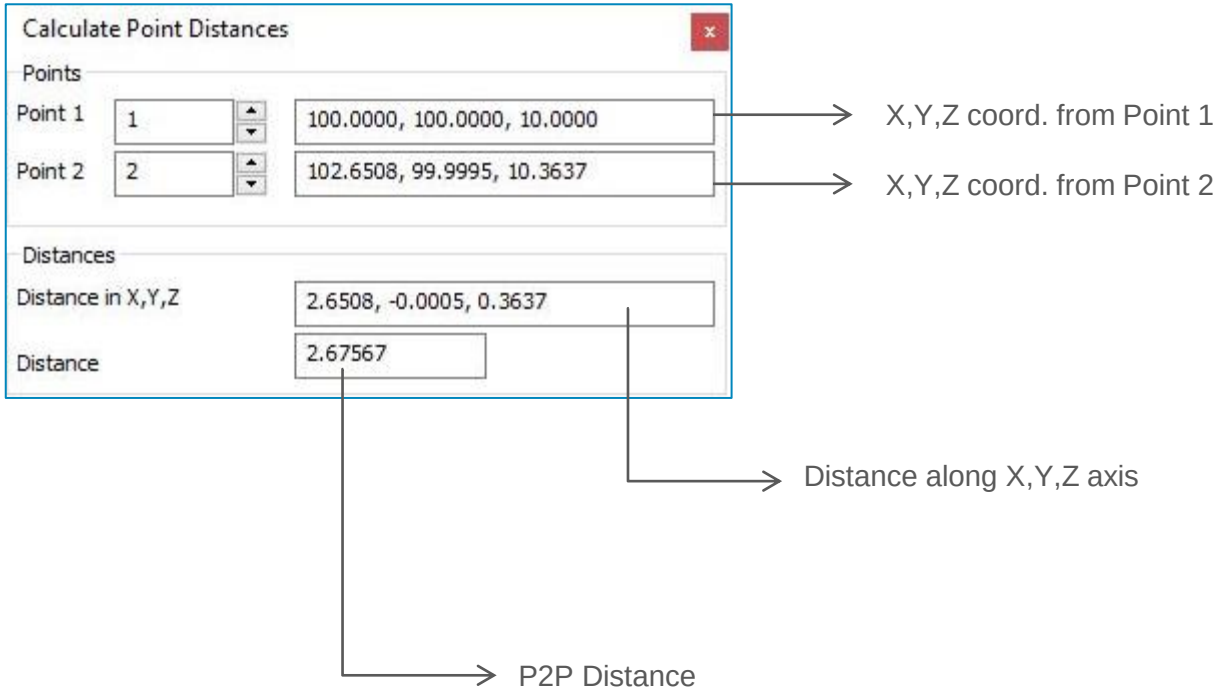
P2P Measurement Process

3D Viewer



P2P Calculator



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Free Station

- Free Station function allows the user to relocate with a new set-up and add relevant information to the existing drawing.
- Useful method when is not possible to measure all the desired data, from one single set-up.
- Please ensure good visibility between Leica DISTO™ device and the points to measure.
- Requires a DST360 adapter or the Smart Base from the DISTO™ S910 must be folded down.

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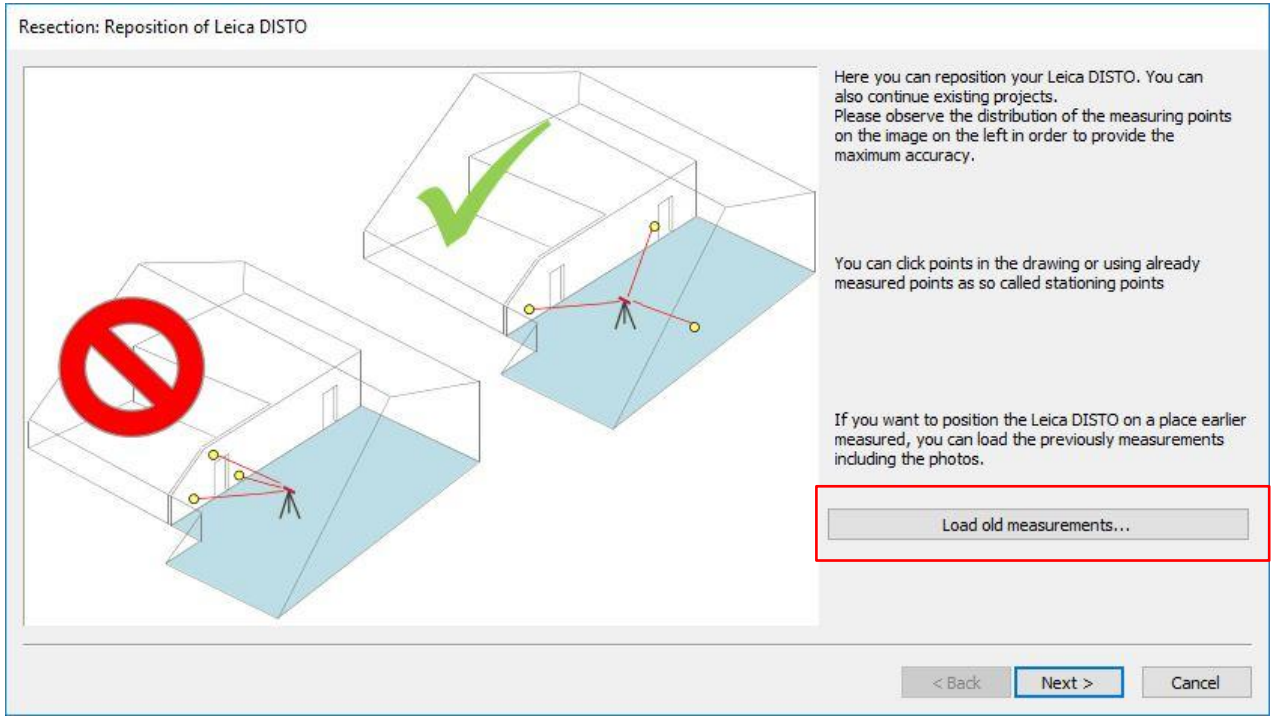
Free Station

- When selecting Free Station function please read carefully the instructions on the screen.
- Select “Load old measurements” to load the reference points.



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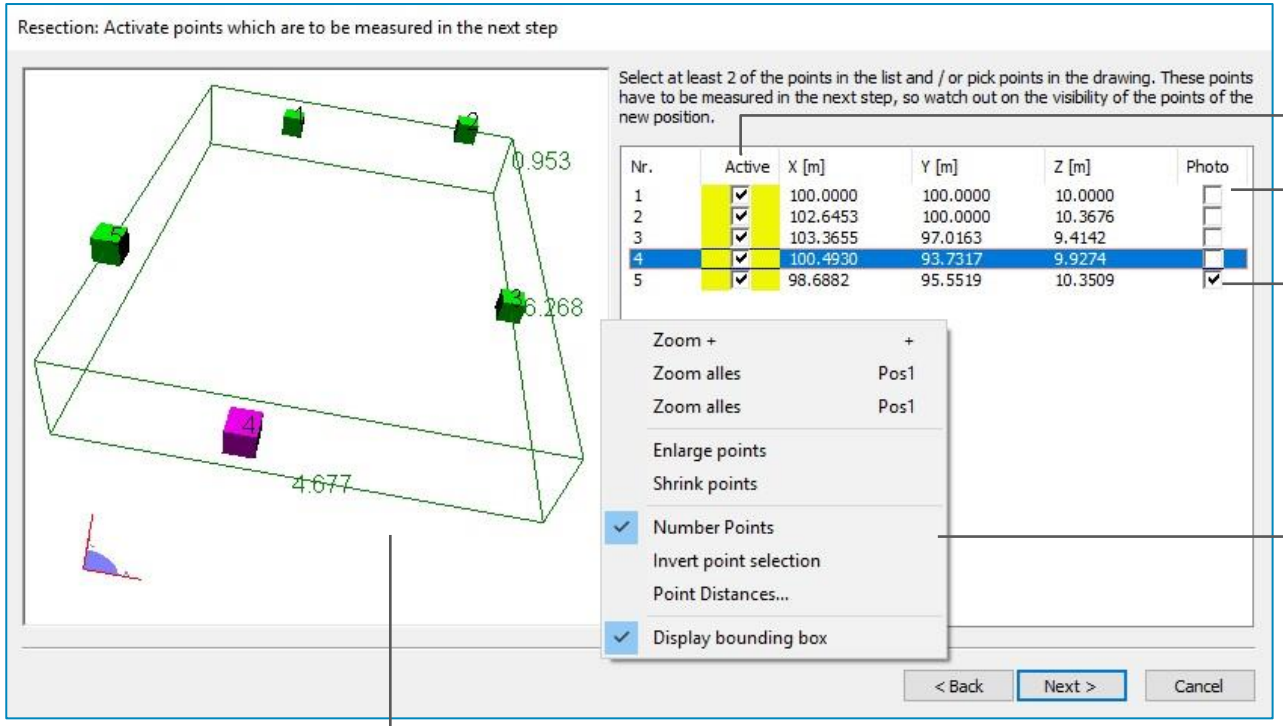
Free Station

- **Select at least 3 points which you would like to use for your relocation.**



Active points

Point without photo associated

Point with photo associated

Right Click Menu

3D Viewer

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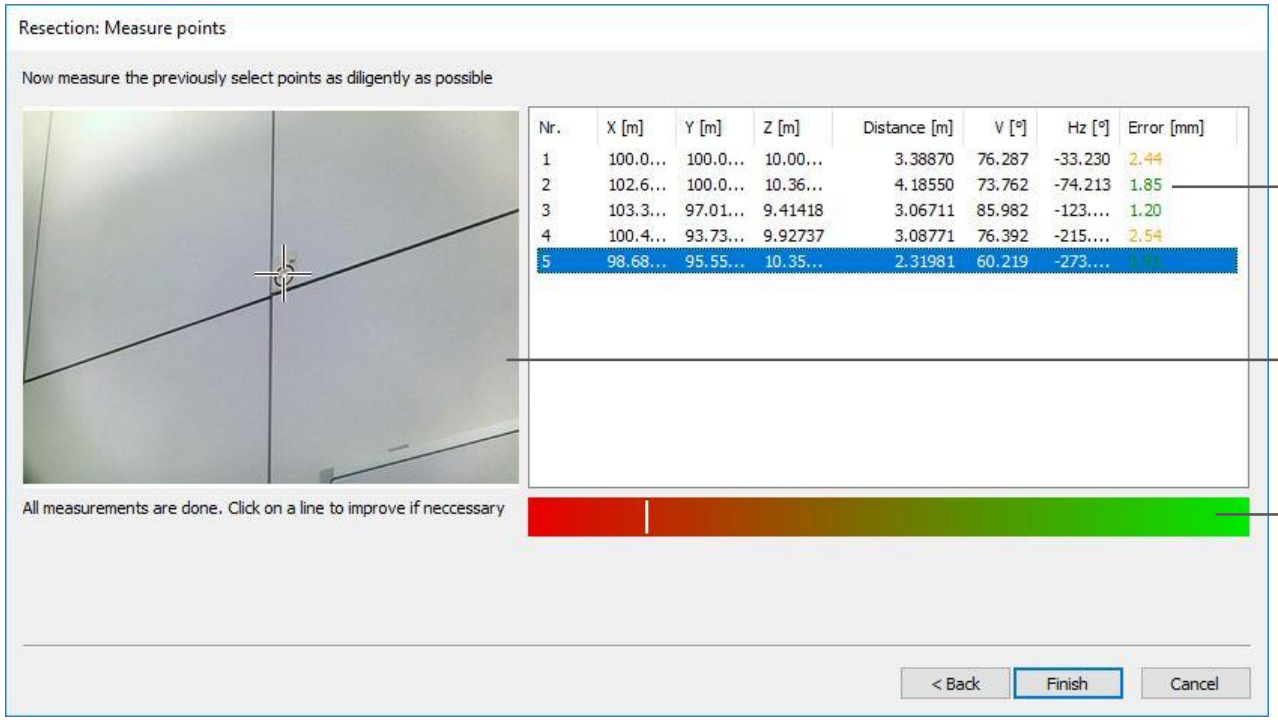
Free Station

- **Select a line from the table and measure the matching point.**



Error associated to each point

A photo will be displayed if it's associated to a point

Accuracy of Relocation

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New Set Up

- New Set Up function allows the user to define a new set-up (for example to measure another room) and continue with the measurements without a need to restart the DISTO™ transfer
- Current measurements and coordinate system will be deleted
- Requires a DST360 adapter or the Smart Base from the DISTO™ S910 must be folded down.

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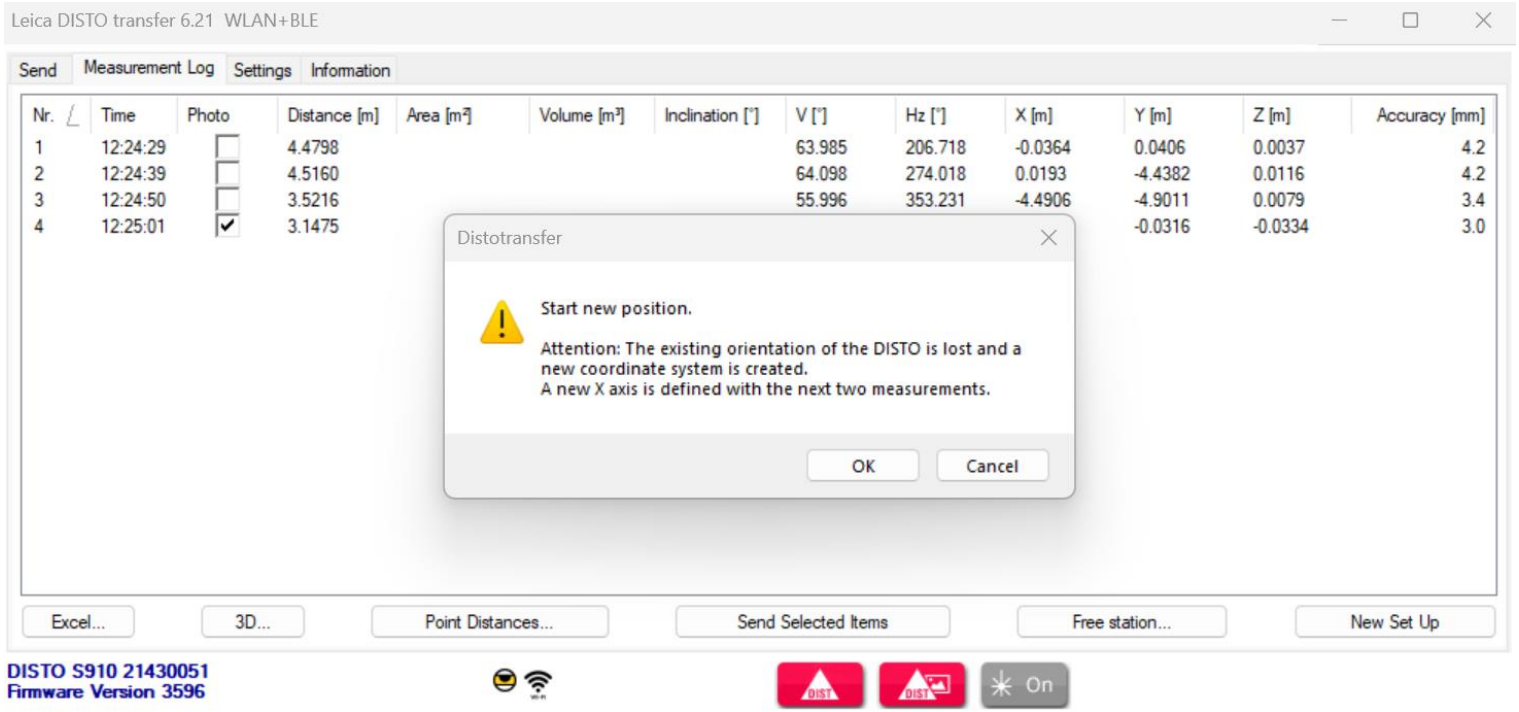
New Set Up

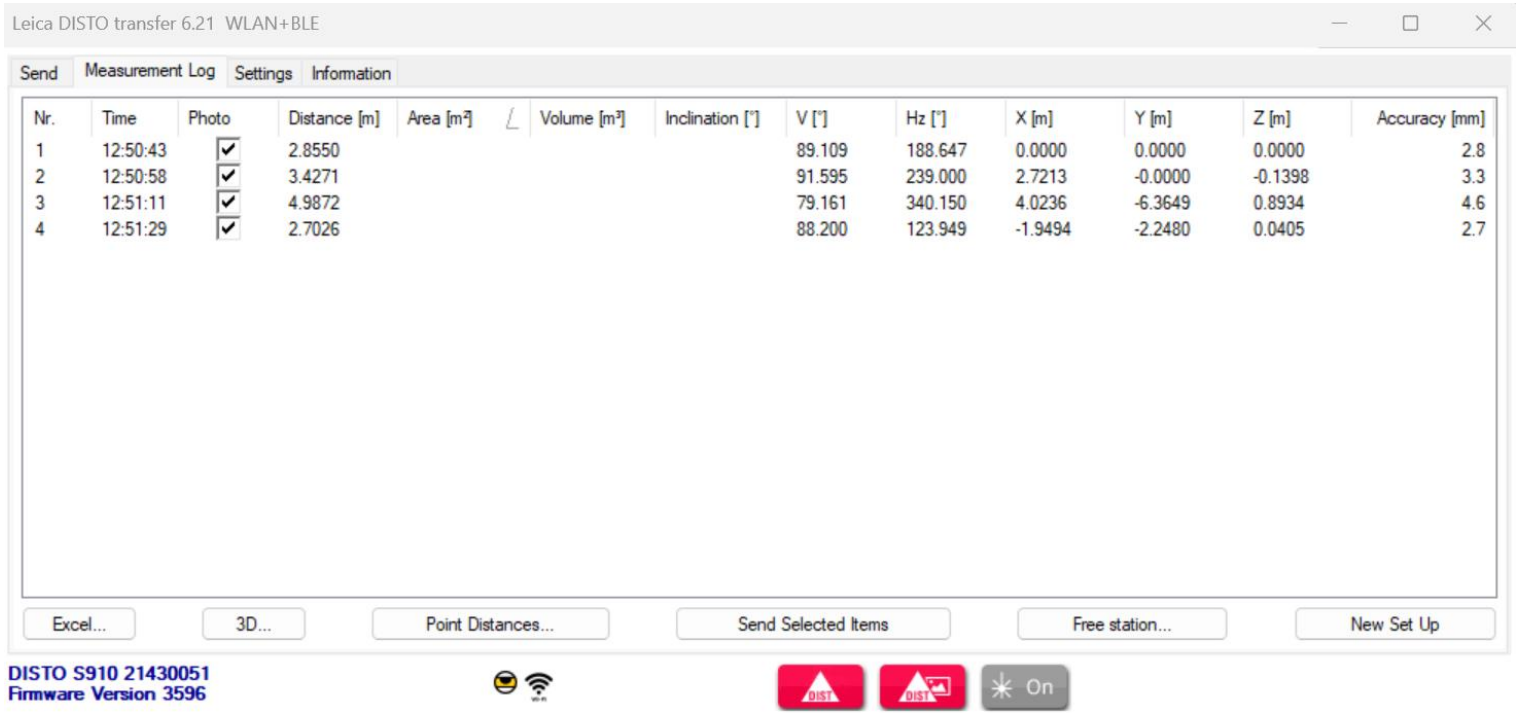
- When selecting New Set Up function a new coordinate system will be created.
- The next 2 measurements define a new X axis.



Leica DISTO™ transfer v6

New Set Up

- Continue with the measurements in the new set-up



Leica DISTO™ transfer v6

CAD Plugin

- **Set-up your DISTO™ S910 – Smart Base folded down and Wi-Fi turned ON**
- **Alternatively you can use a DISTO™ X3/X4 mounted on a DST360 adapter**
- **Open AutoCAD/BricsCAD → Start a new drawing and ensure that your CAD drawing has got the correct Unit system**
- **Make sure the DISTO™ transfer has been installed after your CAD installation or manually start the DISTO™ transfer before using it as a Plugin**

1) AutoCAD LT not supported

2) compatible with AutoCAD 2017 or higher

3) compatible with BricsCAD V17 or higher

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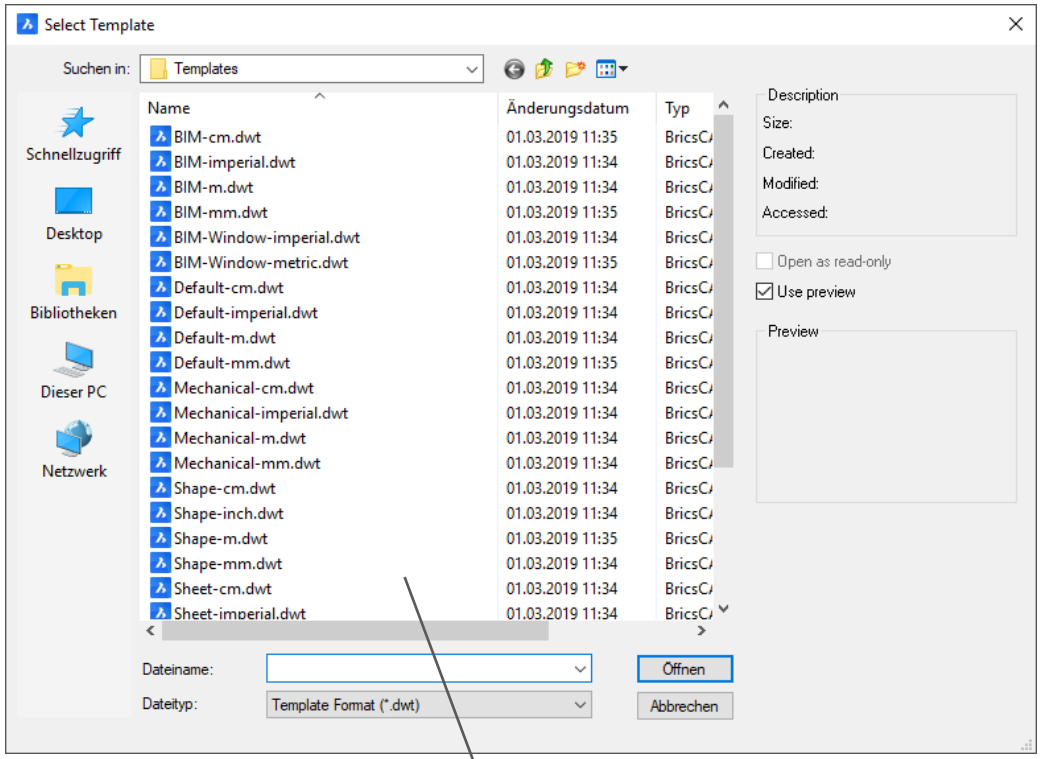
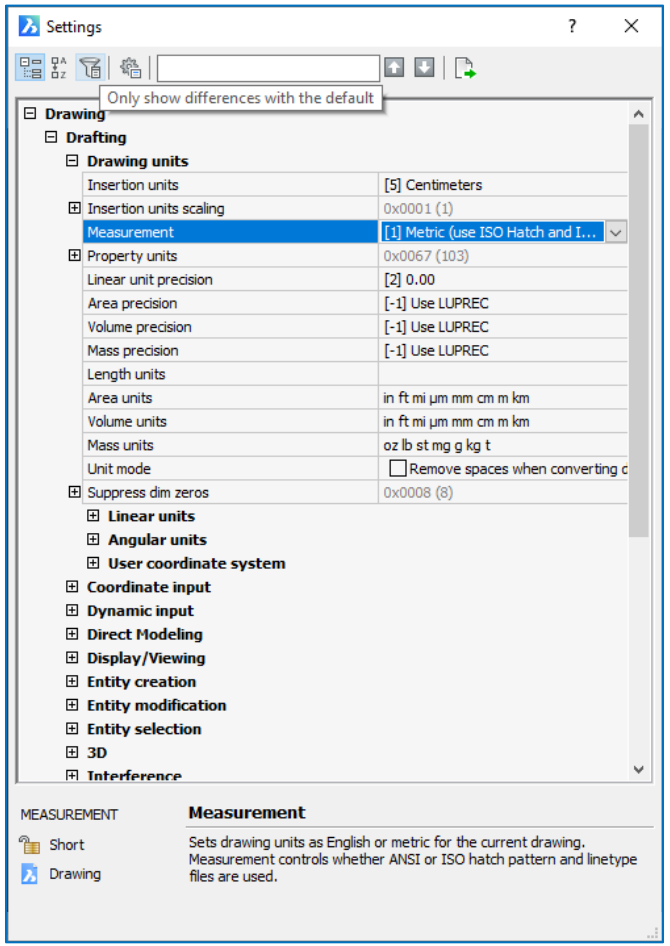
CAD Plugin



Star a new drawing by selecting an existing CAD template

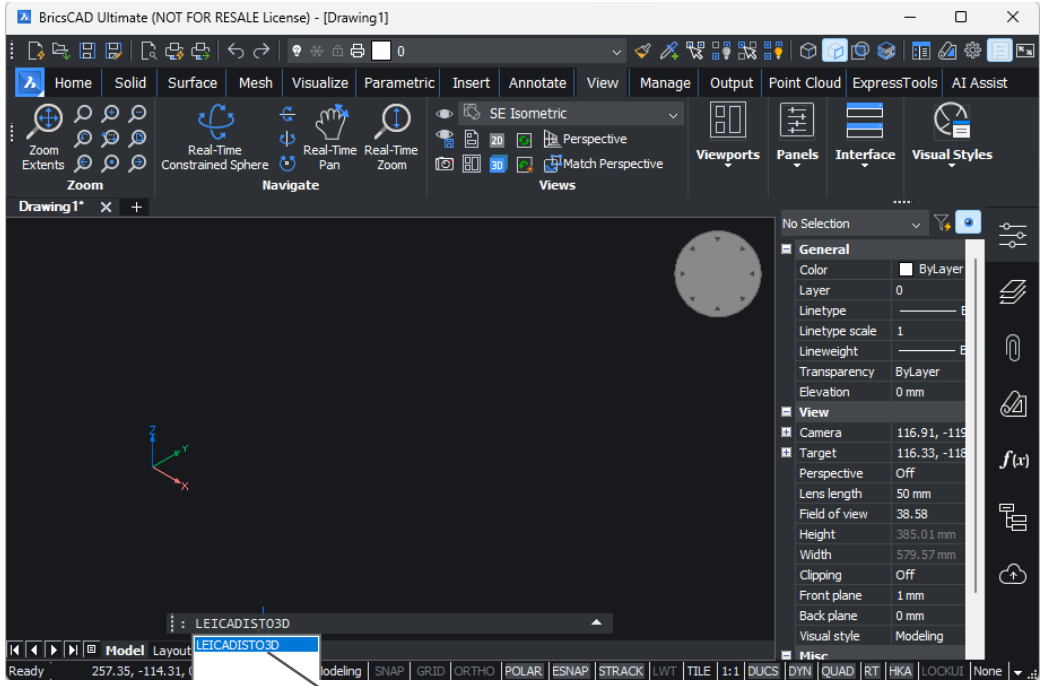


Adjust Unit system:

1) Toolbar
2) Settings
3) Drawing / Drafting / Drawing units
4) Set your preferred Unit System

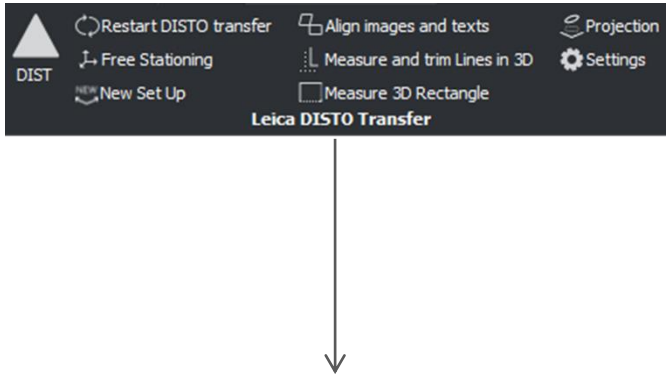
Leica DISTO™ transfer v6

CAD Plugin



To start the plugin please enter LEICADISTO3D into the command line

The plugin starts automatically



Plugin toolbar will appear and DISTO™ transfer will start

- when it has to be **right**

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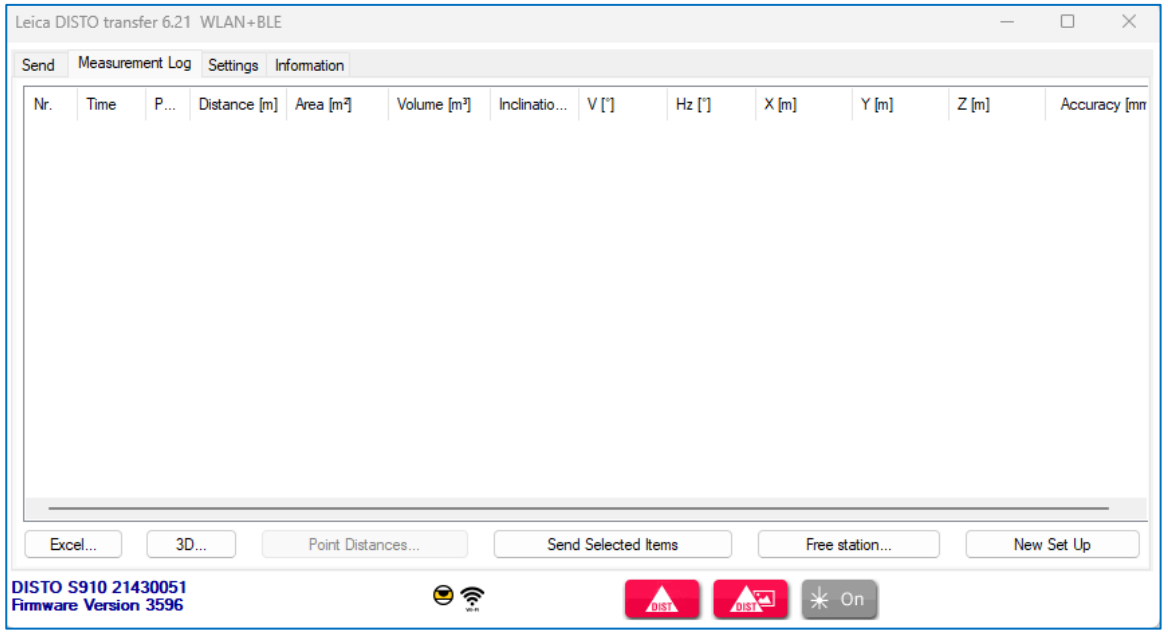
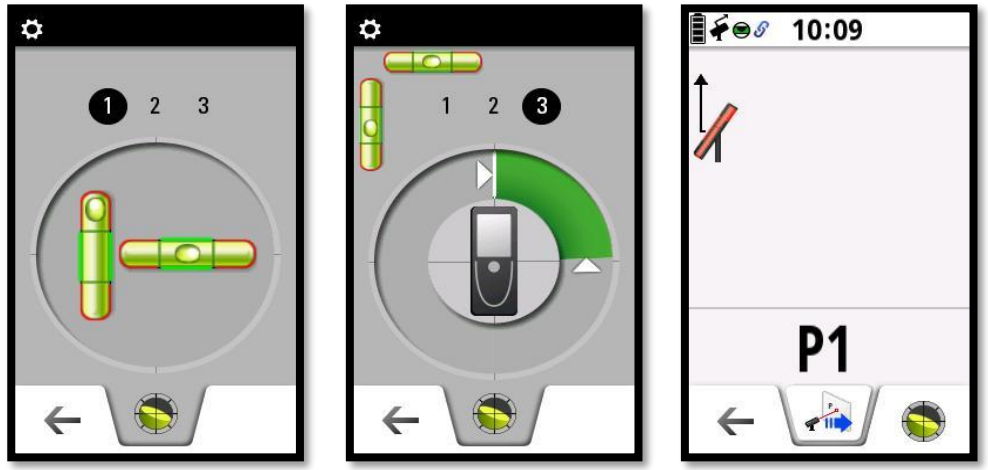
Leica DISTO™ transfer v6

CAD Plugin



Highlighted in Blue → DISTO™ connected to CAD



Execute the levelling process on your DISTO™

- when it has to be right

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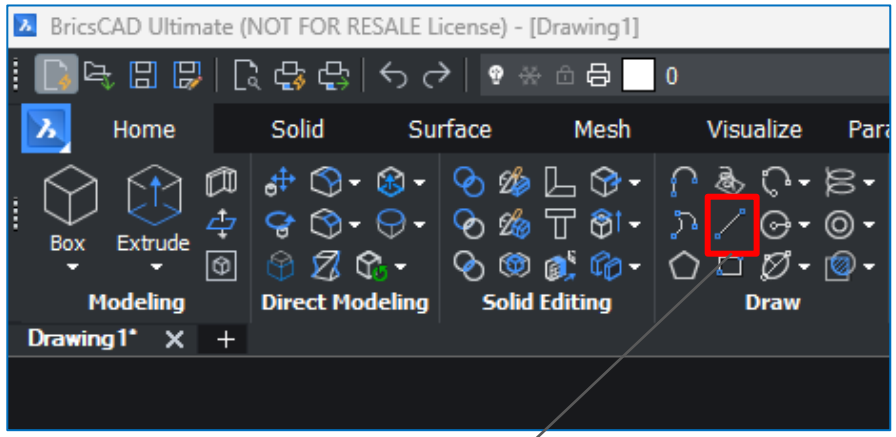
CAD Plugin



Select a drawing element (e.g. Line)

Now that the line has started, you can measure one point after another

NOTE: You need to have a drawing function active to get a value recognized by CAD

Transmit point without picture

Transmit point with picture

- when it has to be **right**

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CAD Plugin

Measured point

To end the line press ESC key

Point number

Image from point

	C...	Layer Name	Descript...	On/Off	Fre...	Loc...	Color
1		0					RGB:223,223,223
2		Defpoints					White
3		DISTO_PHOTO					8
4		DISTO_POINTS					Magenta
5		people					White

Collected data is organised by layers

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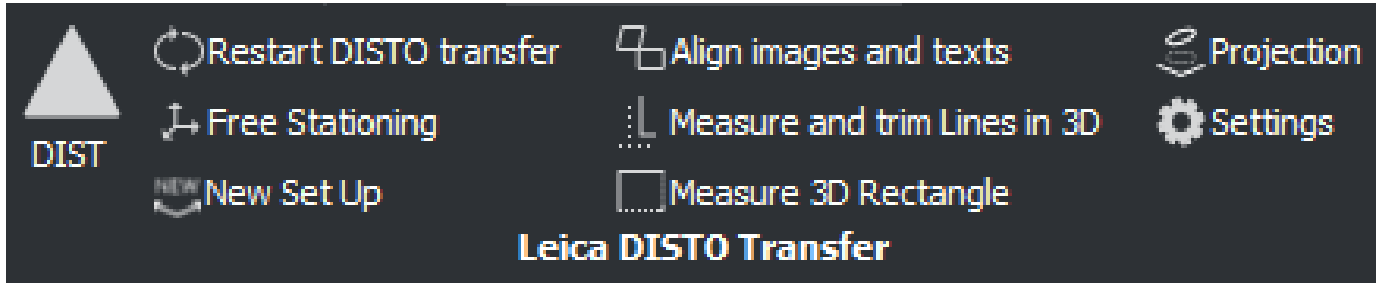
CAD Plugin



Restarts DISTO™ transfer

Align images and texts

Projection

Free Station

Measure and trim Lines

Settings for Text and Images

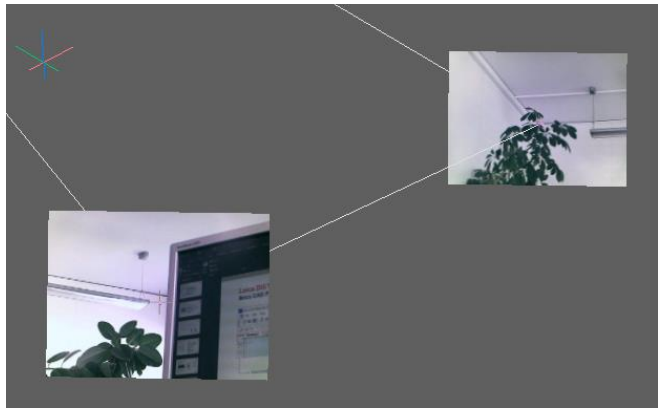
New Set Up

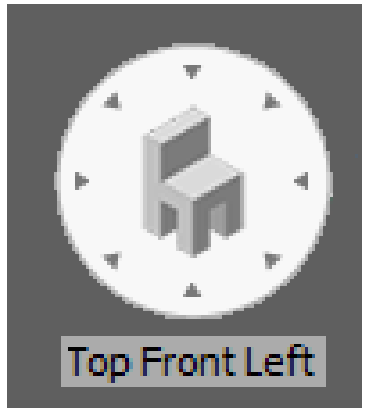
Measure 3D Rectangle

Leica DISTO™ transfer v6

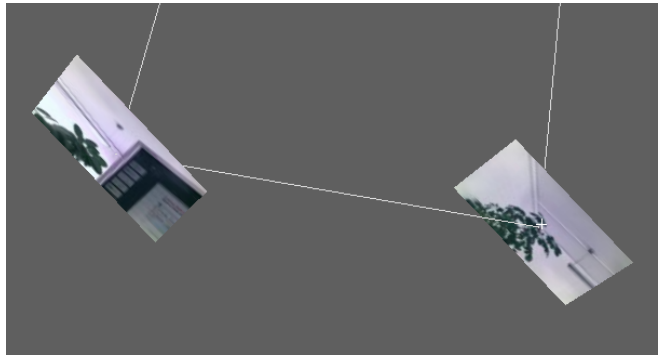
CAD Plugin

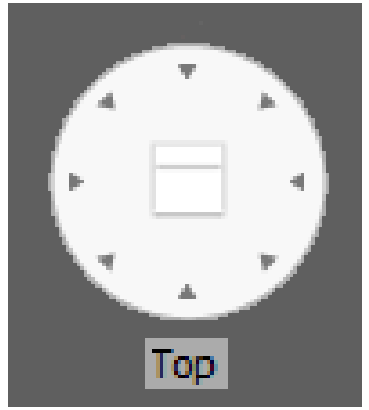
Auto Align Images and Texts





- Default view (Images are aligned)





- When the view is changed, the Images are no longer aligned

- when it has to be **right**

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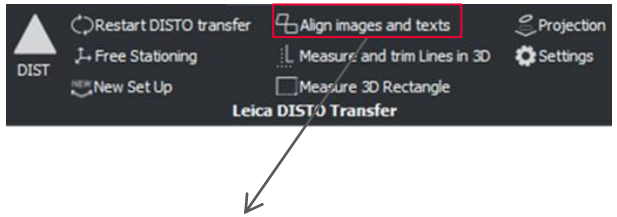
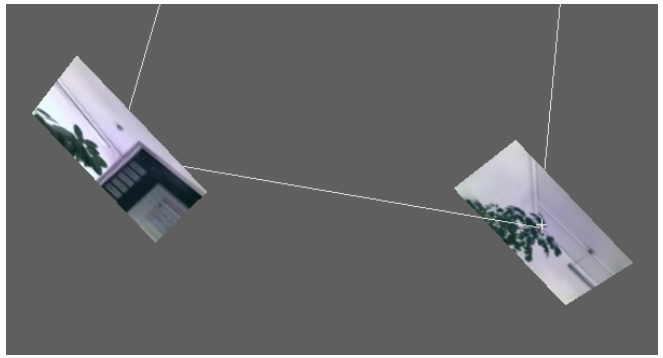
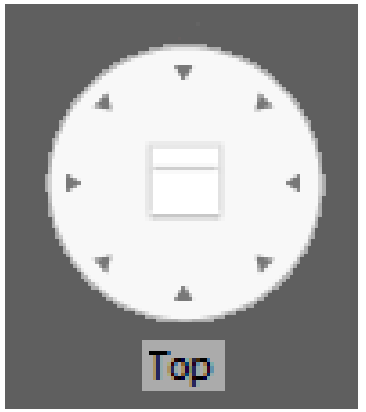
CAD Plugin



Auto Align Images and Texts

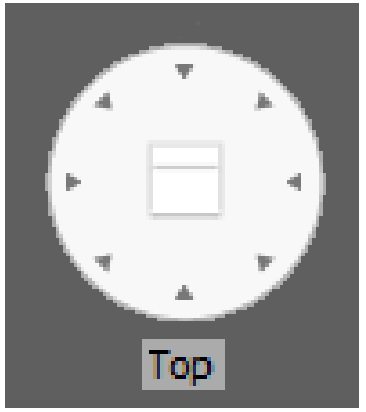




- Press Align images and texts button and select one of the following options:

1) All

2) Individual Image



- Image and Text are now aligned with the current view

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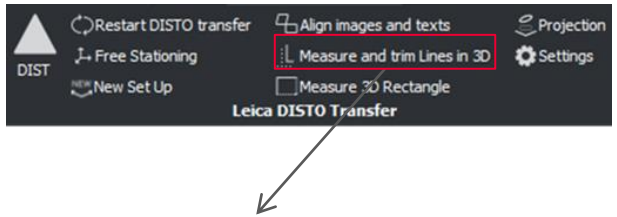
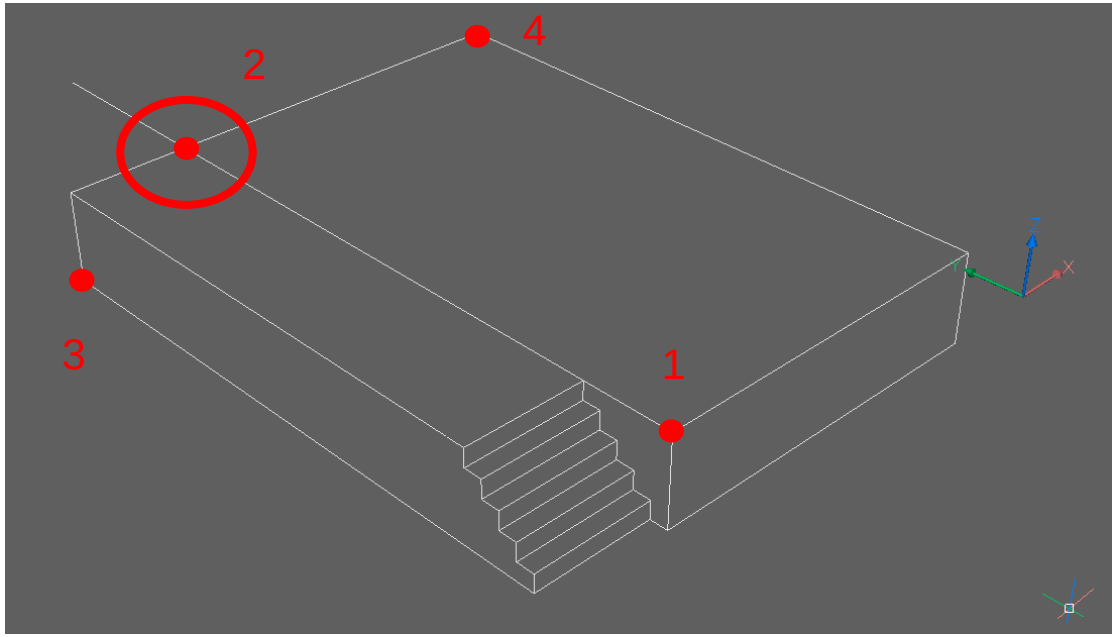
CAD Plugin



Measure and trim Lines in 3D

Start the Trim function in the toolbar and measure two points from the first line and then two points from the second line



In 3D space two lines most likely won't meet

- when it has to be right

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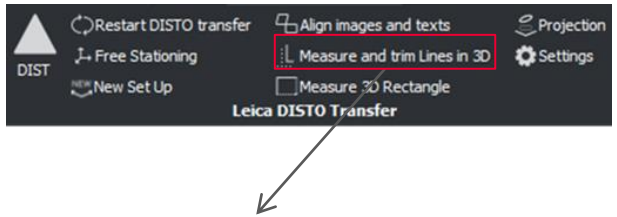
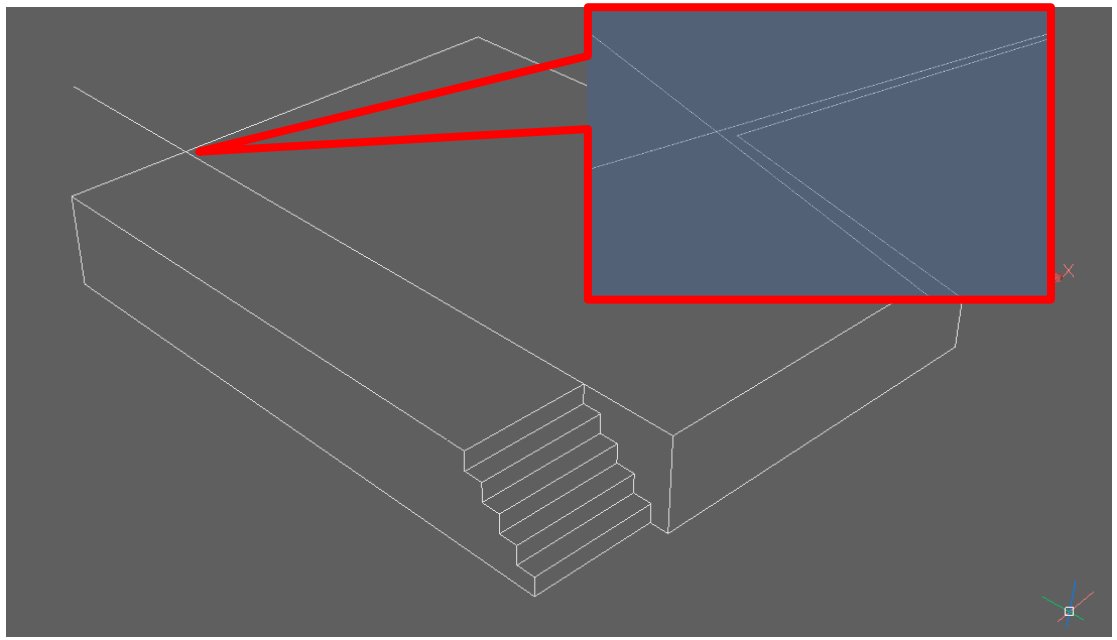
CAD Plugin



Measure and trim Lines in 3D

Press Enter to quit function and type in “yes” to draw the remaining element



The line section was calculated and inserted within the drawing as TWO NEW lines at the closest point that they would meet

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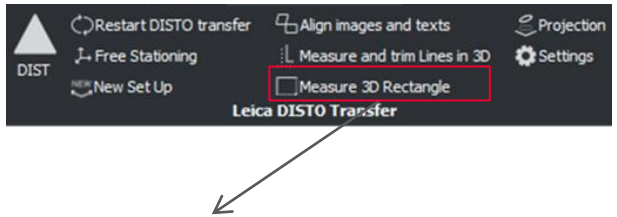
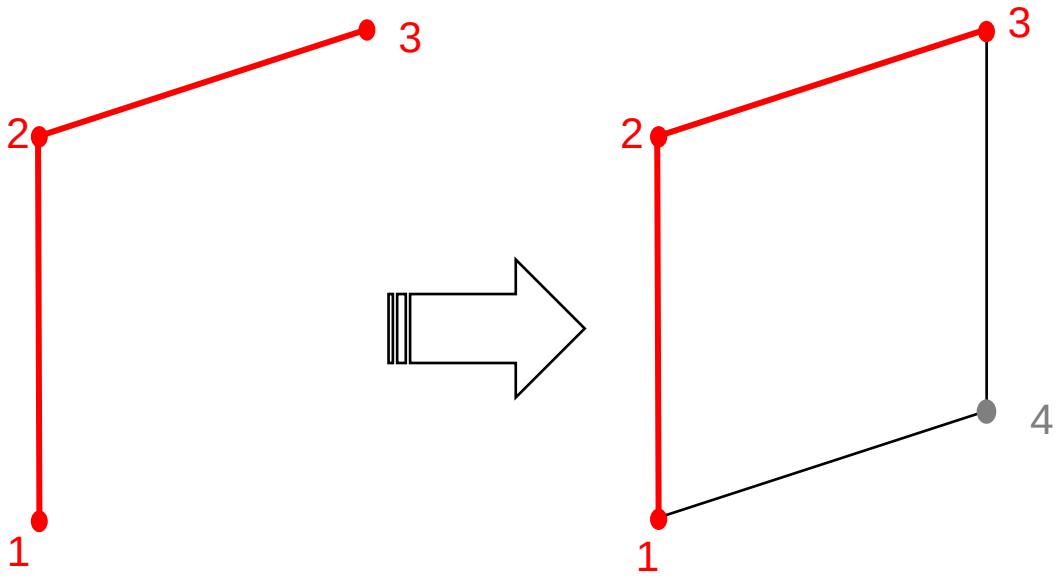
CAD Plugin



Measure 3D Rectangle

Measure three points with your DISTO™S910 to create a rectangle in 3D space



Automatically drawn lines and remaining point is added

- when it has to be **right**

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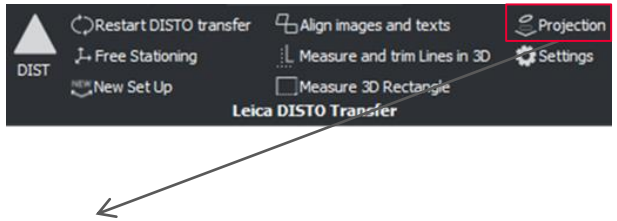
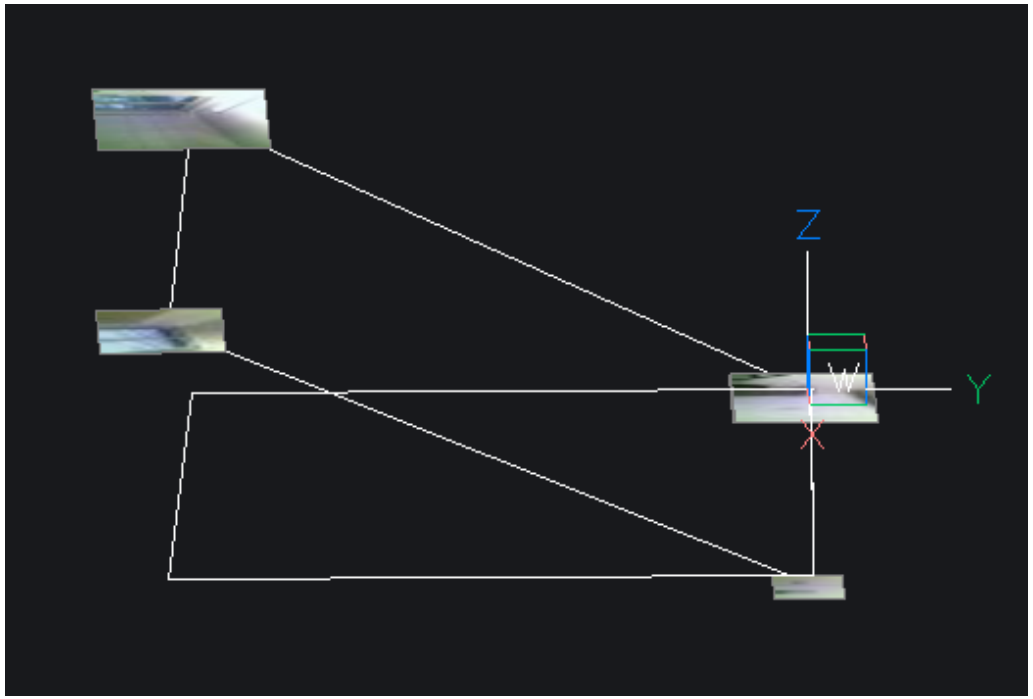
CAD Plugin



Projection

Start the Projection function in the toolbar and select points that should be projected.
Points from various measured heights will be projected onto a common horizontal plane.



- when it has to be **right**

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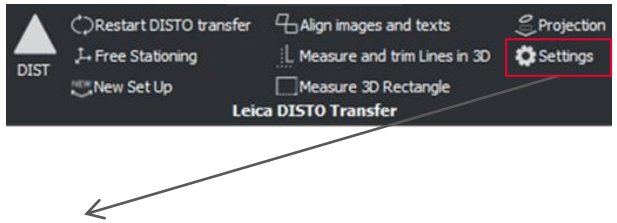
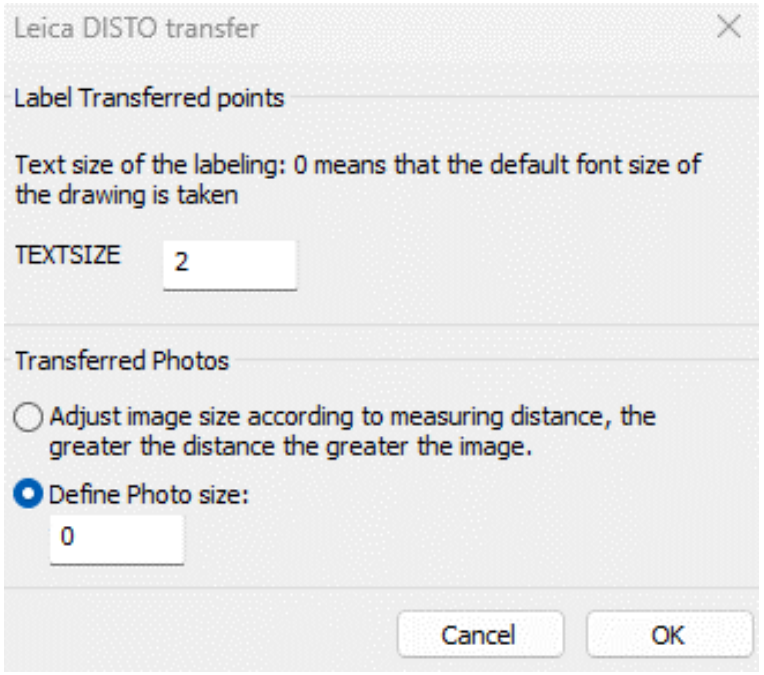
CAD Plugin



Settings

Adjust the text and image size

TEXTSIZE is a relative value, that matches your drawing settings



- when it has to be **right**

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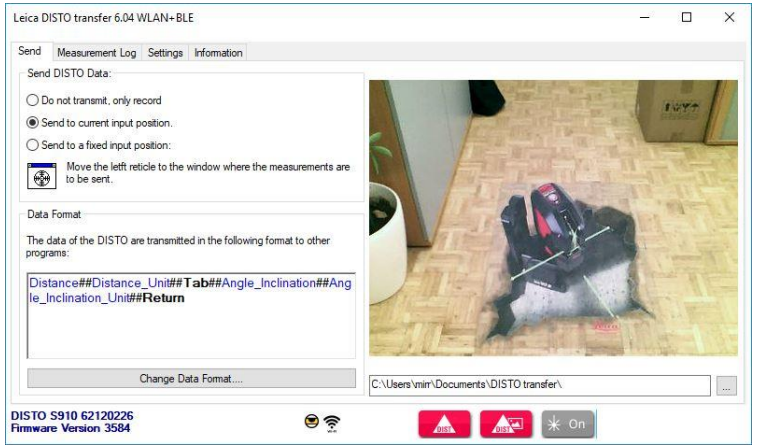
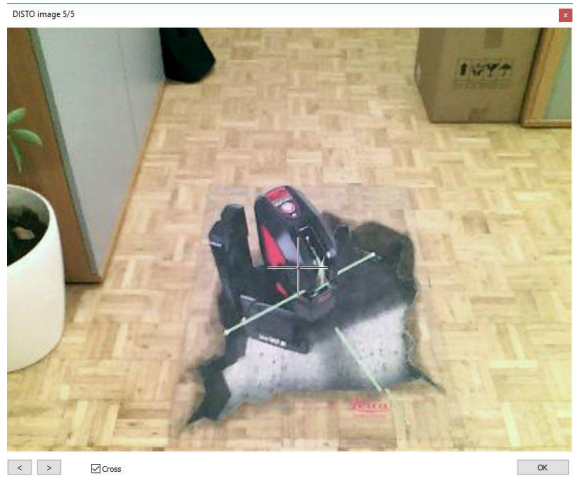
CAD Plugin

- Images transferred from the DISTO™ S910 into the drawing will be stored within the same directory as the drawing
- Captured images are displayed on DISTO™ transfer as well and saved on the Data directory
- Line functions and trimming is only available if the correct layer is selected
- Explanations regarding a function, are always within the command line





- when it has to be right

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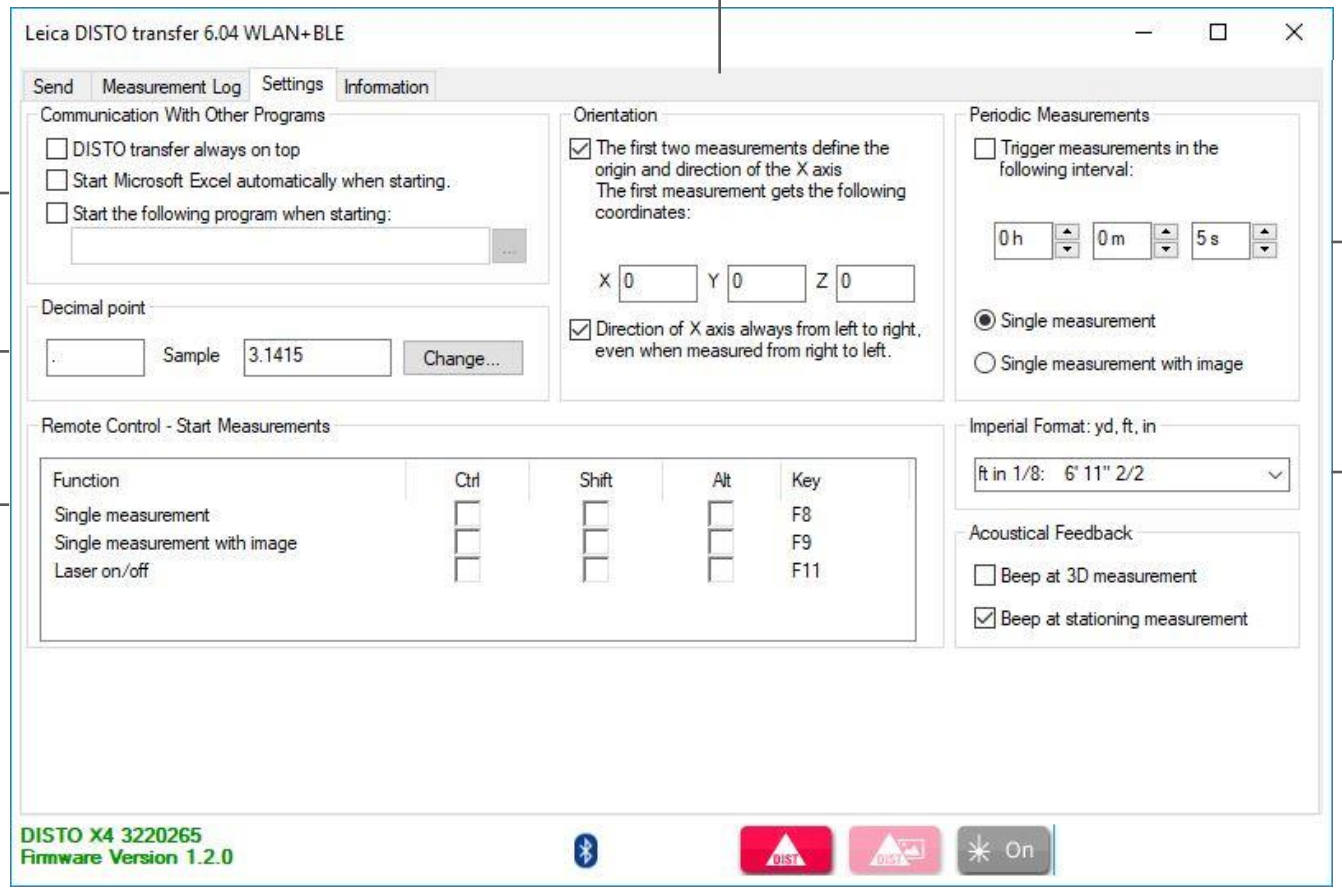
Settings

Orientation Configuration
(see page 43)

Start-up Configuration

Decimal Separator

Shortcuts

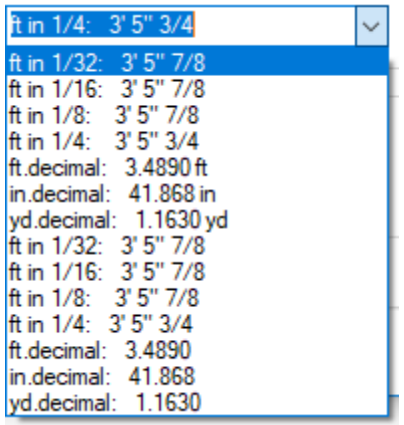


Automatic Measurements

Imperial Data Format Configuration (see next page)

Leica DISTO™ transfer v6
Settings

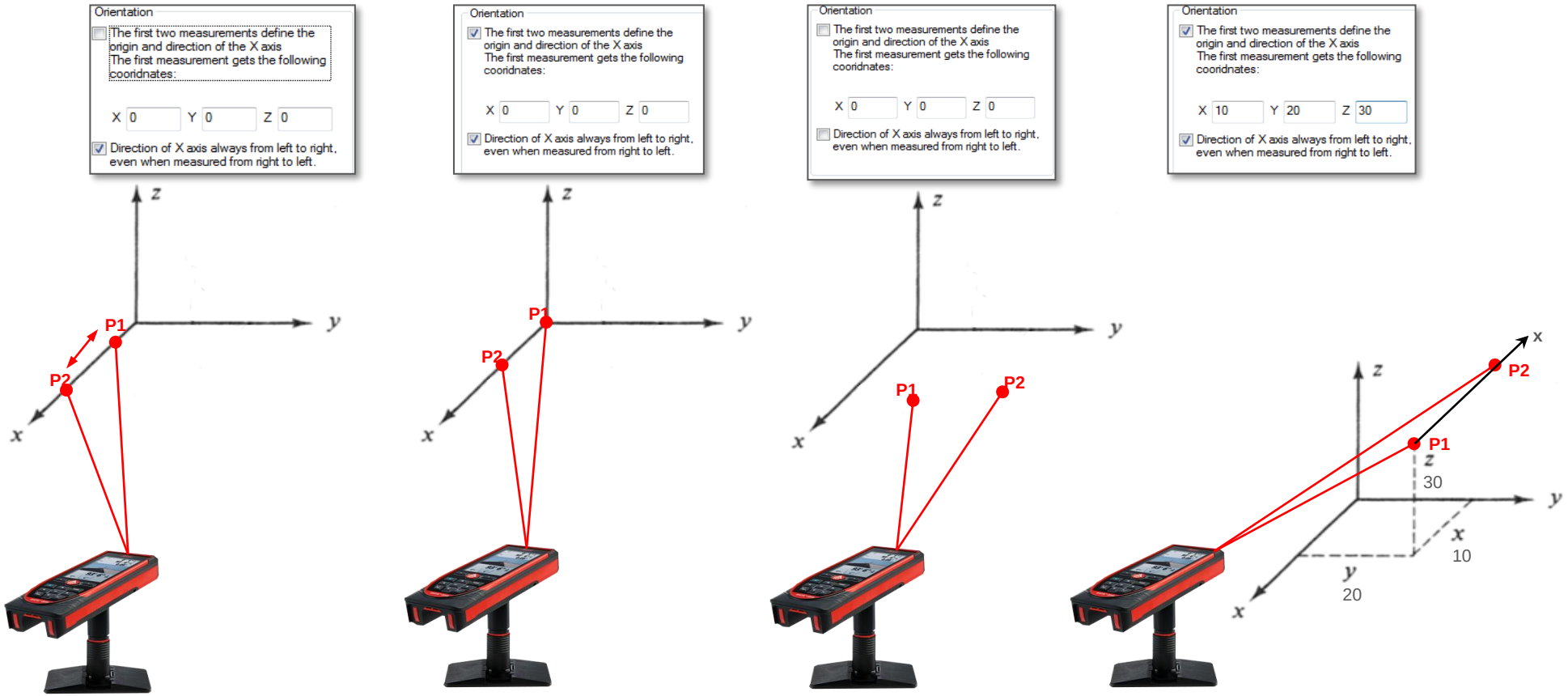
- **Imperial Data Format Configuration**



Distance Unit set on DISTO™ device	Imperial Format set on DISTO™ transfer	Transmitted result
0 1/8in	ft in 1/32: 3' 5" 7/8	3' 5" 7/8
	ft in 1/16: 3' 5" 7/8	3' 5" 7/8
	ft in 1/8: 3' 5" 7/8	3' 5" 7/8
	ft in 1/4: 3' 5" 3/4	3' 5" 3/4
	ft.decimal: 3.4890 ft	3.4890 ft
	in.decimal: 41.868 in	41.868 in
	yd.decimal: 1.1630 yd	1.1630 yd
	ft in 1/32: 3' 5" 7/8	3' 5" 7/8
	ft in 1/16: 3' 5" 7/8	3' 5" 7/8
	ft in 1/8: 3' 5" 7/8	3' 5" 7/8
	ft in 1/4: 3' 5" 3/4	3' 5" 3/4
	in.decimal: 41.868	3.489
	in.decimal: 41.868	41.868
	yd.decimal: 1.1630	1.163

Leica DISTO™ transfer v6
Settings

- **Orientation Configuration**



- when it has to be **right**

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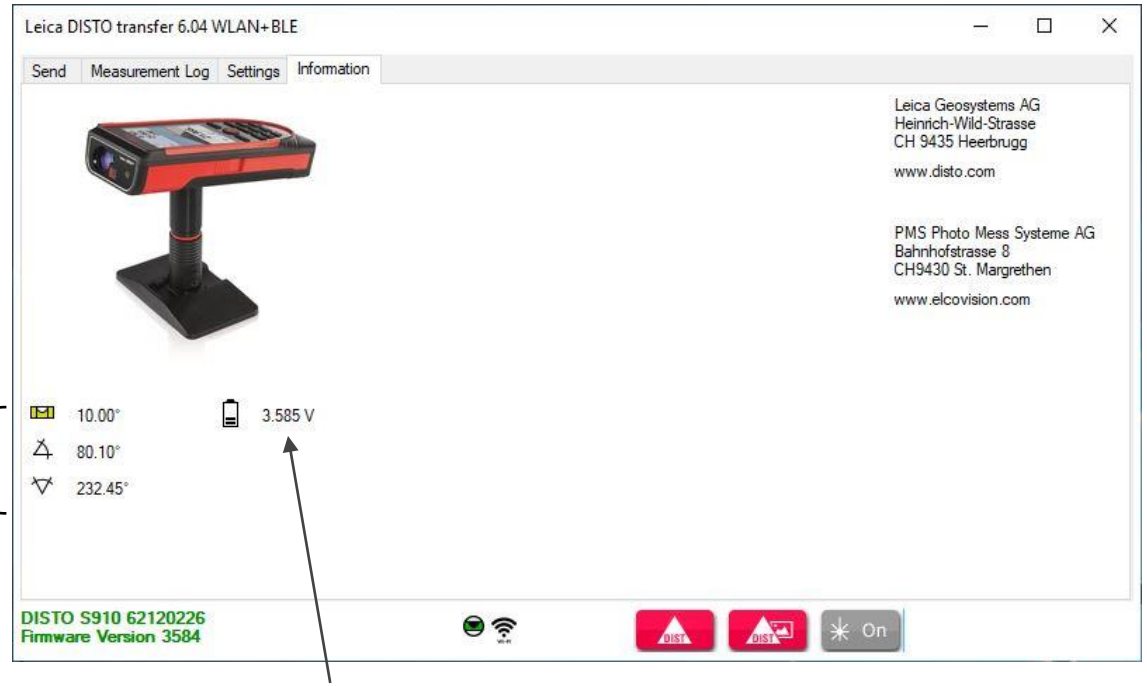
Good to Know

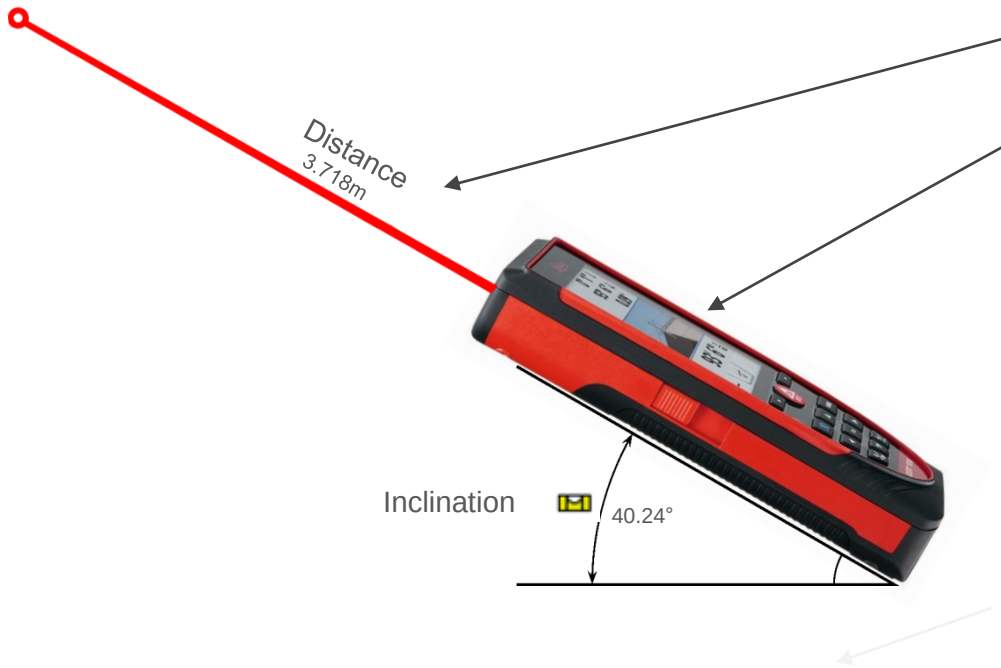


See actual angle and inclination values

Battery Voltage

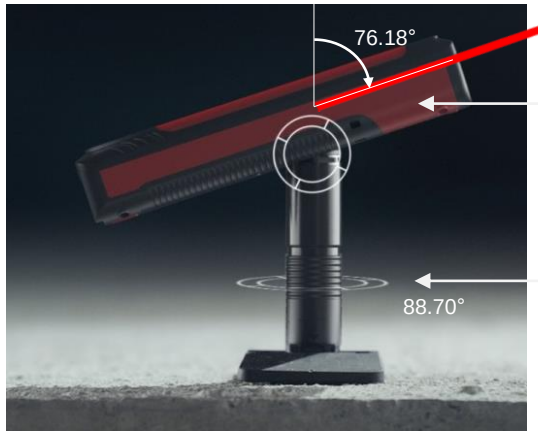
Leica DISTO™ transfer v6

Good to Know



Leica DISTO™ transfer v6

Good to Know



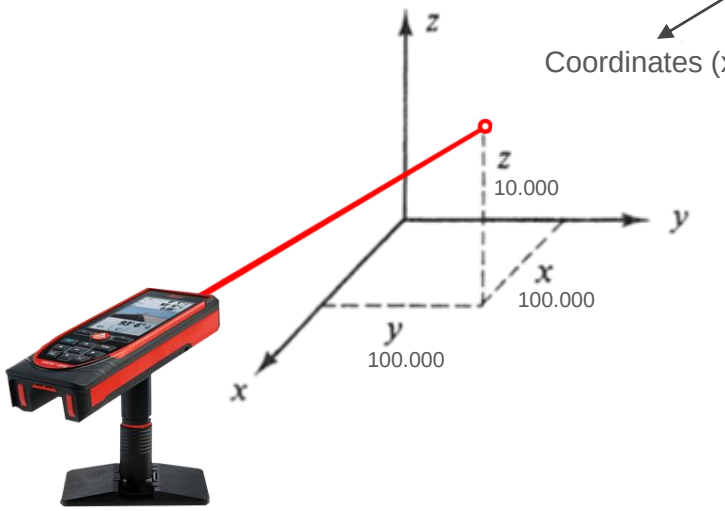
5.521m

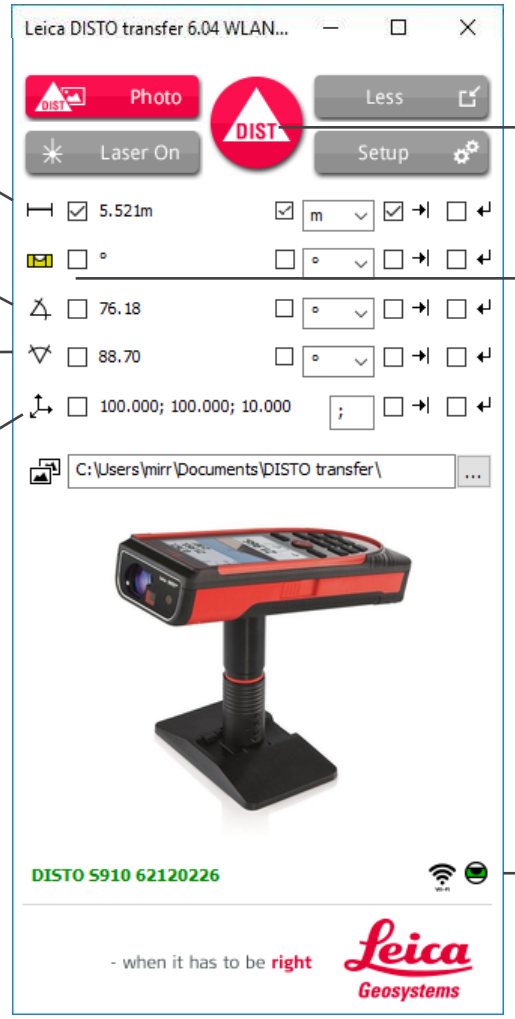
Distance

Vertical Angle

Horizontal Angle

Coordinates (x;y;z)





Triggers remote measurement

When using P2P, the inclination value is ONLY transmitted when a remote measurement is made.

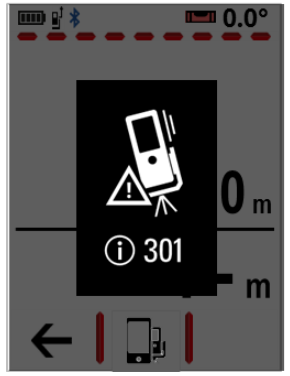
Horizontal and Vertical information correct

No horizontal and vertical correction

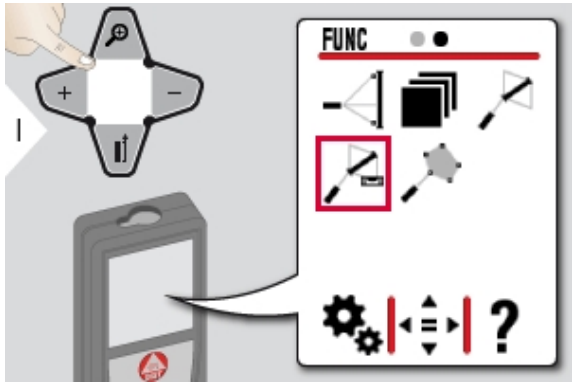
Leica DISTO™ transfer v6

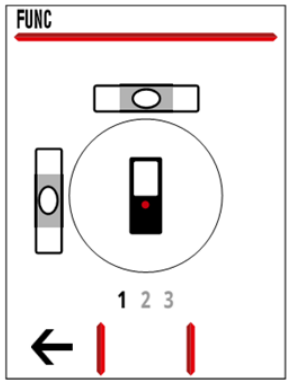
Good to Know

When using a DISTO™ X3 / X4 together with a DST360 adapter and a loss of level is detected



Access the Main Menu screen and select P2P with Levelling function. Proceed with the levelling steps

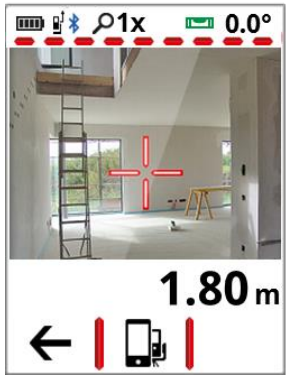




Once the levelling is completed, access Single Measurement function and aim to the desired location.

Complete the measurement action, by pressing DIST button on DISTO transfer

The DISTO™ is now back to the original mode



- when it has to be **right**

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