



Leica 3D Disto

Room Scan application

Version 3.0

- when it has to be **right**

Leica
Geosystems

Leica 3D Disto

Room Scan

This is a quick guide for the Leica 3D Disto's Room Scan application.

- Setup
- Measurements
- Hidden point tools
- Unfold mode
- Scans
- Export
- Advanced

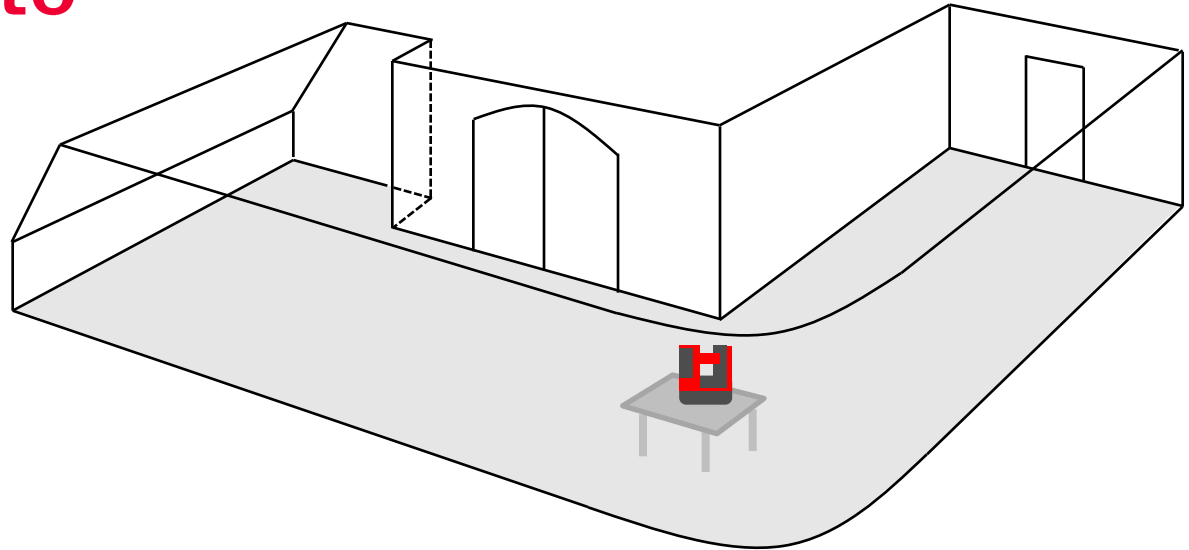


The workflows in this tutorial require software versions >3.0

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Setup



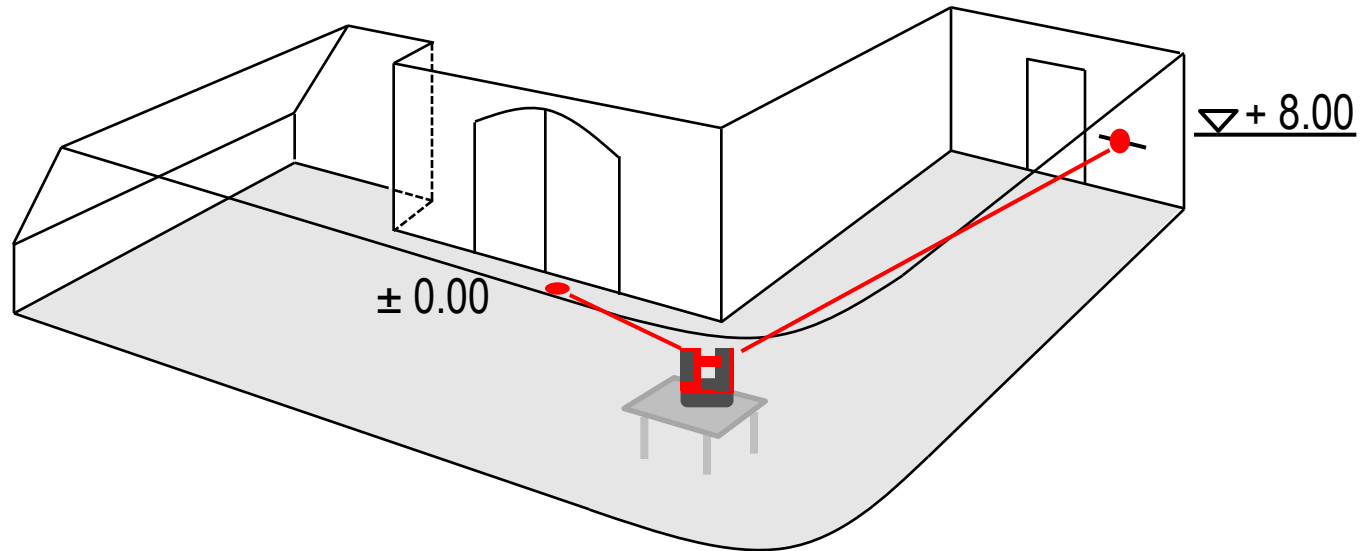
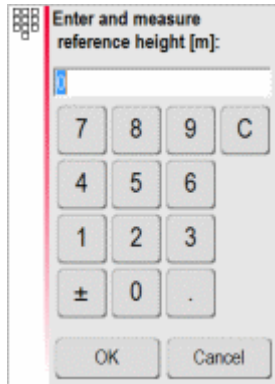
- Put the 3D Disto on a stable underground or tripod & switch ON.
- Connect with Control Unit (Laptop, Tablet PC,) via USB cable or Wifi

If you are not familiar with the 3D Disto's basic functionality have a look at the "First Steps" tutorial.

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Measurements

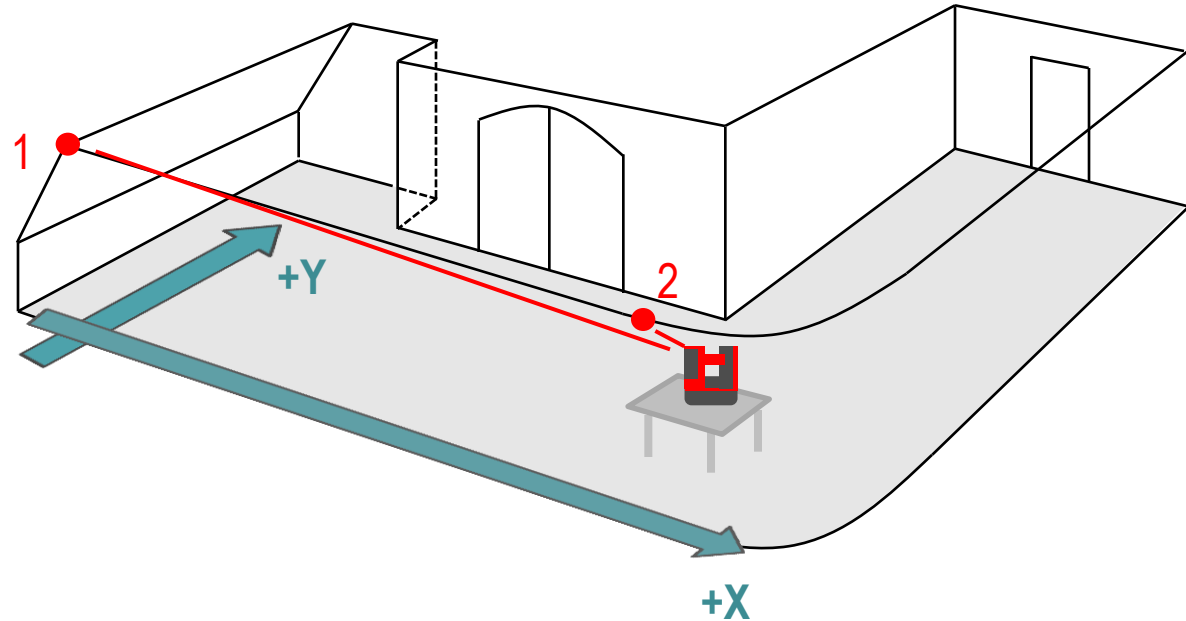


- Start Room Scan application in the menu.
A popup prompts to enter and measure a reference height. This adapts the z-coordinate (=heights) to your individual expectations and to your favorite CAD settings
- If there is a meter mark in the room, enter the value and measure it
- No meter mark? Set a representative spot to "0.00", e. g. a point on the floor. If you want to avoid negative heights set it to "+1.00" or higher

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Measurements



- Now measure the room's shape, point by point.

Advanced users start with a long line, regarding the fact that point #1 and #2 define the coordinate system.

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Measurements

Edit the sketch on your 3D Disto to get a proper result.
It is your decision to do the details here or later with CAD.

click to
start calculator

check results

draw lines

no line drawing
scroll

scale & zoom

finish a shape

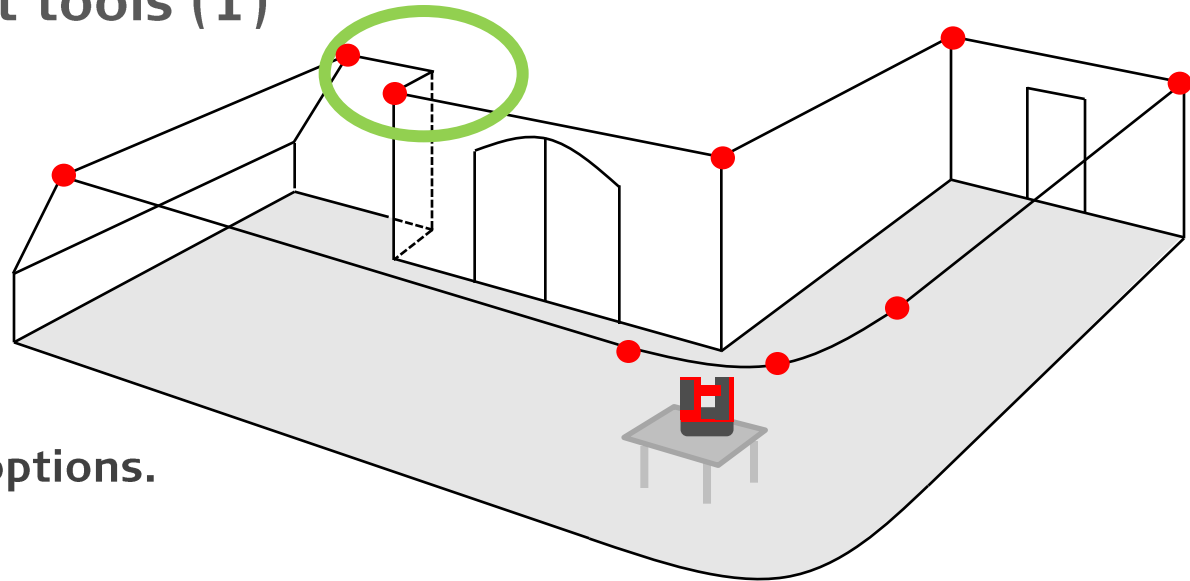
undo/redo last step

delete data

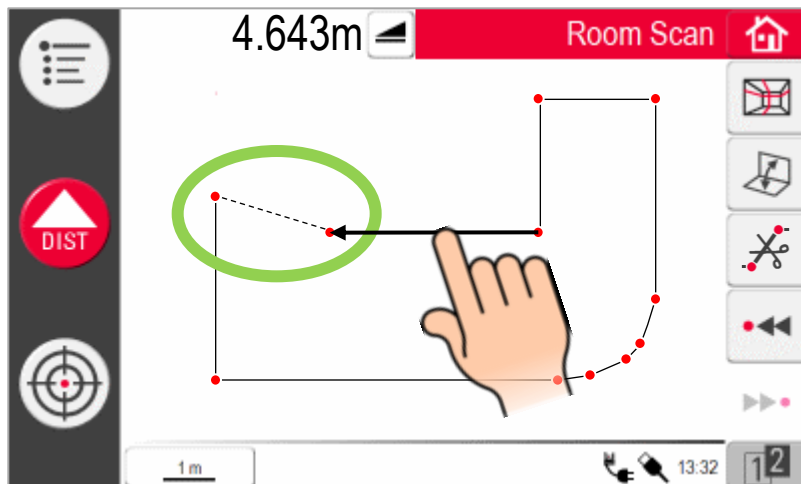
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Hidden Point tools (1)



Hidden points?
You have two options.



Option 1: Simplified CAD tools:

- make a long press on a line to see the tools

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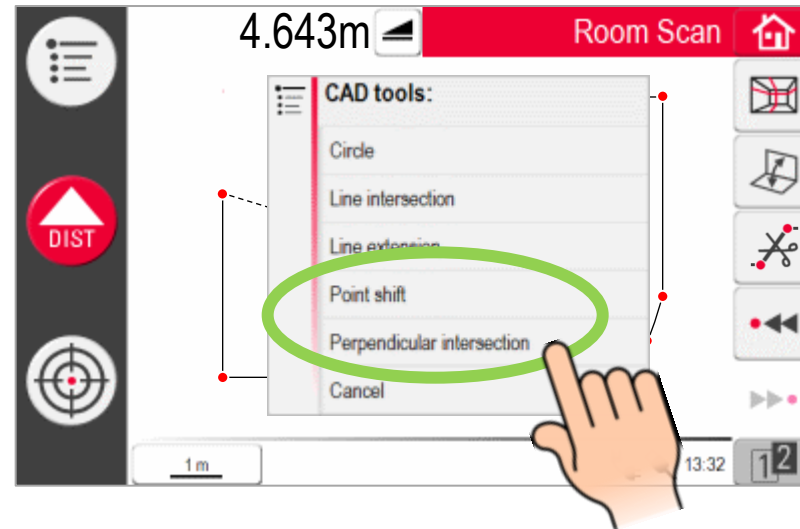
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Hidden Point tools (1)

Option 1: Simplified CAD tools

- select a tool from the list:
“point shift” manages all corners you can imagine
“perpendicular intersection” is a quick 90° tool

Find details in the
3D Disto tutorial
“CAD tools”



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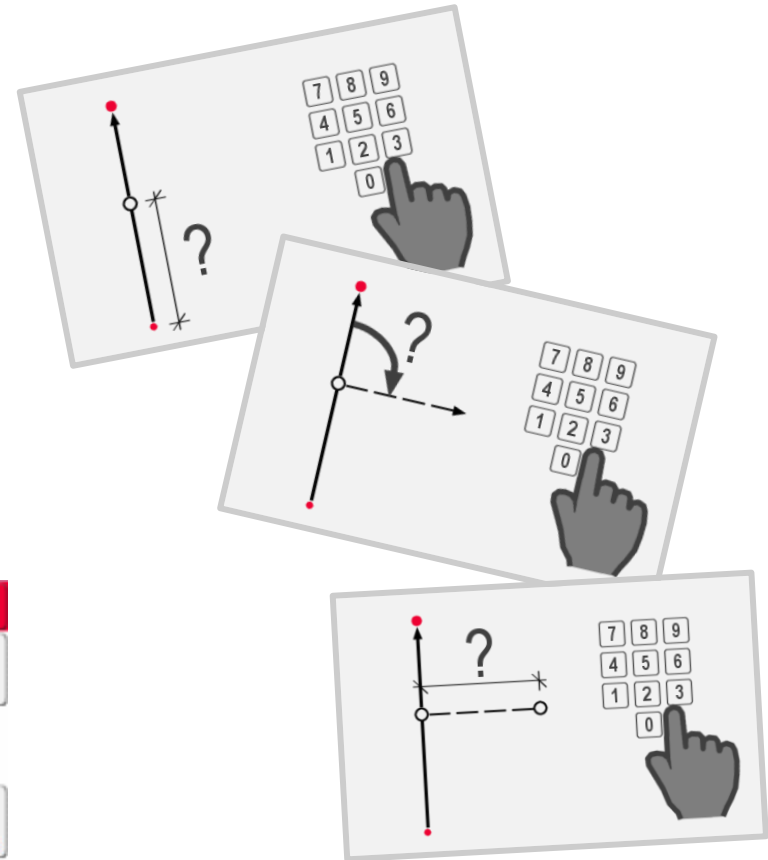
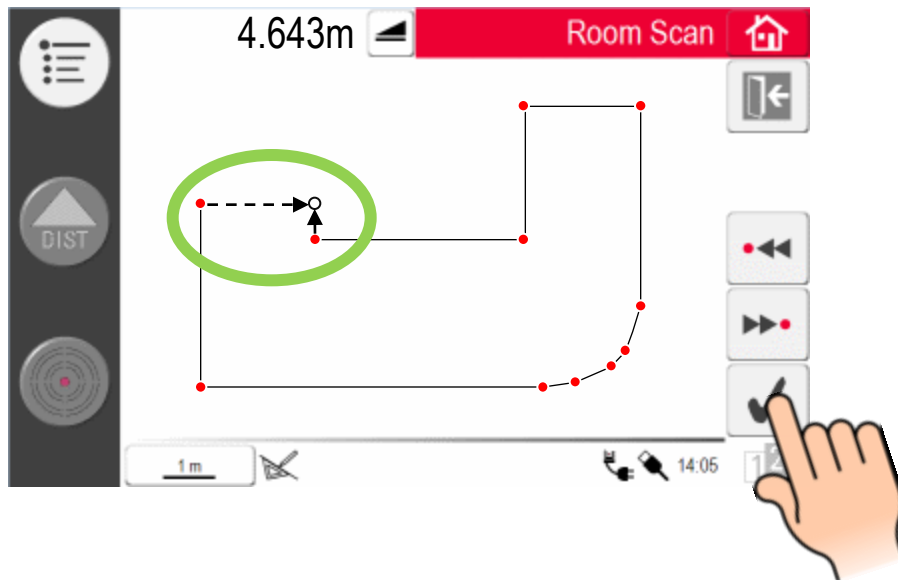
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Hidden Point tools (1)

Option 1:

Simplified CAD tools

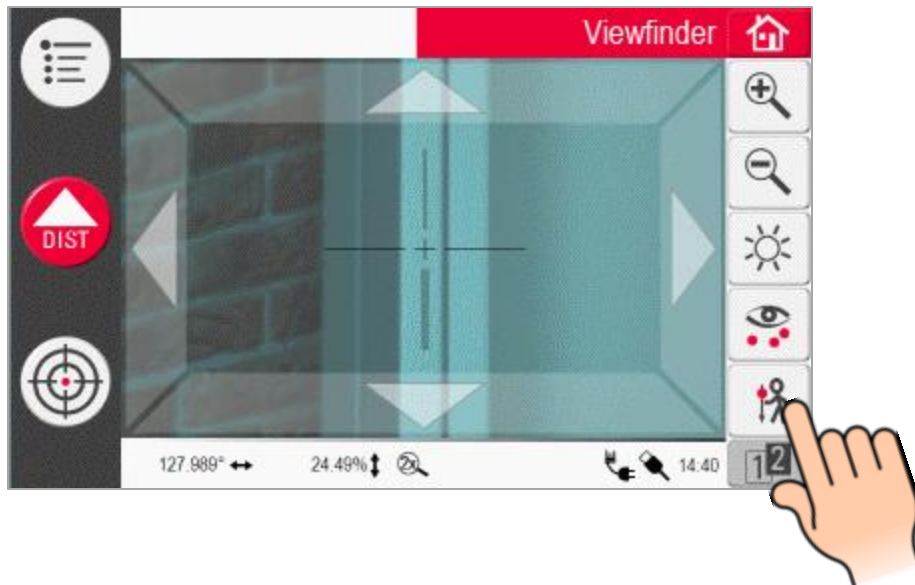
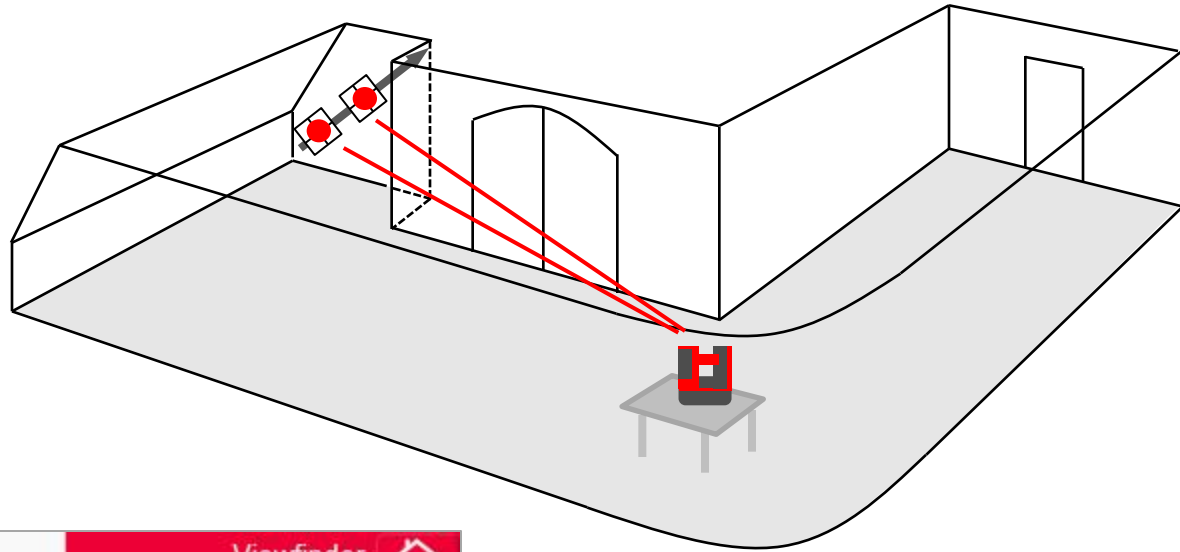
- follow the assistant popups and
- finish via checkmark



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Hidden Point tools (2)



Option 2: Offset tools

- Press key in the Viewfinder's tool bar

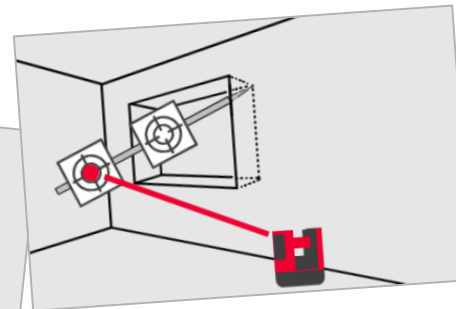
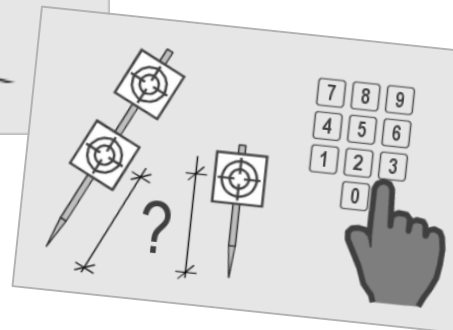
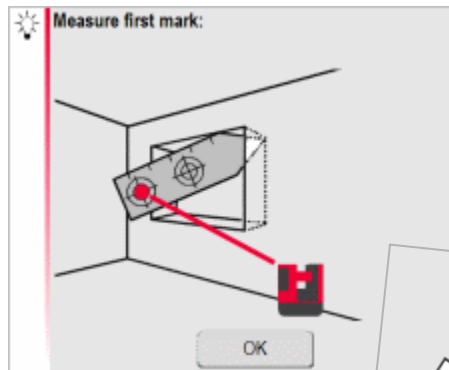
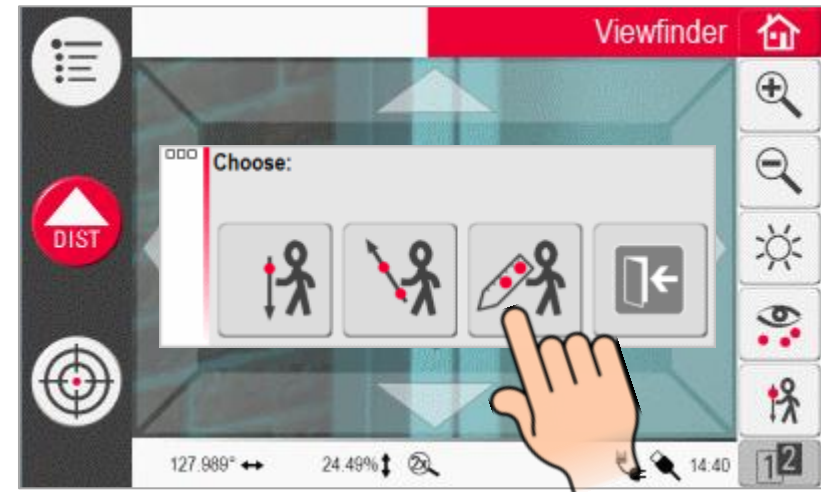
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Hidden Point tools (2)

Option 2: Offset tools

- Select a tool
- Follow the assistant popups

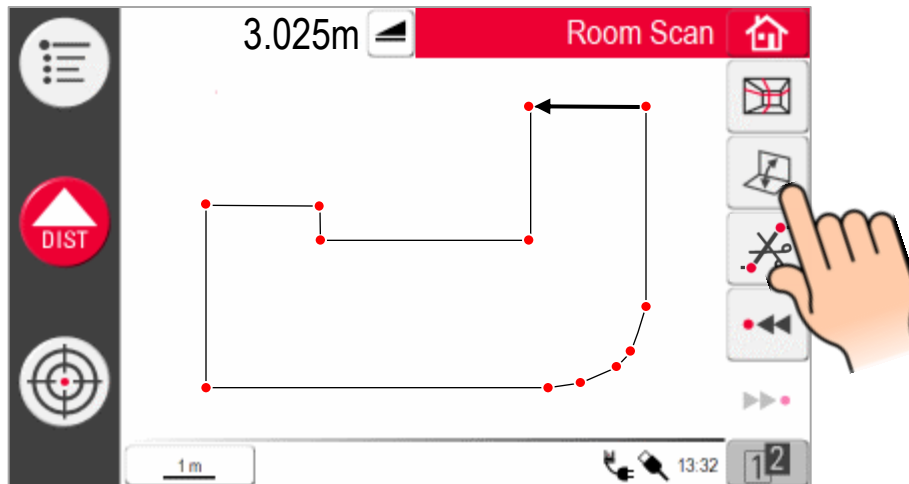
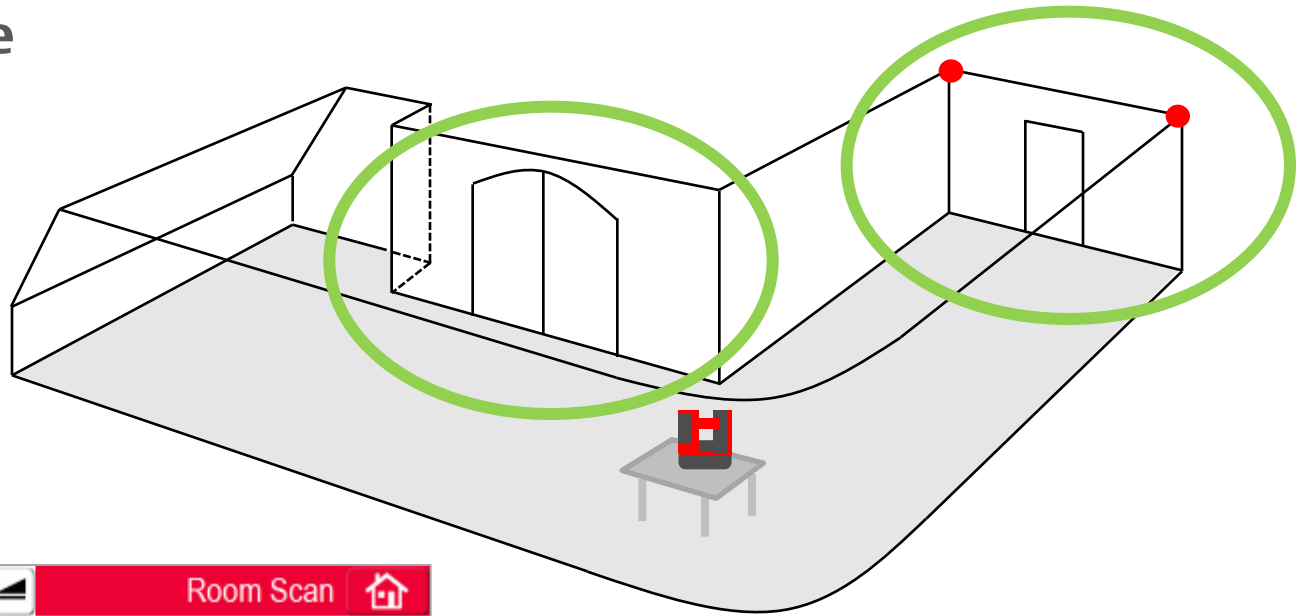


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Unfold Mode

For wall details



Wall details can't be managed in a footprint. To change the view:

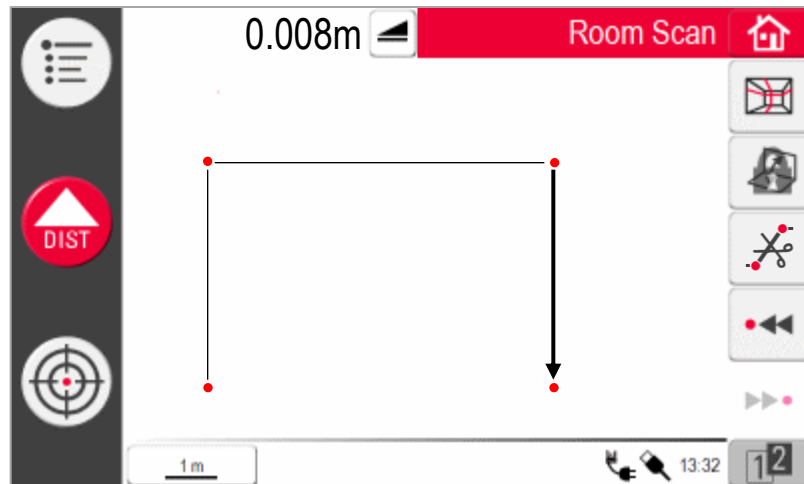
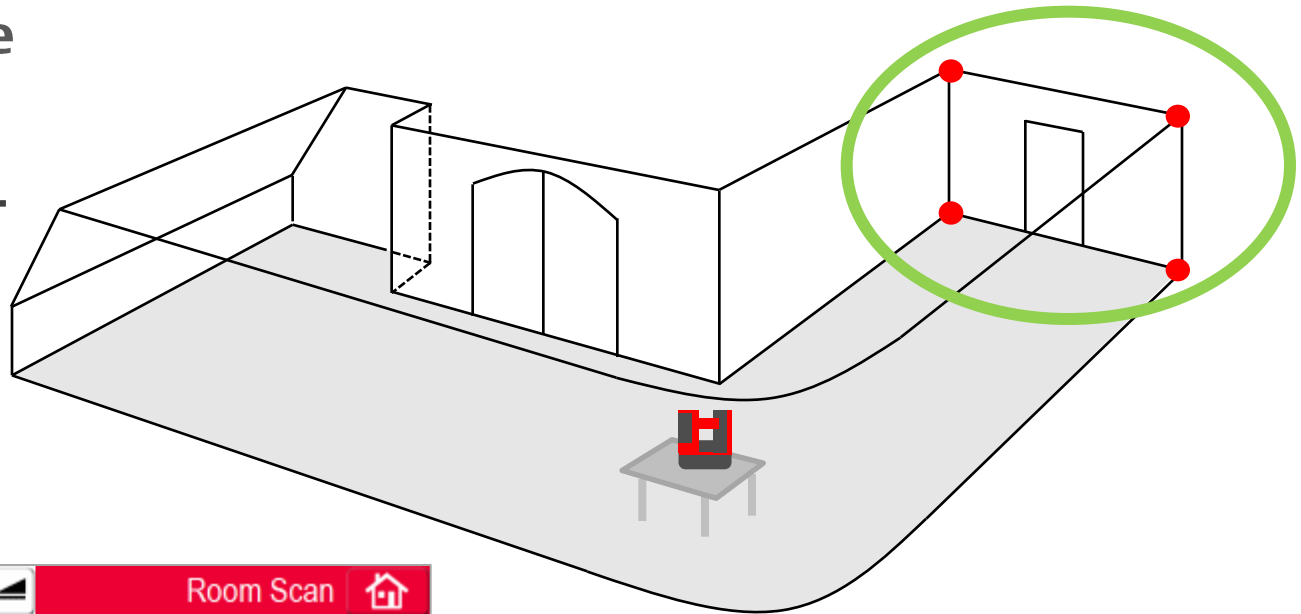
- Select a measured line that stands for a wall
- Press UNFOLD key

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Leica 3D Disto

Unfold Mode

For wall details.



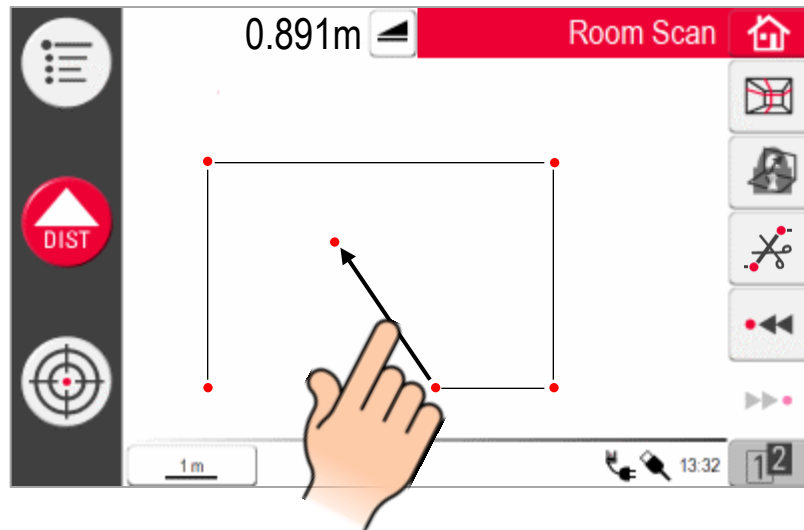
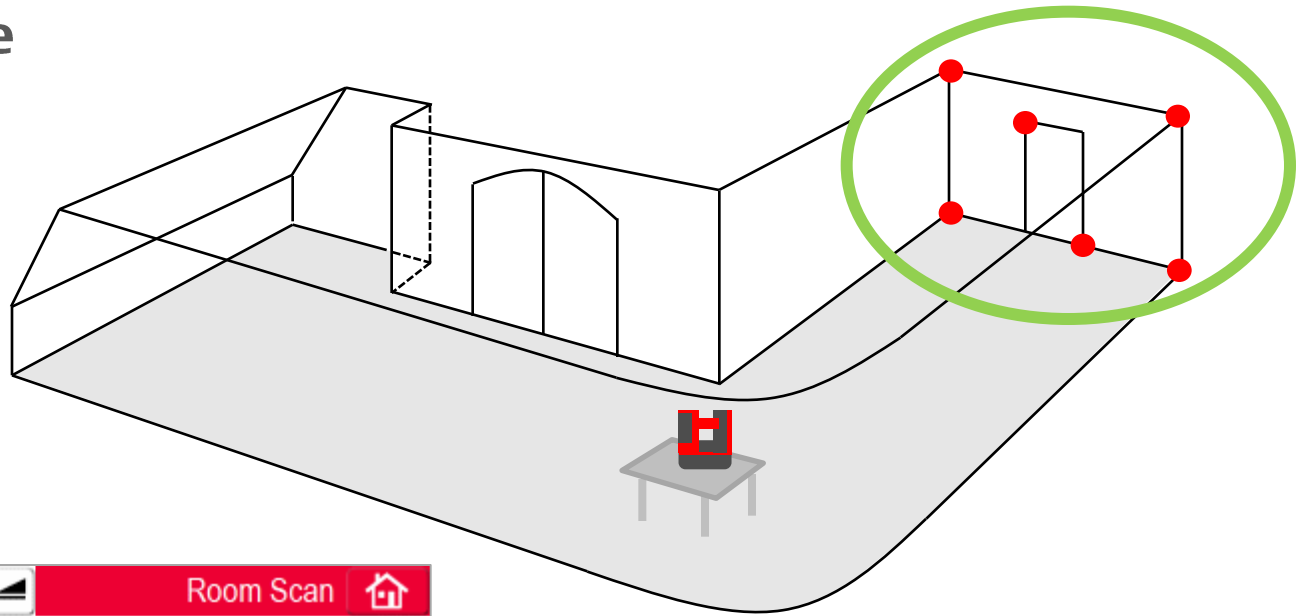
The sketch shows the wall now.
Now...

- Complete the shape with further measurements
- Draw & cut lines with pen or finger

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Unfold Mode



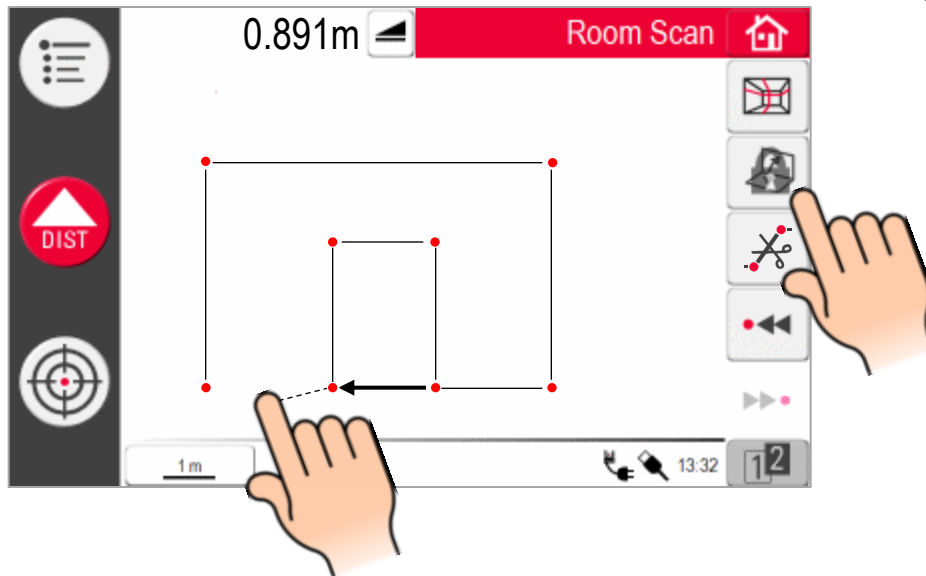
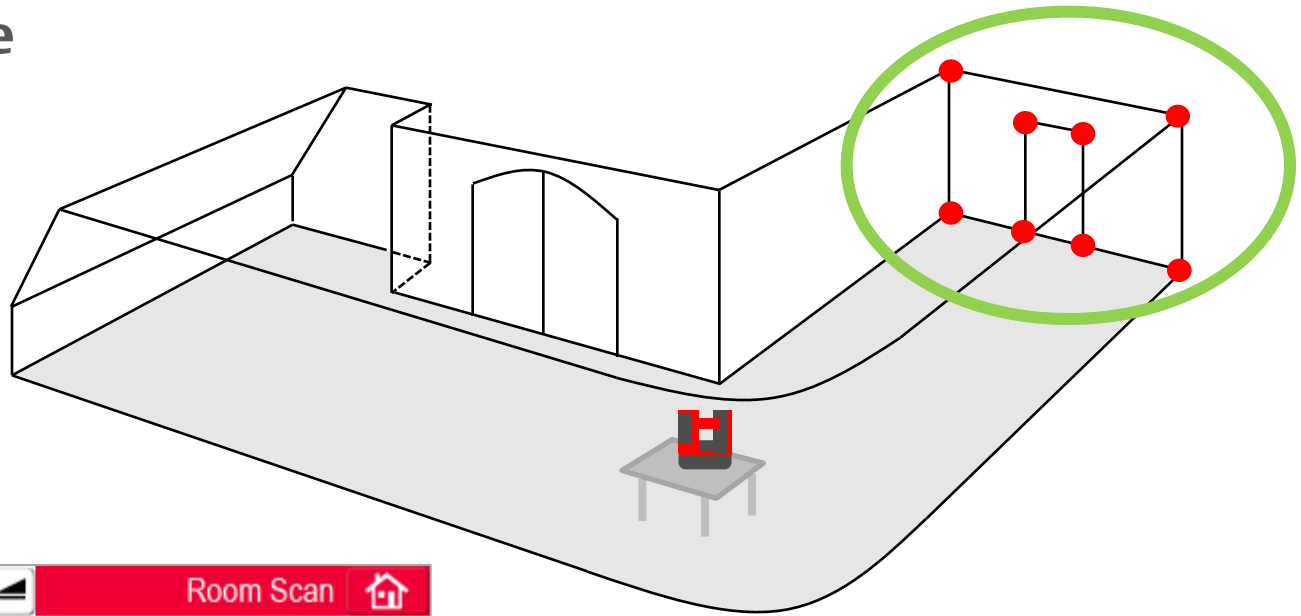
Use CAD tools to measure windows & doors:

- Measure a diagonal line
- Long click the line & tip on "Rectangle" in the list

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Unfold Mode



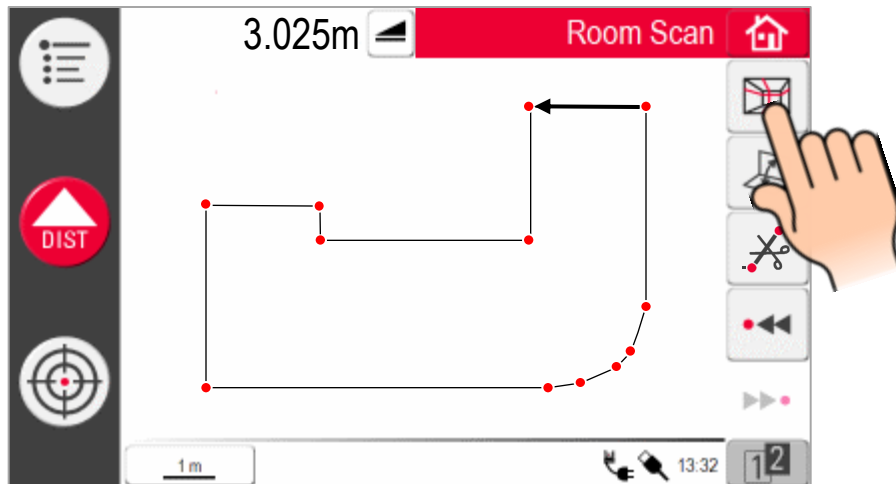
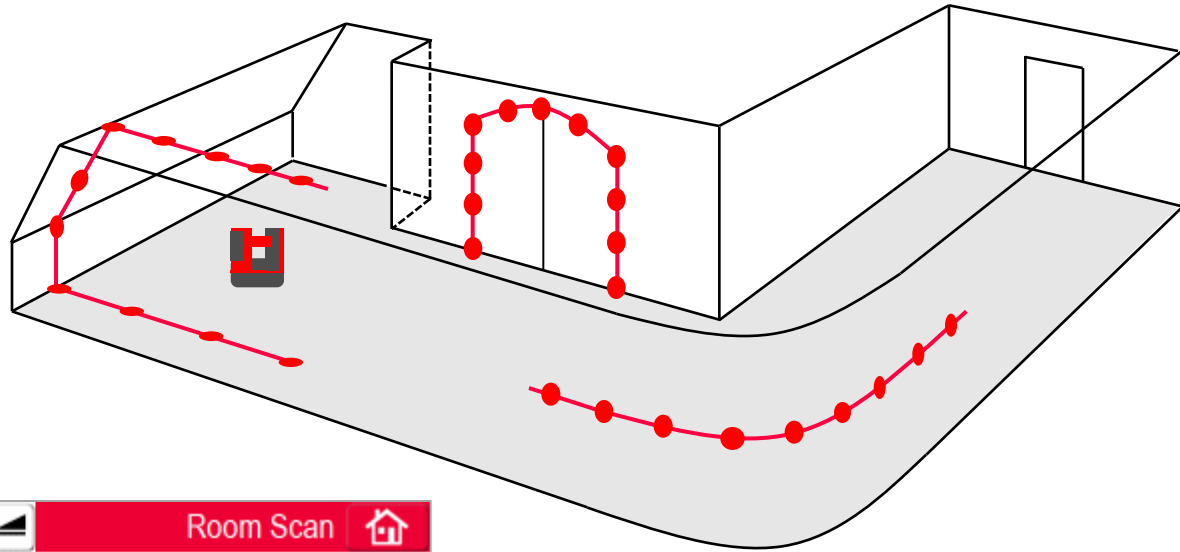
The door is now complete.

- Finish the wall
- Back to footprint via "Unfold" key

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Scans



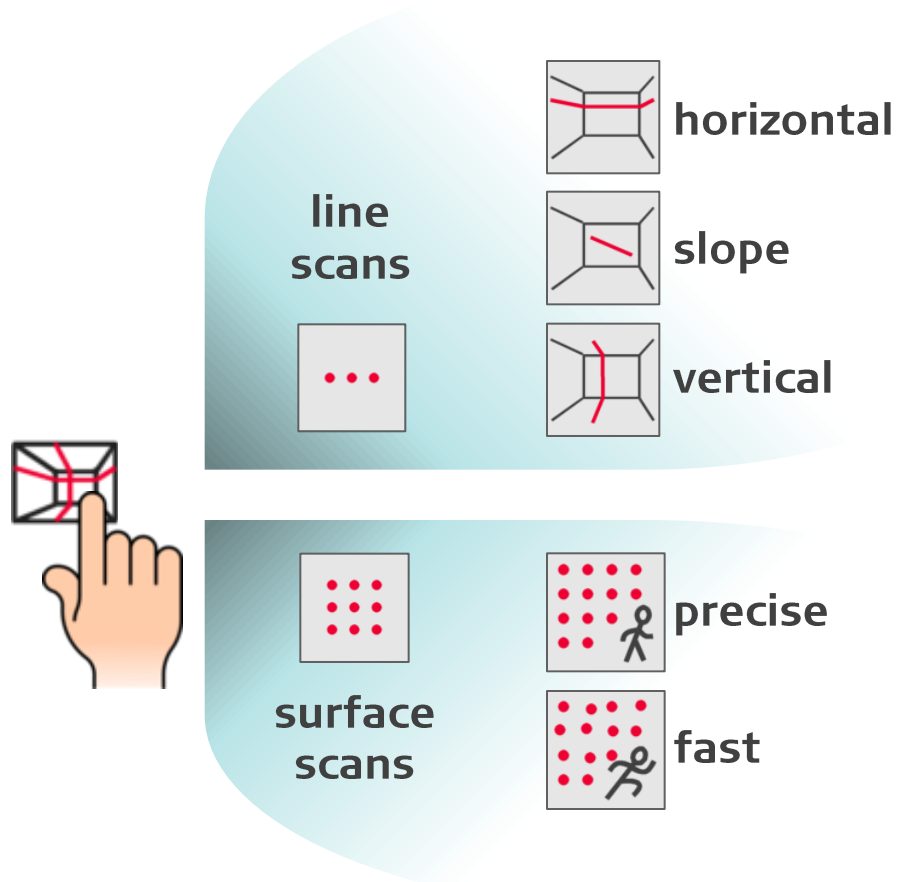
Scanning is one of the 3D Disto's most powerful performances.

- Press SCAN key

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Scans



Step 1:

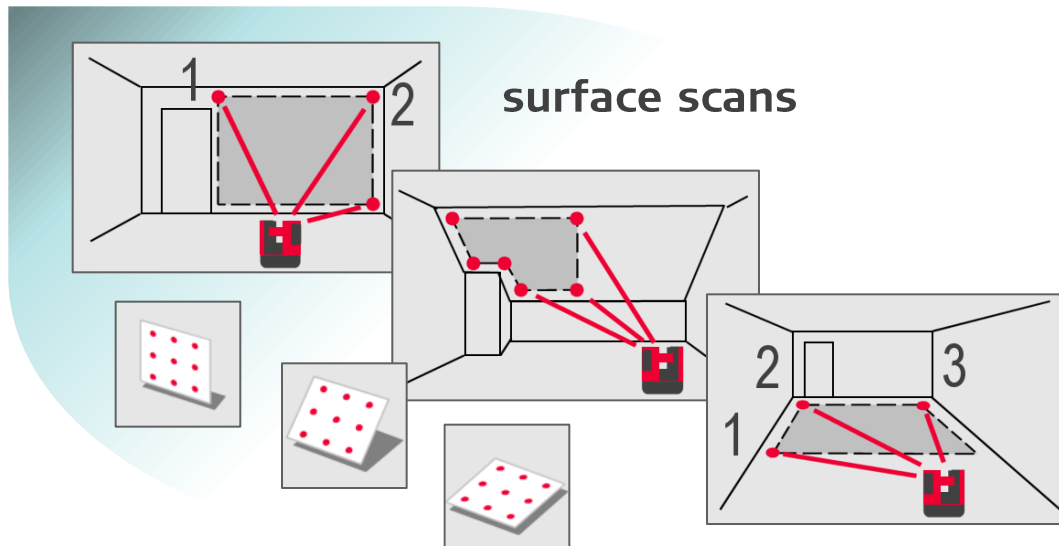
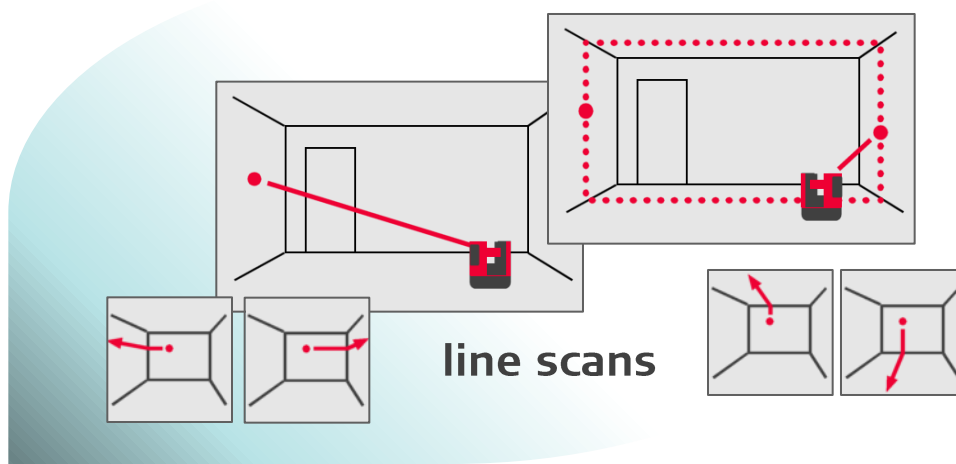
Select the preferred scan with a few clicks:

- Line scans for kitchen, glass, doors, metal works...
- Surface scans to measure flatness, shape or deformation of ships & boats, floors, ceilings, walls, screens, metal sheets...

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Scans



Step 2:

Choose further options and follow the assistants to define scan properties.

- Line scans require start point, scan end etc.
- Surface scans need an area definition

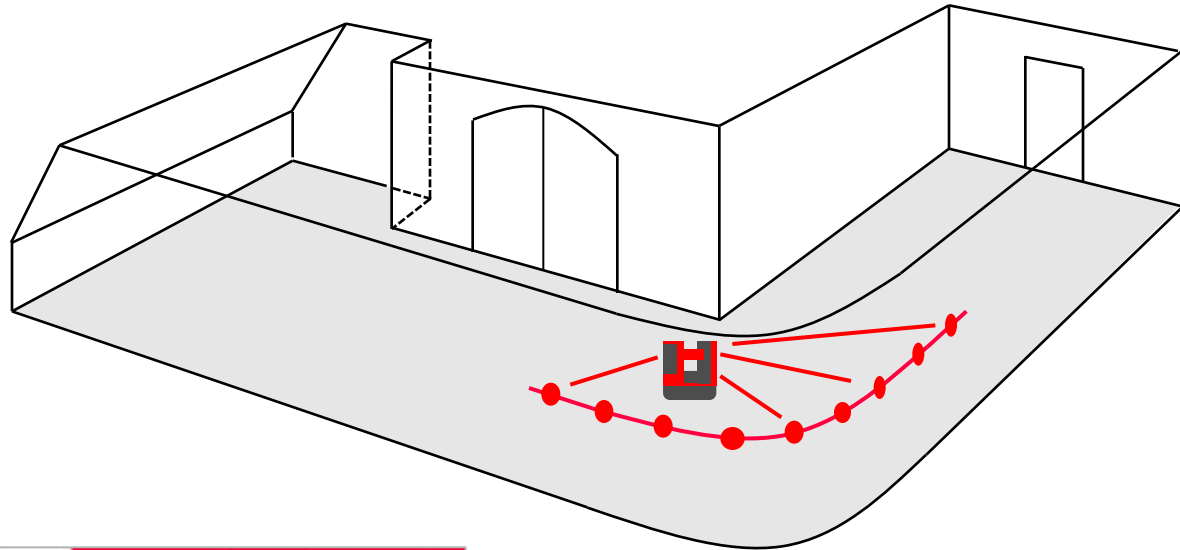
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Scans

Step 3: Scanning.

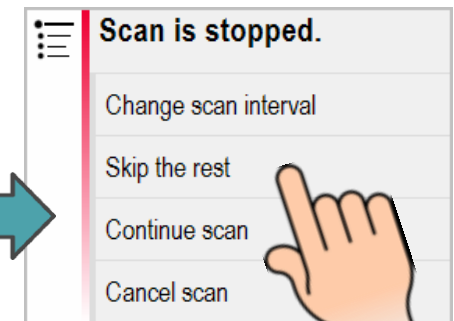
Pilot the scan
if necessary
via toolbar
keys:



switch to sketch

break...

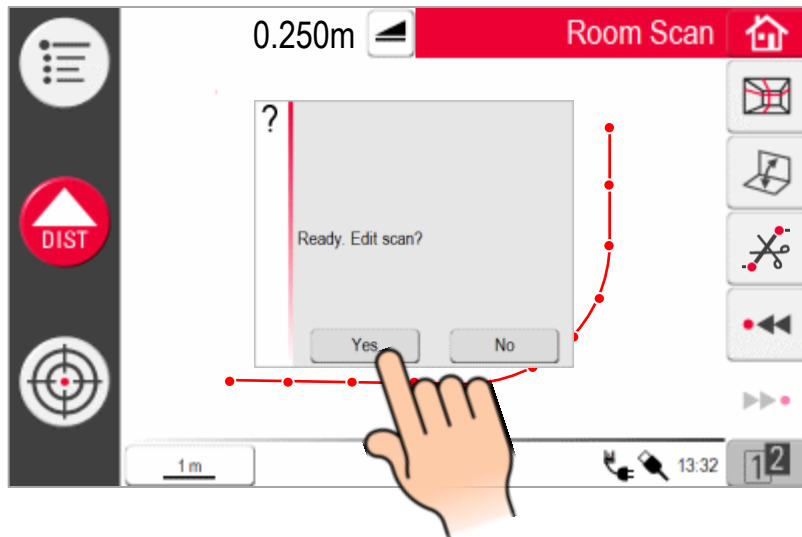
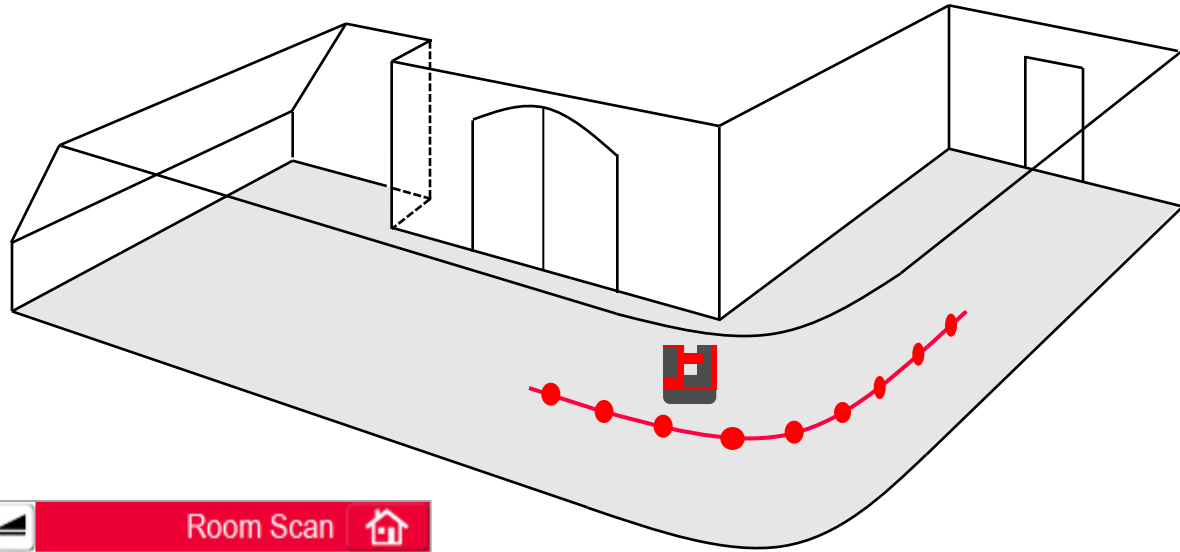
skip a scan point



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Scans



Step 4: Editing the scan

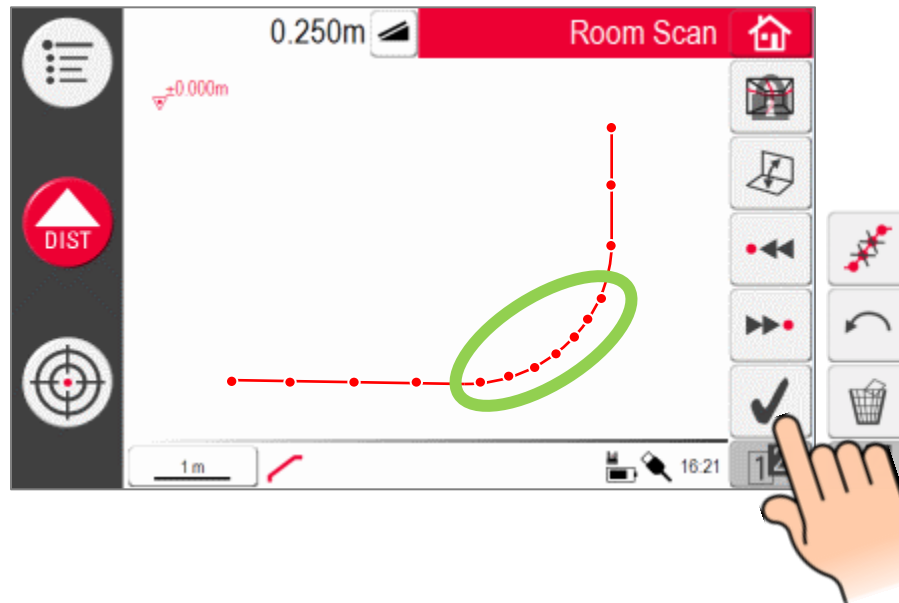
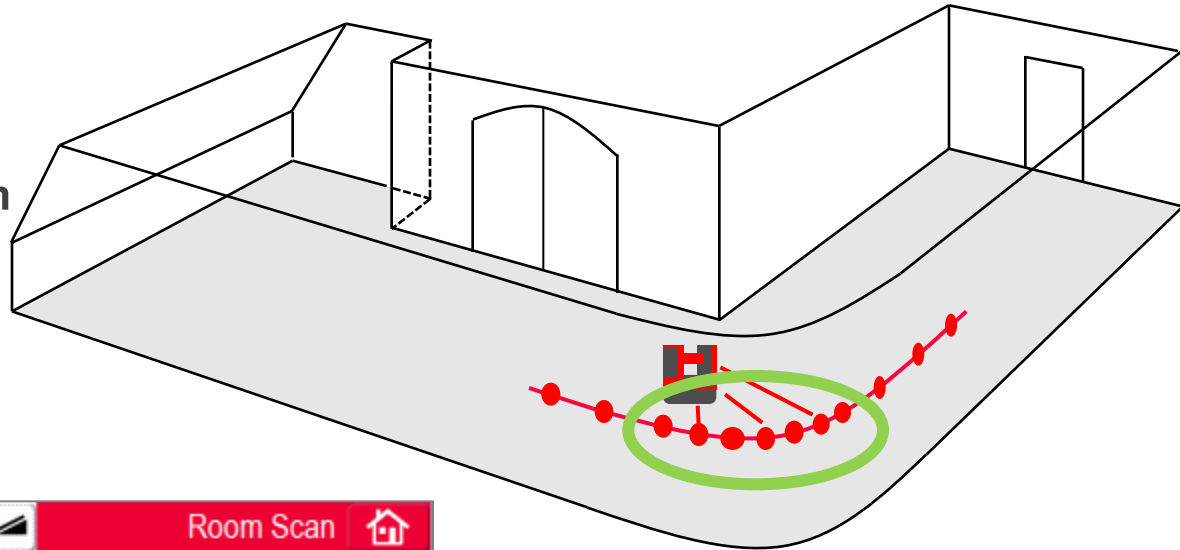
- If the scan needs edits press OK key
- Press NO to accept it like it is.

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Scans

Step 4: Editing the scan (optional)



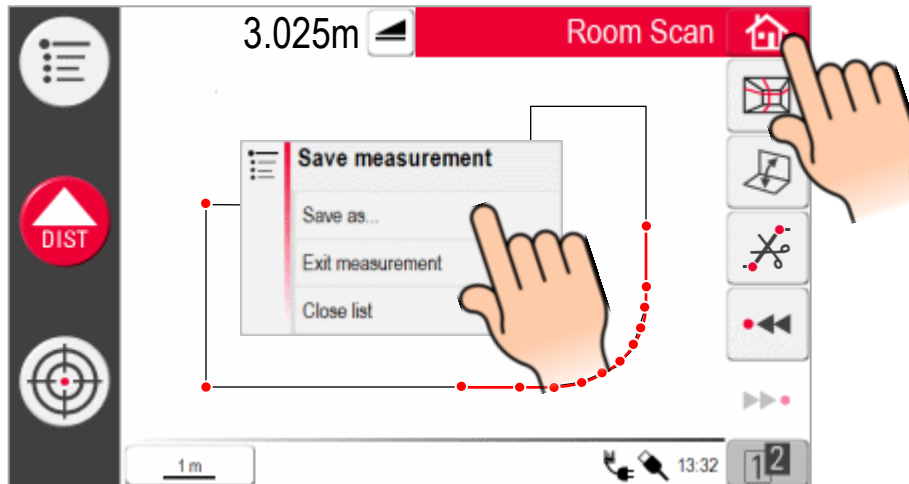
Options:

- Measure missing points
- Delete points manually or via automatic THIN OUT function
- press CHECKMARK to finish the scan

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Save & export



Press the HOME key at any time if you run into trouble and to quit the application.

To save & export:

- Press "Save as..."



- Create or select a folder
- Press checkmark

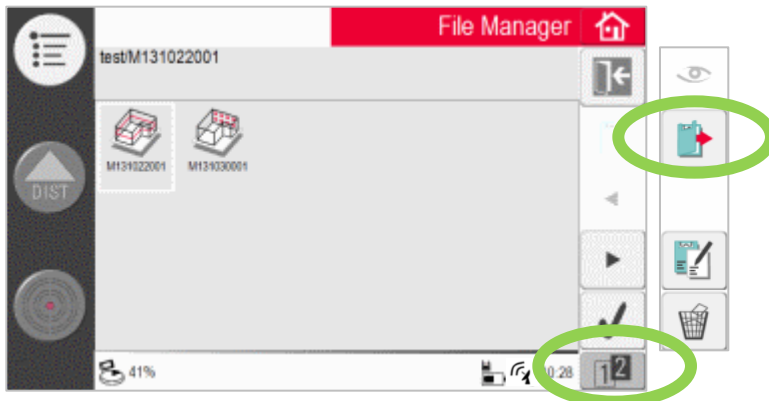
- when it has to be **right**

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Save & export



- Plug the USB stick into the Control Unit.
- Start the file manager.

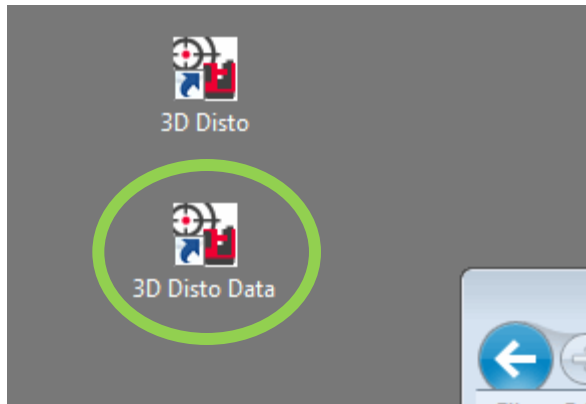


- Select a file or a folder.
- Press export key.

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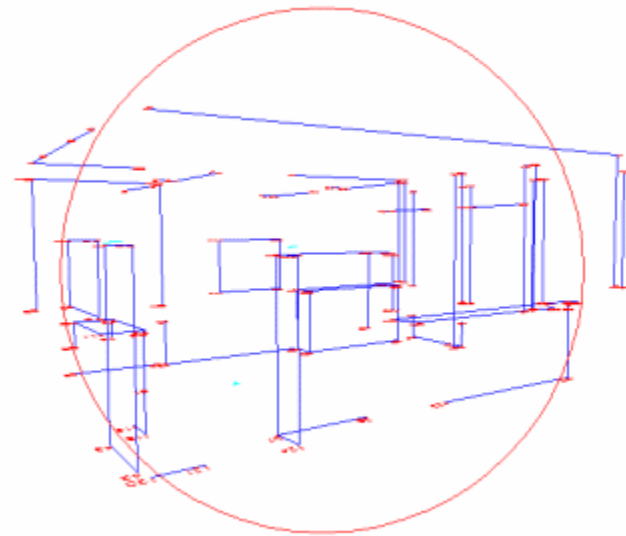
Save & export (Windows version)



If you use the software version for Windows all export data is now in a folder on your desktop.

Tip

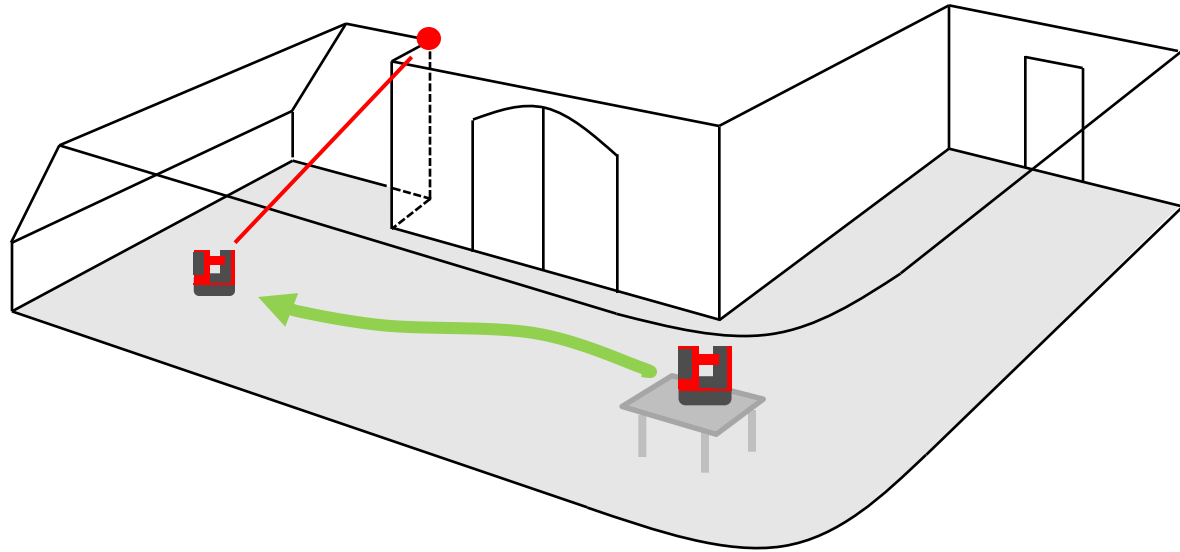
Download a free DXF viewer from the internet and check your export data immediately after export.



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Advanced



There is a third option to measure hidden points:
Change the 3D Disto's position and continue the
measurement.

This procedure is a guided application, offered in the
menu. Find details in the "Relocation" tutorial.

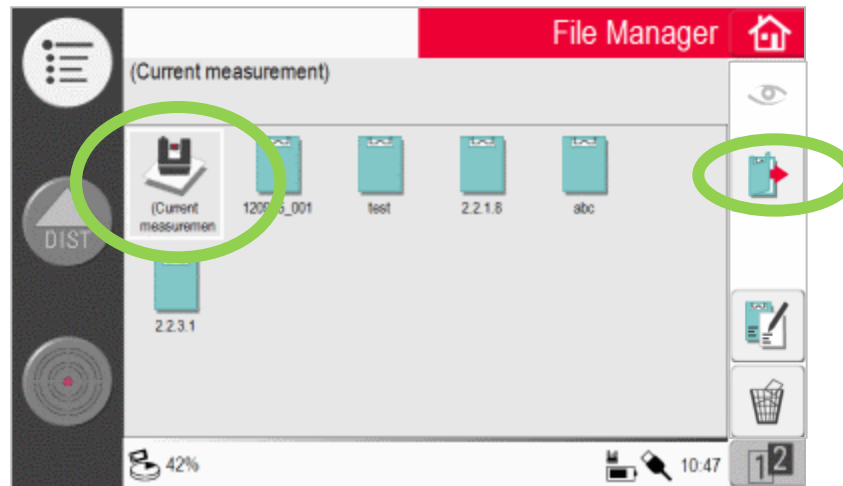
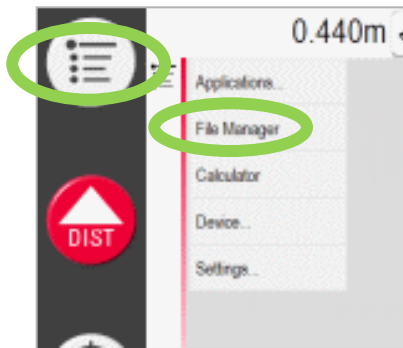
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Advanced

The 3D Disto allows a "Quick data export" of the actual measurement without prior saving:

Menu → File Manger → select "Current Measurement" → EXPORT



Control Unit option:
Plug USB stick
before export

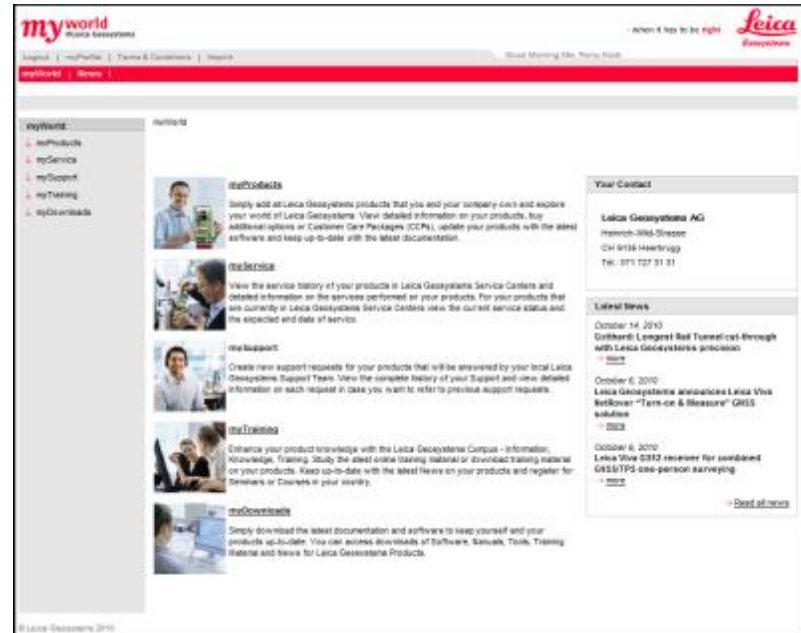
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Leica 3D Disto Advanced

Register your 3D Disto on
myWorld for:

- warranty extension
- license keys
- training materials
- free software updates
- support
- manuals

<https://myworld.leica-geosystems.com>
www.3ddisto.com



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