



3D Disto Software  
for Windows®

# Leica 3D Disto

## Tutorial

## CAD Tools



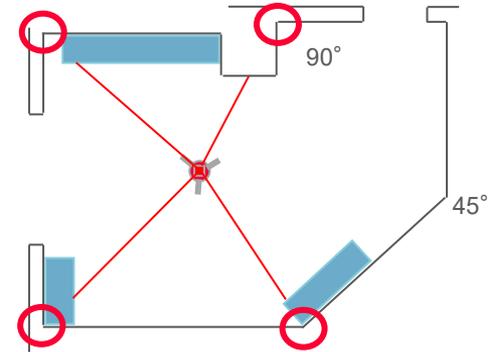
- when it has to be **right**



# CAD Tools

## When to use them

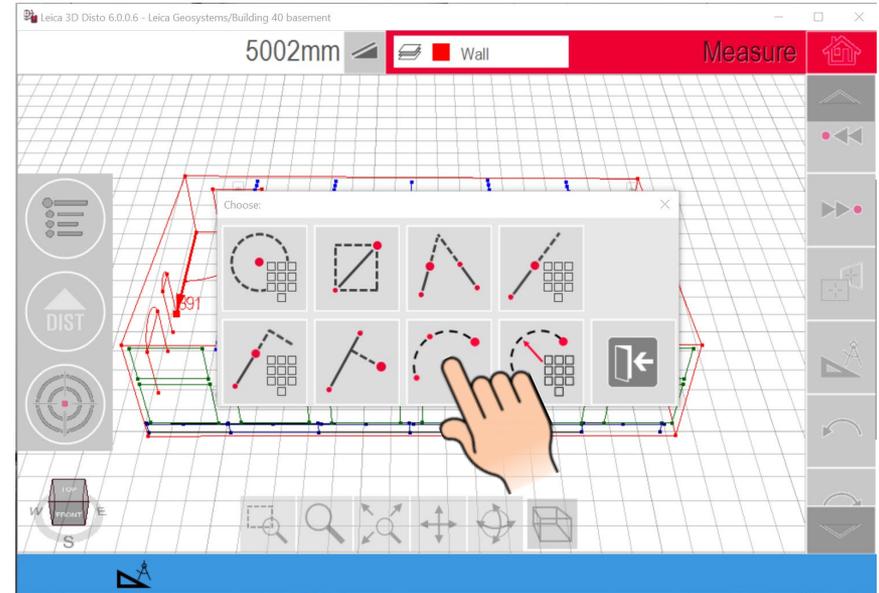
- to measure windows, doors and other wall details
- to measure hidden points
- to create corners of exactly  $90^\circ$
- to create preset dimensions
- to complete missing points and edges
- to measure rooms with minimal effort



# CAD Tools

## Start & Options

- CAD tools are only offered in the MEASURE application
- Select a point or line
- Tap or click on the CAD icon  in the toolbar on the right side
- select a tool from the list

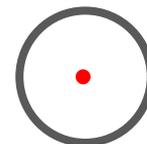
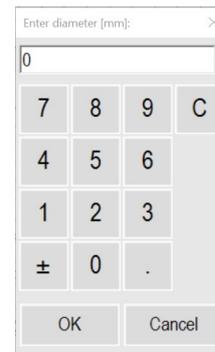
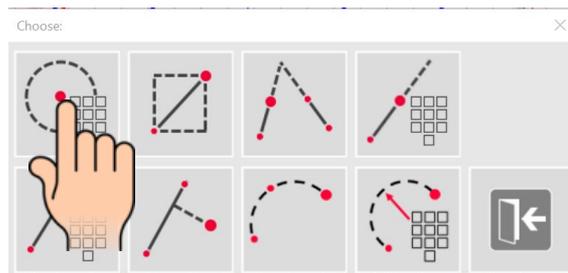


# CAD Tools

## Circle Tool



Draws a circle around the selected point, e. g. to measure plugs, sinks, etc.:



long click on point  
(touch screen)  
or right mouse click  
(desktop PC)

enter the  
diameter

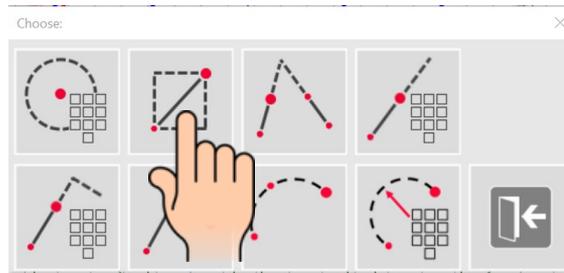
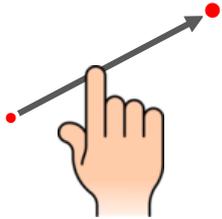
- when it has to be **right**

# CAD Tools

## Rectangle Tool



Transforms a diagonal line into a rectangle, e. g. to measure windows or doors:



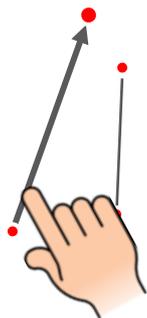
long click or right  
mouse click

Only works on vertical surfaces!

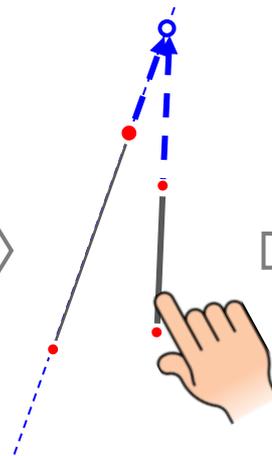
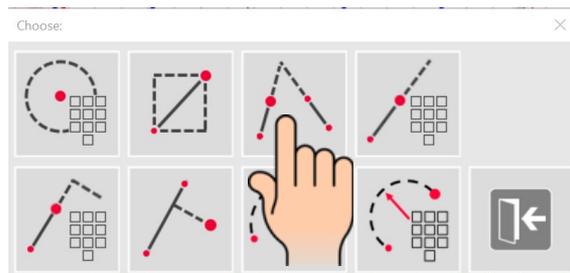
# CAD Tools

## Line intersection

Intersects two lines:



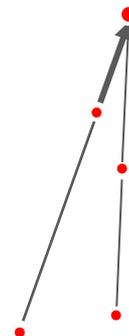
long click or right  
mouse click



tip on 2nd line  
→ preview appears



accept



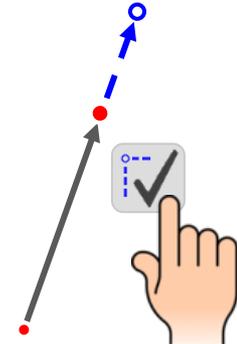
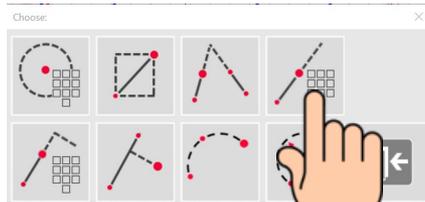
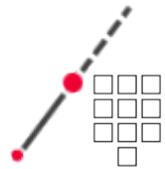
result



# CAD Tools

## Line extension

Prolongs a measured line:



long click or right mouse click

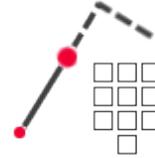
enter a value

accept point

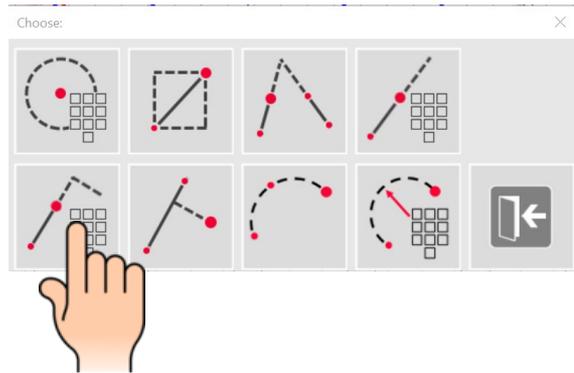
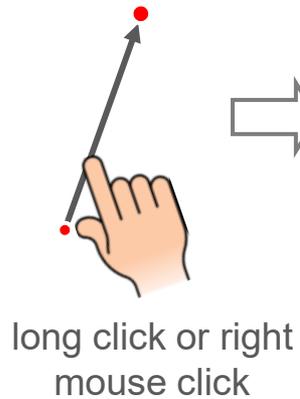
result

# CAD Tools

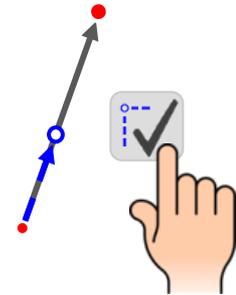
## Point shift (1)



Creates a point related to a line:



Enter a value.  
Default = length of  
selected line.  
Negative entries are  
accepted.

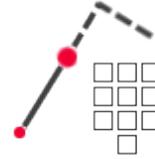


accept

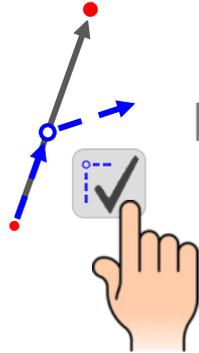


# CAD Tools

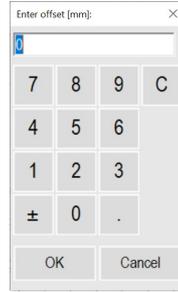
## Point shift (2)



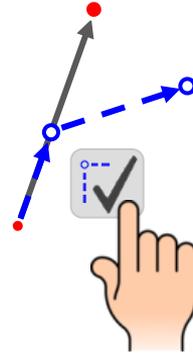
enter an  
angle



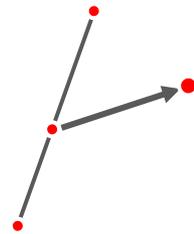
accept



enter an  
offset



accept

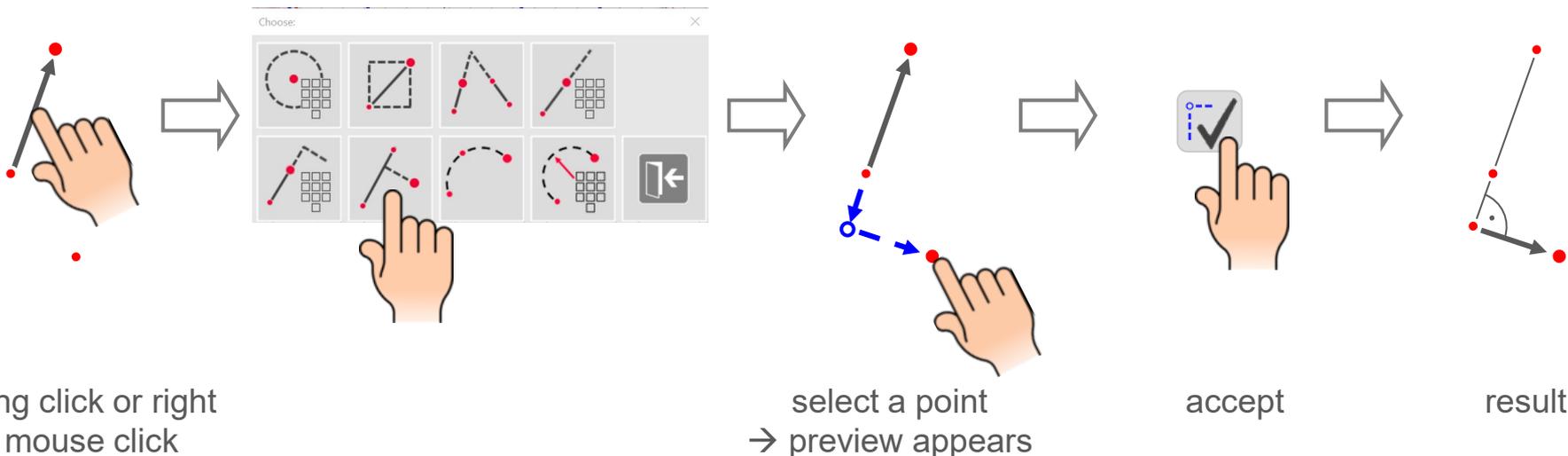


result

# CAD Tools

## Perpendicular intersection

Projects a point perpendicular to a line and creates a right angle:

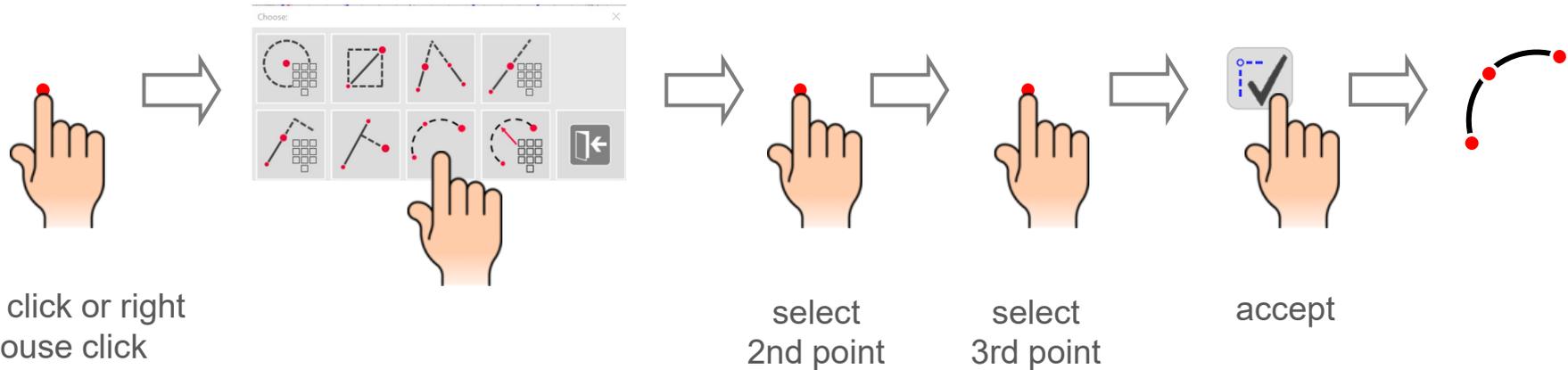


# CAD Tools

## Arc with 3 points



Draws an arc with 3 measured points:

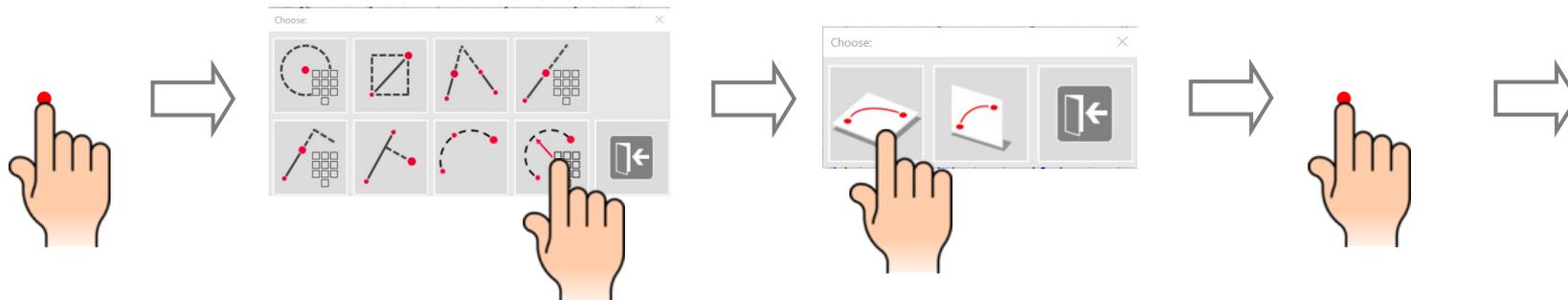


# CAD Tools

## Arc with 2 points and radius (1)



Draws an arc with 2 measured points and radius:



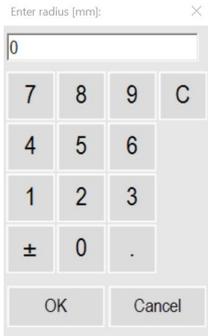
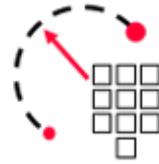
long click or right  
mouse click

choose orientation  
(horizontal or vertical)

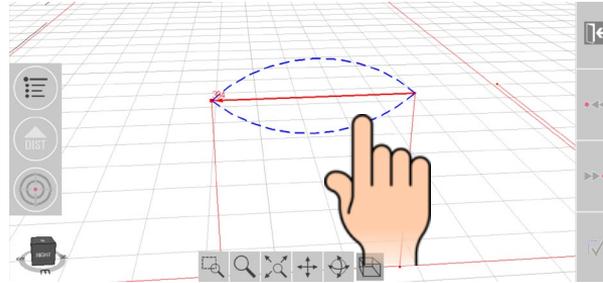
select  
2nd point

# CAD Tools

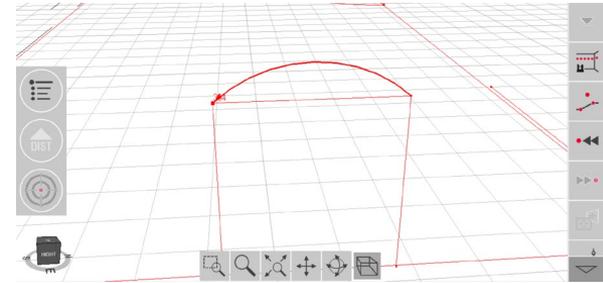
## Arc with 2 points and radius (2)



enter radius



choose one of the possible arcs



result

# CAD Tools

## Examples

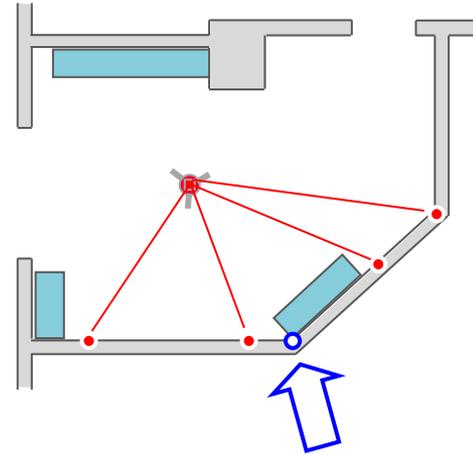
The following pages show some examples how to use the CAD tools effectively.



# CAD Tools

## Hidden Corner with Line Intersection

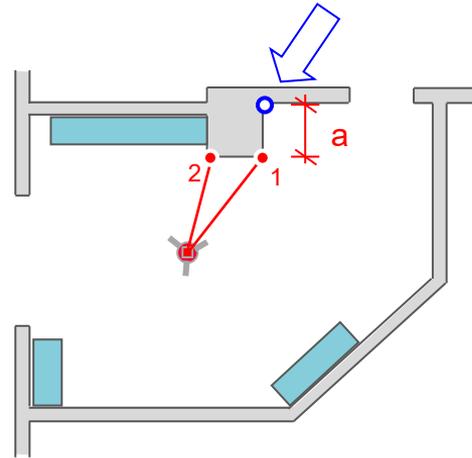
- measure 4 points on two walls
- use „Line intersection“ tool to determine hidden corner



# CAD Tools

## Measuring around the corner with “Point shift”

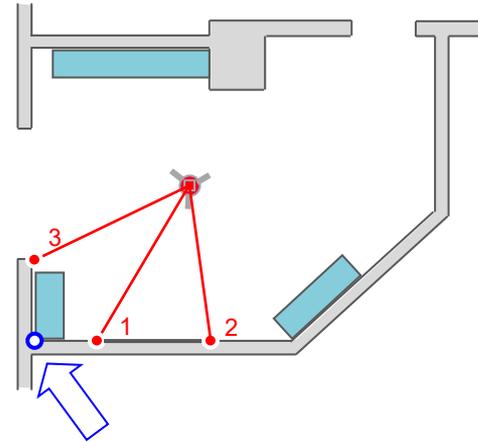
- measure 2 corners with 3D Disto
- measure „a“ by hand
- start POINT SHIFT tool
- enter 0, 90° and „a“ to create the hidden point



# CAD Tools

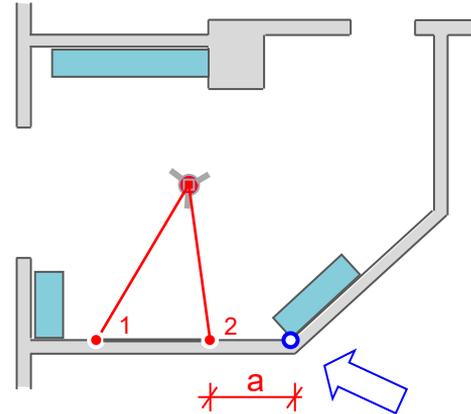
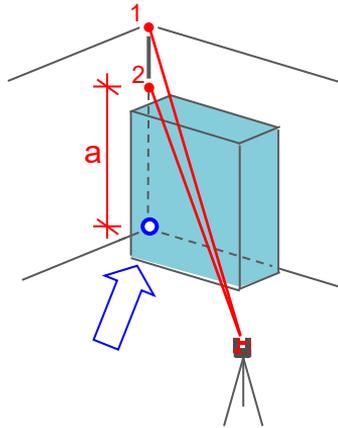
## Creating a 90° corner with “Perpendicular intersection”

- measure P1 and P2 on the wall
- measure P3 on the corner
- start PERPENDICULAR INTERSECTION tool with line P1/P2
- tip on P3 and accept



# CAD Tools

Measure a hidden corner with “Line extension”



- measure P1 and P2 with 3D Disto
- measure „a“ by hand
- start LINE EXTENSION tool on line P1/P2
- enter „a“ and accept

# Leica 3D Disto

## Registration at myWorld

Register your 3D Disto on myWorld for:

- warranty extension
- license keys
- more tutorials
- free software updates
- support
- manuals

[www.myworld.leica-geosystems.com](http://www.myworld.leica-geosystems.com)

