

Planimeter - GPS Area Measure version 3.7.1

How to Use Guide in Questions and Answers

Q. Where can Planimeter be used or useful?

A. Planimeter can be used in industries in measuring for road repairing, concrete, seal coating, roofing, paving, fence, underground utilities.

Also useful for map measure, outdoor activities, sports, range finder applications, bike run tour planning, explore golf area, golf distance measure, run, walk, bike, jog tracking, field pasture area measure, garden and farm work and planning, area records, construction, fencing, agricultural fencing, solar panel installation - roof area estimation, trip planning, etc.



- **Q.** What features Planimeter have?
- A. App Features:
- Accurate GPS distance, area measure and calculation
- Metric, Imperial units (m, km, mile, yard, foot, acre, ha)
- Distance between points
- Angle between lines
- Navigation through points by touch
- GPS coordinates for selected point
- GPS accuracy settings
- Manage KML files: open, save, preview, share
- Export data to Google Earth and Maps (KML file)

- Share by email, Skype, Google Dive: picture, coordinates as text message, KML file
- Save screenshot on SD
- Map/Satellite View
- Zoom and Edit points
- Current location search with GPS and Network
- Address, ZIP area code search
- Select points in Edit Mode
- Delete selected, all points
- Simplify Lines and Convex Area: smart measured path processing functions
- Fit-in, center points on screen
- Add points by touch
- Target Mode: add points using target on screen
- Stylus Draw Mode

- GPS TRACKING feature

- Add current GPS / Network location as a point
- add points with Latitude and Longitude coordinates (in different formats*)
- Last point is auto centered (optional, check **<u>Preferences</u>**) make it easy to use on scaled

up map

- Show/hide lines
- <u>Preferences</u>: GPS accuracy, search time, delete option and color theme
- Landscape View for big screens and tablets.
- Full screen mode
- p2p distances for each path segment
- quick open/export in Google Earth



Q. What can I measure with Planimeter?

- **A.** You can measure
- distance between two locations
- perimeter
- area
- angle
- the length of the tracked path
- the distance between each pair of waypoints
- you can also see the GPS coordinates of selected points

Q. How do I measure perimeter of a field / region on Google Maps.

A. You can do it manually by placing pins on the map or using tracking feature by walking or driving around the field.

Q. How can I start a new measurement?

A. Simply use LONG touch on *Trash button* to delete all previously added pins on the screen and add new pins by touching, drawing or by walking around using *live tracking mode*.

Q. I want to measure the region by walking around but I want to place the waypoints manually.

Is it possible?

A. Yes. Just make a LONG TOUCH on *Track button* \bigotimes to select the time interval options for tracking.

Select *Manual* option. The new *Set Point* button will appear on the screen. Walk and use this button to place the pins/waypoints.



Q. What does the buttons mean? **A.**



Target Mode: pins are added at the "target" sign in the center of the screen by touch.
 You can also see current Geo coordinates corresponding to the center of the screen if enabled in settings.

- Stylus Draw Mode: to make measurements by drawing free form line on the map.
 LONG touch on the screen + MOVE to start drawing on the map.
 Drawing can produce big number of pins on the map and can slow down the app,
 use <u>Simplify Path function</u> to remove redundant points and <u>hide pins</u> icons to achieve better performance.

- *Full-screen* : use currently selected mode in full screen. Use to come back to standard view.

- Share button in Full-screen Mode : share current screenshot and measurement results.

- <u>Quick Open/Export in Google Earth</u>*: open/export Planimeter data in Google Earth quickly. It is very useful to view data offline in pre-cached Google Earth maps.

If you see () (disabled) - it means Google Earth is not installed on your device.

GPS - **Provider button** : select input source.

TOUCH to select between GPS, Network, Lat and Lng, Address. In the case GPS is selected LONG TOUCH shows accuracy settings.



TOUCH - search for location and go to it, it will be marked as a green pin \mathbb{T}

LONG TOUCH - add location as a point and show it as a red pin



(K) - *Track button* : start and stop live <u>tracking using GPS provider</u>*. TOUCH - on/off tracking. LONG TOUCH - time interval settings for automatic pin placements on the map.

(*I wap View button* : turns on/off satellite view for Google Maps.

- Distance button : turns on/off distance measurements. TOUCH - show/hide the distance measurement results and lines between pins.

LONG TOUCH - show/hide pins 🖡



Area button : turns on/off area measurements. TOUCH - show/hide the area measurement results and filled area. LONG TOUCH - shows list of advanced path processing functions *.

(i) - *Save button* : save current screenshot as JPG file and measurement results as KML file on your device storage*. TOUCH - show Save As... dialog LONG TOUCH - clear data folder. All screenshots and KML files will be deleted after confirmation!



- Send Email or Share button : share current screenshot and measurement results.
 TOUCH - show options for sharing data.
 LONG TOUCH - clear sharing/e-mail cache folder. All screenshots and KML files
 from the cache folder will be deleted after confirmation!

- **Center or** *Edit button* : starts edit mode where possible to edit/move previously placed pins, check extra information about selected pin, navigate through pins using <u>Info Panel</u>*, select group of pins for deletion.

TOUCH - turns on/off Edit mode and shows Info Panel on top of the screen with

extra information about active/highlighted pin 👎

LONG TOUCH - Fit-in and center pins on the screen



- **Trash button** : delete last, group or all pins/points from the map. TOUCH - delete last point or group of selected points in Edit mode. LONG TOUCH - delete all points.

Q. How do I open previously saved KML files?A. Use standard option menu button to reach Files option and other settings.



Q. How do I change measurement units?
A. You have an option to change measurement units (m, km, mile, yard, foot, acre, ha) for each result: Distance (D), Area (A) and Perimeter (P) independently. Just touch the result view you are interested to change (in the upper left corner) and select units.



Q. I use Planimeter on daily basis for my work, but I am still missing some features important for me. What can I do?

A. You can contact us <u>by email</u> or using <u>contact form</u> on <u>our website</u> and describe your problem or suggestions. We try to consider user suggestions in app updates.

Q. How can I measure the small size plots/building area approximately 100 - 500 square yards? **A.** You can measure it manually by bounding the area of interest with pins on Google Maps using satellite view. Another option is to use tracking feature and walk or drive around the region of interest.

Q. I have started live tracking but see nothing on the screen?

A. Please check if pins or path visibility in ON. Press <u>*Distance* button</u> O on the right panel to change the state. Also check GPS accuracy and tracking time interval setting, check <u>Track Mode</u> <u>notes</u> below.

Q. Can Planimeter work offline (without internet connection)? What options do I have?

A. Google Maps require active internet connection and map tiles caching in developers apps is forbidden according to Google Maps license conditions. If you work offline, please use *GPS* or *Lat and Lng* input methods. In this case all calculations are based on Geo coordinates and should be correct. You can save results as KML file and open and edit it later when Internet connection is available. You also have option to open your data in pre-cached Google Earth. <u>Check this option in our app.</u>

Q. Can I change Latitude and Longitude (geo-coordinates) format?

A. Yes, you can check currently selected and select different Geo-coordinate format in the **<u>Preferences</u>** by touching **GPS Coordinate Format**. Also you can <u>add points using different</u> formats.

Q. When I Zoom in the map turns black. Can I Zoom in more to see detailed map?

A. The zoom level and zoom feature provided by Google Maps and it works as it meant.

Q. What screen orientations are supported by Planimeter? Can I use the app in *Landscape* mode?

A. Planimeter supports Portrait and Landscape screen orientations. You can select between fixed orientations *Portrait* and *Landscape*, or use *Auto-Rotation*.

Please note, *Landscape* mode is available on devices with big screens and tablets. You can check if your device supports the *Landscape* mode and change screen orientation settings in **Preferences**. *Auto-rotation* feature depends on your global device settings, so make sure it is enabled.

Tips: Fixed orientation is preferable way to use the app. Battery lasts longer with fixed orientation because points/pins are not recalculated on every screen orientation change.

Q. Is it possible to clear screen or hide the button panel while making points on map?

A. Yes you can use <u>full-screen</u> <u>option</u> available in the latest version of the app.

Q. Can I see distances for every segment of the path (pin-to-pin distances) along with total distance of the path?

A. Yes this option is available in the app and can be activated in **Preferences**, check *"Show P2P Distances on Path"* option. Drawing distances for every segment can slow down the app for big number of pins, use this option only if needed and with few number of points on map. To improve performance for this option, please consider <u>turning off pins</u> and using <u>Simplify Path function</u> to remove redundant points.



Q. Can I export data or KML file from Planimeter to Google Earth app?

A. You can use sharing options available in the app to email KML file to your Gmail and then open it from Gmail using Google Earth (GE has to be installed on your device). If you want to do it with no extra fuss directly from Planimeter app, use can purchase this option from the app, check <u>Quick Open/Export in Google Earth</u> feature.

Q. I like Planimeter and find it useful. How can I support Planimeter development.
A. You can rate and comment the <u>Planimeter app on Google Play</u>. Recommend the Planimeter app to your friends and colleagues.

*NOTES:

Path processing functions:

- **Simplify Path** function process and remove redundant points.
- **Convex Area** function process and remove all inner points and leaves only outer contour of the region.

Data Storage:

Planimeter uses "external storage" to save data (KML files, screenshots). "External storage" can be a removable storage media (such as an SD card) or an internal (non-removable) storage. Files saved to the external storage can accessed and modified by the user when they enable USB mass storage to transfer files on a computer. Planimeter data files are saved in the root directory under **com.vistechprojects.planimeter folder**. Make sure to backup this folder if you need it later or if you do factory reset of your device.

Info Panel:



*Bearing is the compass direction to travel from previous point to active point. Range: 0 to 360, where 0 - north, 90 - east, 180 - south, 270 - west.

Track Mode:



1 - red color indicates about active GPS tracking

2 - current track

3 - LONG TOUCH to fit-in and center pins on the map.

4 - GPS accuracy threshold according to GPS accuracy settings (Menu/<u>Preferences</u> or <u>shortcut</u>)

5 - current tracking GPS accuracy

6 - total number of points in the current track

Please note, points/pins are added to the current track ONLY if following condition is satisfied: current GPS accuracy value (5) is less or equal to GPS accuracy threshold value (4). So adjust GPS accuracy threshold according to your requirements and GPS reception conditions.

Geo-coordinate Formats:

Please select *"Lat and Lng"* option using provider button and "*My location"* button to get to following window:



- 1 change format
- 2 degrees
- 3 minutes
- 4 seconds
- 5 TOUCH to switch between North and South
- **6** TOUCH to switch between East and West

Preferences:



Quick Open/Export in Google Earth:



This paid feature is quick replacement for standard free way of exporting KML file into Google Earth on mobile device using Gmail and KML sharing feature available in Planimeter app. This is possible if you are online, but if you are offline direct way to open data in pre-cached Google Earth maps becomes very useful and convenient.