



# Prairie Geomatics Ltd

--- DATA SHEET ---

## Field Acreage Calculation Method for GPS76/72, MAP76 and MAP76S

First of all, in general, you drive or walk around the field perimeter, as your gps records a trail of points (a 'tracklog'). You then take this trail (the 'active tracklog') and save it as a 'saved tracklog'. Area and perimeter length are displayed on the GPS screen as attributes of each saved track.

### Exact steps:

- drive to field and stop somewhere along the outside of the field
  - turn on gps, wait for it to get initialized, press menu key twice
  - highlight tracks (using up or down rocker key) and hit enter
  - clear any leftover active tracklog by doing the following:
    - highlight clear and hit enter; highlight yes
  - while still at the 'tracks' page press menu and highlight 'setup track log'
  - make sure 'recording' is set to wrap when full; 'record method' set to auto and interval to most often (use rocker up/down and enter key to do this)
  - you can also set 'record method' to 'time' and enter 1 sec or 2 seconds as the logging interval
  - finish off the track setup by highlighting 'OK' and pressing enter
  - press the page key until you get to the gps 'map' page
  - press zoom in or zoom out until the scalebar reads about 120 ft (not 120 miles)
  - drive around the field perimeter until you get back to your approximate starting point (you will see the field boundary being created as you drive; zoom in/out as needed)
  - hold the GPS unit in a vertical position, or use an external antenna, for best satellite reception
  - the tracklog/field boundary will be created no matter what screen you are on, so you can use different screens such as the gps information page to check gps accuracy, etc.
  - press menu twice; highlight tracks, press enter; highlight save; select entire log
  - you will then see area in acres; highlight OK and press enter to save this tracklog
  - you could also change the 'name' from the date to something like 'field-3'
  - repeat above for each interior exclusion area like a bluff or slough
  - add up the exclusion area(s) with pencil and paper and subtract from the main field area to get the correct area for the field; you can't do this inside the gps unit
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- **Notes:**
  - the GPS manuals cover tracks and track information **BUT** area is a new feature of the 'track information page' and is not in the manual
  - If you have a Map76/Map76S disable the lock to road feature: On Map page press menu, select mapsetup, tab along the options on the top of the GPS screen (the lock to roads feature is under the OTHER option)
  - you need software version 2.04 or higher (GPS76/MAP76) or 2.00 or higher (MAP76S) to get the area feature
  - (check your unit by pressing menu twice, highlighting 'system Info' and pressing enter)
  - if your unit has an earlier version you can upgrade by downloading the freeupgrade from [www.garmin.com](http://www.garmin.com)
  - track record method could also be set to 'time' or 'distance', rather than 'auto'
  - (we have done hundreds of fields and generally use 2 second logging)
  - taking an 'active tracklog' and saving it as a 'saved tracklog' reduces the number of tracklog points in the field boundary and generalizes the shape somewhat. If you want a 'full resolution' field boundary, then copy the active tracklog to your computer using GPS Trackmaker, OZI Explorer, Fugawi or Garmin's MapSource program which comes with every MapSource CD-ROM