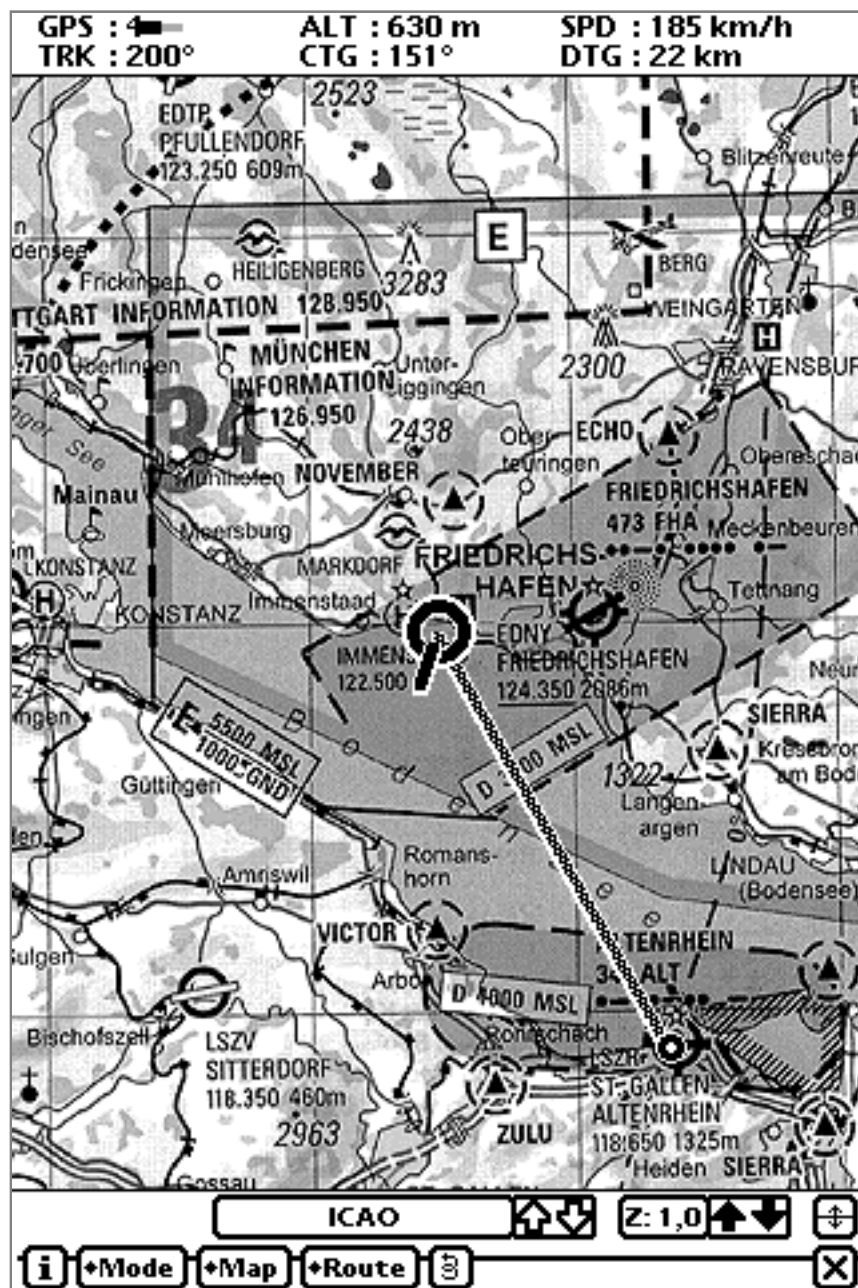# GPS Map Lite

## Version 2.0 Supplement

## Introduction

*GPS Map Lite 2.0*  is a new, NOS2.x savvy version of *GPS Map Lite*  with some new, impressive features.

This document describes the added functionality only. For a full overview *of GPS Map Lite*  features please also read the standard *GPS Map Lite 1.x*  manual.

## PDA Requirements

*GPS Map Lite 2.0*  runs only on Newtons equipped with an OS version of 2.0 or 2.1. It is highly optimized for the *MessagePad 2x00*  family, although it should also run on *MessagePad 130*.
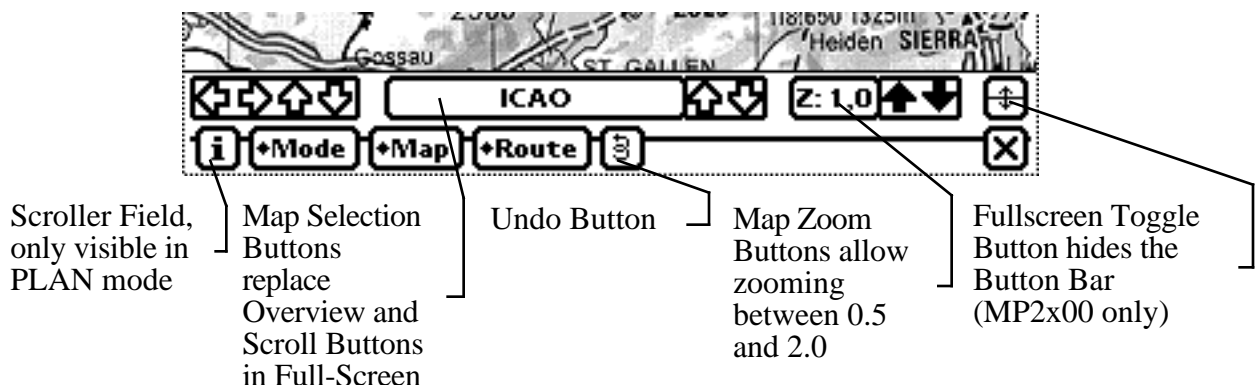
If you have an older device such as *MP120*  or a device running an OS version of 1.x you should continue using *GPS Map Lite 1.x*.

## GPS Requirements

There are the same requirements as for GPS Map Lite 1.x, except that you may now specify other baud rates and a string for initialising the GPS receiver as needed by some GPS receivers (e.g. *TripMate* ). The new version also supports connecting the GPS to the second serial port (MP2x00 only) or to a PCMCIA Serial I/O Card (e.g. Socket Communications Single Serial Card).

Also ncluded is an external GPS driver for supporting the Centennial PCMCIA SatNav GPS Card (both binary and NMEA versions).

## New features



Scroller Field, only visible in PLAN mode

Map Selection Buttons replace Overview and Scroll Buttons in Full-Screen

Undo Button

Map Zoom Buttons allow zooming between 0.5 and 2.0

Fullscreen Toggle Button hides the Button Bar (MP2x00 only)

As the *MessagePad 2x00* has a soft button bar it is now possible to hide the standard bar for using the whole screen as a map display. New buttons have been added for replacing the overview-, scroll-, and undo buttons within the standard button bar. The namer of the actual map is displayed within the button left to the scale change arrows.

Zoom buttons support zooming the map to a magnification between 0.5 and 2.0. The actual zoom state is displayed left to the zoom arrows. Tapping the zoom state will reset the magnification to 1.0.

## Enhanced Preferences

In addition to preselecting the units for distance, altitude, speed and setting the LCD contrast you have now full control over the GPS interface, and you may switch between different GPS drivers without restarting *GPS Map Lite*.
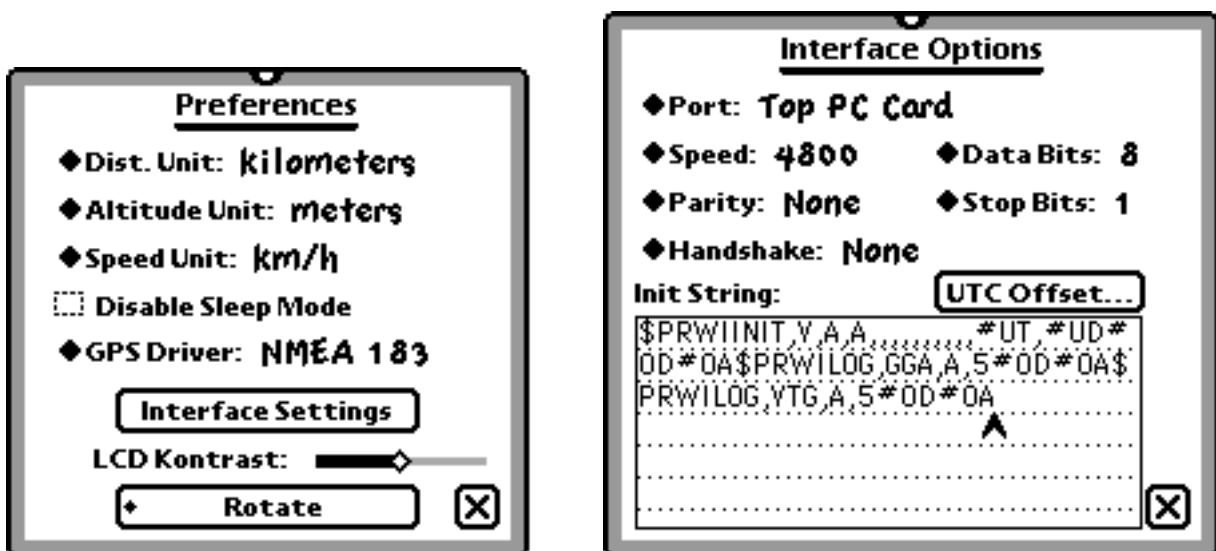


For changing the GPS driver simply select the new driver through the „GPS Driver" popup menu. The „Interface Settings" button will disappear while *GPS Map Lite* closes the current and opens the new GPS driver.

After the „Interface Settings" button is visible again you may tap on it for changing the driver settings.

The standard NMEA driver has been enhanced with various new features:

An initialisation string may be needed by some GPS receivers to enable them for outputting NMEA data. You may enter both ASCII and binary data into the input field.

Each binary byte must be prefixed by a # sign, followed by two hexadecimal digits. If the # sign should occur as an ASCII character within the string you must type it twice.

Example: Entering „$ASTRAL#0D#0A" represents the string „$ASTRAL", followed by a return and a linefeed character as needed for initialising the *TripMate* active antenna.

Please note: As it is difficult to recognise hexadecimal data (e.g. to distinguish between a O and a 0) it is preferable to use the keyboard by double-tapping into the input field.

Some receivers, e.g. the *Centennial PCMCIA SatNav GPS Card* offer the option to initialise them with the actual date and time for speeding up the time until getting the first fix. You may insert the strings #UD for Universal Date and #UT for Universal Time (UTC) into the initialisation string.

The example string as shown within the screen shot above will initialise the NMEA version of the *Centennial PCMCIA SatNav GPS Card* with date and time, and set its update rate for both the $GPGGA and $GPVTG messages to once per five seconds for reducing power consumption. Please note you will need to use a special GPS driver included with this delivery if you have the binary protocol version of that card!

Although *GPS Map Lite* will calculate UTC automatically based on Newton's time and date, the current location as set within the Time Zones application and the actual daylight settings for that location you should check and eventually correct the time offset by clicking the „UTC Offset" button.

After closing the preferences window *GPS Map Lite* will switch to the new interface settings and again listen to your receiver.

If data is incomming for a few seconds *GPS Map Lite* will adapt its driver to the best data message combination found in the data stream.

GPS Map Lite 2.0 will go final as soon as Apple tells us how to fix a bug causing system freezes and -10067 exceptions during scrolling maps.

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