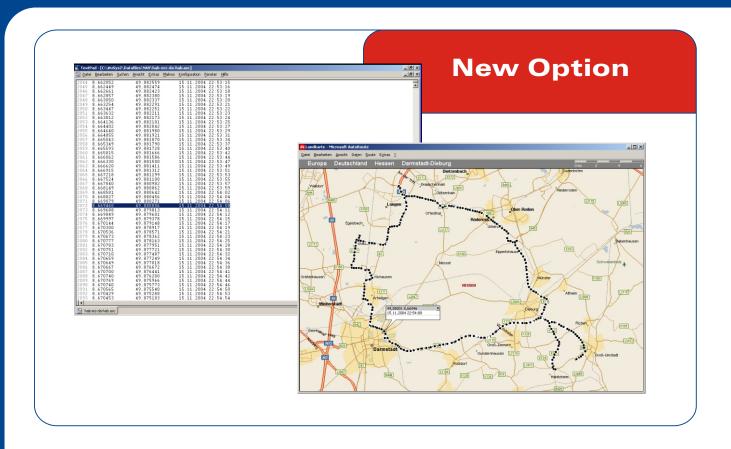


Hard-/Software Option

GPS-OptionGlobal Positioning System



Description of the GSP Option

With this option the recorder is able to record position data provided by a standard GPS receiver. The position data is stored in addition to any other data evaluation method. The GPS information is provided to the recorder in the standard NMEA0183 format. To reduce the amount of data a new position is only stored, if the recorder determined that the object has moved a user defined minimum distance. Then the actual way point and time are stored. The next way point will be stored not until the object has moved the minimum distance again. Thus, the generated data volume depends on the covered distance only. If the object is standing still or moving very slowly, almost no memory is consumed. Even so the standstill periods and the driving time can be determined exactly by the recorded data. By alteration of the maximum recording interval time and the accuracy of the stored way points the data volume can

be adapted in a wide range. For example, the storage of a distance of 1000km at intervals of 100m needs approximately 30kByte storage space only. On the other hand a way point resolution of less than one meter is supported which is adequate for making full use of the advantages provided by differential GPS (DGPS). The GPS option is applicable world wide. The GPS receiver is connected via the additional serial interface of the DICO module. The actual position can be displayed in the DVM mode at any time. The DICO pre-processes the NMEA0183 formated data and, hence, relieves the main processor significantly, so that the GPS option can be applied together with all other evaluation methods. The recorded GPS data can be exported in the NMEA0183 format or as an ASCII table.

GPS-Option

Hard-/Software Option

Typical Applications

- Recording of a complete motion protocol for documentary purposes
- Assignment of trigger events to characteristics of the route (potholes, curves etc.)
- Assessment of driving distance and average velocity.

Main Features of the GPS Option:

Hardware

• Second serial port at the MAS MICRO-II recorder. Requires the DICO module.

Software

- NMEA0183, Baud rate is configurable (4800-19200Baud)
- GPS data sampled synchronously to the recorder time
- Adjustable way point resolution, suits DGPS also
- Adjustable scanning rate
- Very little data volume, almost entirely distance dependent (approx. 3Byte per way point)
- Export of the GPS data as text in NMEA0183 format or as ASCII table
- Display of the actual position in the DVM mode
- Applicable world wide



Subject to technical alterations

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