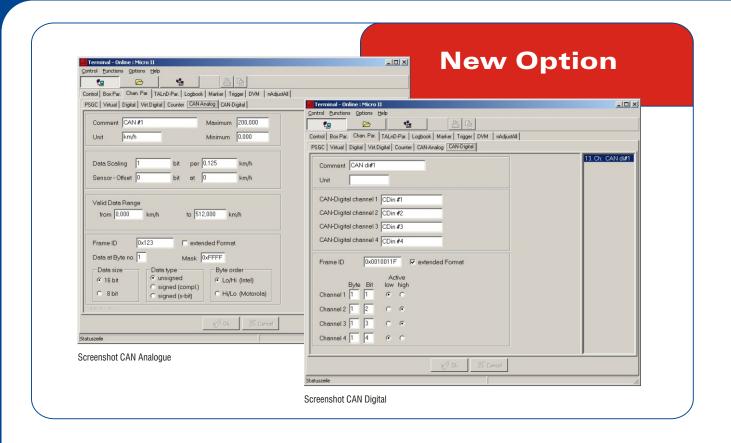


## **Hard-/Software Option**

# CAN-Bus Controller Area Network



### **Description of the CAN-Bus Option**

The Controller Area Network (CAN) Bus interface is becoming more widely used - in particular, it has become an accepted standard within the automobile industry.

In response to this trend, a new CAN-Bus option is available for the MAS MICRO-II recorder. With this option the recorder connects to a CAN-Bus and allows extraction of almost all transmitted data. The MAS MICRO-II recorder is extended by up to 20 analogue channels and up to 4 groups of 4 digital CAN channels.

The analogue CAN channels are treated like any other real analogue channel of the recorder. They can be used as input for virtual channels (requires the software "Virtual Analogue Channel") and be analysed according to all available evaluation methods. Individual data bits can be masked off by a user defined bit mask. The digital channels are used to separate individual bits from the CAN data, which can be used as trigger for the TM-method, as control signal for TaLnD and as signal input of the virtual channels.

The CAN-Bus option is also available for the new MAS MATCH-II-ADV.

## **CAN-Bus**

## Hard- / Software Option

Main Specification of the CAN-Bus Option:

#### **Hardware**

Baud rate
 10kBaud 1MBaud and completely user defined timing

Protocols
 CAN2.0A (standard message format)

CAN2.0B (extended message format)

Hardware layer
 SO 11898 (-24V)

#### **Software**

Number of CAN frames only limited by the number of channels

Frame identifier standard or extended identifier, selectable for each channel

Frame data maximum 8 Bytes

CAN channels maximum 20 analogue data channels

maximum 4 groups of 4 digital channels each

Data format (analog)8 Bit or 16 Bit

signed or unsigned

INTEL or MOTOROLA (big/small endian)

Response to failures
 Detection of range exceedance (adjustable for each CAN

channel). Retains the last valid value

Scanning rate up to 200Hz per channel

Evaluation all analogue evaluation methods

(RF, TM, TaL, TaLnD, SQTMS)

and combinations

(RF+TM+TaLnD, SQTMS+TaLnD)

DT for digital channels Virtual channels

Subject to technical alterations (Rev. 1.0 080605)

