CAN-Bus Supplement for UEP15/24 NIM Power Supplies

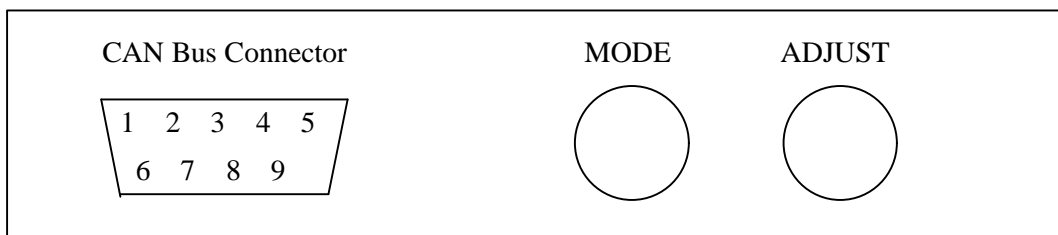The CAN Bus Signals are provided on the 9 Pin female DSUB:

CAN_H: Pin 7

CAN_L: Pin 2

CAN_GND: Pin 3

The software protocol is described in a seperate document (Part No *00183)

The CAN bus operation parameters may be changed with the two hexadecimal switches „ADJUST"and „MODE".

You may change the device address (0x00-0x7f, 0: can disable, 1: factory default), the general call address (0x00-0x7f, 0: no general call address, 0x7f: factory default) and the transmission speed (0-9, 1: factory default).

If you change the switch settings, a timer is started. The data will be stored into the power supply flash/eeprom and the new can bus settings will be active 5 seconds after you have turned the switches. If you disconnect the power supply from the mains before the data is stored, the change will be lost.

MODE	Function
A	CAN Device Address (low, Bit 0-3)
B	CAN Device Address (high, Bit 4-6)
C	CAN General Call Address (low, Bit 0-3)
D	CAN General Call Address (high, Bit 4-6)
E	Transmission Speed Index

CAN Transmission Speed Index			
Index	Maximal Distance	Transmission Speed	Type
0	10 m	1.6 Mbit/s	high speed (needs termination)
1	40 m	1.0 Mbit/s	
2	130 m	500 kbit/s	
3	270 m	250 kbit/s	
4	530 m	125 kbit/s	
5	620 m	100 kbit/s	low speed
6	1.300 m	50 kbit/s	
7	3.300 m	20 kbit/s	
8	6.700 m	10 kbit/s	
9	10.000 m	5 kbit/s	

Example:

To set the can bus to device address 19 (= 0x13), general call address 127 (= 0x7f) and 500 kbit/s (index 2), you have to:

- turn the MODE switch to „A"   low device address
- turn the ADJUST switch to „3"
- turn the MODE switch to „B"   high device address
- turn the ADJUST switch to „1"
- turn the MODE switch to „C"   low general call address
- turn the ADJUST switch to „F"
- turn the MODE switch to „D"   high general call address
- turn the ADJUST switch to „7"
- turn the MODE switch to „E"   transmission speed
- turn the ADJUST switch to „2"
- wait 5 seconds, ready

To set the can bus to the default factory settungs (device address 1 (= 0x01), general call address 127 (= 0x7f) and 1 mbit/s (index 1), you have to:

- turn the MODE switch to „A"   low device address
- turn the ADJUST switch to „1"
- turn the MODE switch to „B"   high device address
- turn the ADJUST switch to „0"
- turn the MODE switch to „C"   low general call address
- turn the ADJUST switch to „F"
- turn the MODE switch to „D"   high general call address
- turn the ADJUST switch to „7"
- turn the MODE switch to „E"   transmission speed
- turn the ADJUST switch to „1"
- wait 5 seconds, ready