## PC-Link data protocol

Interface parameter: 2400 Baud, No parity, 8 data bits, 1 stop bit

Connect RTS and DTR to the plus potential (TRUE for VB6) Handshake line:

The displaying devices send a telegram every 30 to 60 sec. The following dataset will be exported serially:

Byte	Meaning
0	Preamble byte FF for synchronization UART (no evaluation)
1	Starting byte STX (02)
2	Quantity of all bytes(17) incl. quantity and checksum, without preamble, start, end
3	Displaying device labelling:  02 = without relay output (Tank-Spion Digital LX-1)  03 = with alarm input and 2 relay outputs (TO-1)  04 = with 1 relay output (LC-1 / LC-2)  05 = Tank-Spion LX Home  06 = Tank-Spion LX-2  07 = Smartbox 1 / 2  08 = Smartbox 4  09 = Smartbox 4 pro  10 = Smartbox 3  11 = SBM1 interface (LPG)
4, 5	Serial number in hex (MSB first)
6	Temperature $00 = \text{no value (device has no temperature sensor)}$ $01 = -127 ^{\circ}\text{C}$ $80 = 0 ^{\circ}\text{C}$ $FF = +127 ^{\circ}\text{C}$
7	Bit field disturbances and relay conditions (if function is available)  Bit 0: Disturbance input alarm: 1 = alarm ( make/brake )  Bit 1: Disturbance input condition: 1 = closed contact  Bit 2: Relay 1 condition: 1 = relay has energized  Bit 3: Relay 1 condition: 1 = relay has energized  Bit 4: Beeper acknowledgement (only LC1/2, provision for unit)  Bit 5-7: Unit: 0=liter, 1=m³, 2=%, 3=m, 4=kg, 5=imperial gallons 6=US gallons
8, 9	Current displayed value in BCD (e.g. 0550 = 550 liter, E00x=error)
10	Decimal point + rounding Bit 0-1: Decimal point: 0=none, 1-3=after digit 1-3 (1000er cutoff point for L, kg, gal) Bit 2: Not used (used to be 1 for older devices) Bit 4-7: Rounding
11	Tank form Bit 0-3: Tank type (depending on device type) Bit 4-7: Medium: xx: 0=heating oil, 1=water, 2=diesel, 3=biodiesel, 4=RME, 5=rape oil, 6=palm oil, 7=motor oil, 8=adblue, 9=gasoline, 10=premium gasoline (super), 11=special)
12, 13	Tank volume in hex (MSB first)
14, 15	Tank height in mm in hex (MSB first)
16, 17	Programmed limit values for relay and alarm generator (00 if function is not available or deactivated)  HI byte = 1. limit value - relay switching point or alarm point in percent (01-99)  LO byte = 2. limit value - relay switching point in percent (01-99)
18	Checksum: 8 Bit sum of all bytes (bytes 2-17)
19	Ending byte ETX (03)