W&T

Manual

RS422 > Centronics Interface

W&T

Model	62008, 62009
Release	1.40

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Interface 20mA > Centronics, 4+4KByte, Model 62008

Function

Interface 62008 allows you to connect parallel printers or plotters to any data source to a serial RS422 port. Installation requires that the data format of the interfaces be adapted to the format of the data source. The serial parameters can be set either using DIL switches inside the port (see table) or using automatic format detection in „Learn-Mode".

Learn-Mode: To initialize Learn Mode, the black button on the side of the interface converter must be actuated when the port turns on. After releasing the button the current setting of the port is output on the connected printer. Following this, approx. 1 page of any desired text should be sent to the interface for the purpose of format detection. The serial parameters which are detected are automatically stored in a non-volatile EEPROM. The next time the port is activated (button does not need to be pressed), the port carries out its normal function using the newly detected parameters. Learn Mode can be repeated as often as desired.

In normal operation, pressing the red button once clears the built-in buffer (Clear). Pressing twice prints out the buffer contents again (Copy).

Handshake: The interface performs hardware handshake and XON/XOFF handshake. The built-in overrun buffer ensures that no data are lost when the computer sends up to 4 KBytes after Handshake Stop.

Code conversion: The interface can convert in either direction between German ASCII and IBM code.

Manually setting the serial parameters

In addition to Learn Mode, the interface allows you to set the serial parameters manually using DIL switches, which are accessible after opening the interface housing. The meaning of the DIL switches is described in the following tables:

Baudrate	S1	S2	S3
300 Bd	off	off	off
1200 Bd	ON	off	off
2400 Bd	off	ON	off
4800 Bd	ON	ON	off
9600 Bd	off	off	ON
19200 Bd	ON	off	ON
38400 Bd	off	ON	ON
76800 Bd	ON	ON	ON

Parity	S5	S6
no	ON	off
odd	off	ON
even	ON	ON
Learnmode	off	off

Code conversion	S7	S8
no	ON	ON
GRASCII > IBM	off	ON
IBM > GRASCII	ON	off

Data bit	S4
7	ON
8	off

Handshake

The Interface uses Hardware handshake and XON/XOFF handshake. To suppress one of these methods, leave the corresponding line unconnected. The built-in Overrun Buffer ensures that no data are lose even when the computer sends up to 4kB of data after the handshake stop.

Connector and pinouts

The RS422 connection on the interface is configured as a 25-pin SUB-D female connector. The pinouts for this connector must in general be adapted to the pinouts of the data source when installing the device. This can be done using an adapter cable or by modifying the interface plug assignments. The interface pin assignments are shown in the following table.

Signal	Pin#
Data Out A (-)	10
Data In A (-)	11
Signal GND	14
Hands. Out A (-)	15
Hands. Out B (+)	16
Data Out B (+)	22
Data In B (+)	23

Technical Specifications

Baud rate:	300..76800 baud
Data format:	7,8 data bits, No, Even, Odd Parity
Handshake:	DTR-, XON-/XOFF-Handshake
Buffer:	8 KByte (4 KByte + 4 KByte overrun buffer)
Power supply:	AC adaptor provided
Current draw:	typ. 50 mA
Input:	25-pole SUB-D female connector
	incl. 2m connection cable on the device
Output:	36-pin Centronics male, Interface
	can be plugged directly into the printer
Housing:	Plastic enclosure, 75x61x20 mm
Weight:	425 g incl. power supply
Packing list:	Interface RS422 > Centronics
	AC adaptor for office use

RS422 > Centronics Interface, 1+1KByte, Model 62009

The 62009 Interface permits parallel printers or plotters to be connected to any data source having a serial RS422 port.

Function

When installing, the data format of the Interface must match the format used by the data source. The RS422 parameters can be set either by using DIL switches inside the Interface (see table) or using automatic format detection in „Learn-Mode".

Learn-Mode

To initialize Learn-Mode you must press the key on the interface converter as the Interface is being turned on. After releasing the key the current setting of the Interface is output on the connected printer. Next a page of any desired text should be sent to the Interface for purposes of format detection. The detected RS422 parameters are output on the printer and automatically stored in a non-volatile EEPROM. The next the the Interface is turned on (without holding the red key down), the Interface carries out its normal function using the newly detected parameters. Learn-Mode can be repeated as often as desired. In normaly operation pressing the key once clears the built-in buffer (Clear). Pressing it twice prints out the buffer contents again (Copy).

Manual setting of the RS422 parameters

In addition to Learn-Mode, the Interface allows you to set the RS422 parameters manually using DIL switches accessible by opening the Interface housing.

The meaning of the DIL switches can be taken from the table below:

baudrate	S1	S2	S3
300	off	off	off
1200	ON	off	off
2400	off	ON	off
4800	ON	ON	off
9600	off	off	ON
19200	ON	off	ON
38400	off	ON	On
76800	ON	ON	ON

data bit		S4
7		ON
8		off

parity	S5	S6	S7	S8
no	ON	off	ON	ON
odd	off	ON	ON	ON
even	ON	ON	ON	ON
learn mode	off	off	ON	ON

The number of stop bits may be any. Only the format *7 data bits, no parity, 1 stop bit* is not supported by Learn Mode of the interface.

Handshake

The Interface uses Hardware handshake and XON/XOFF handshake. To suppress one of these methods, leave the corresponding line unconnected. The built-in Overrun Buffer ensures that no data are lose even when the computer sends up to 1kB of data after the handshake stop.

Connectors and pinouts

The RS422 connection on the interface is configured as a 25-pin SUB-D female connector. The pinouts for this connector must in general be adapted to the pinouts of the data source when installing the device.

This can be done using an adapter cable or by modifying the interface plug assignments. The interface pin assignments are shown in the following table.

Signal	Pin#
Data Out A (-)	10
Data In A (-)	11
Signal GND	14
Hands. Out A (-)	15
Hands. Out B (+)	16
Data Out B (+)	22
Data In B (+)	23

Technical Data

Baud rate:	300..76800 baud
Data format:	7,8 data bits, No, Even, Odd Parity
Handshake:	DTR-, XON-/XOFF-Handshake
Buffer:	2 KByte (1 KByte + 1 KByte overrun buffer)
Power supply:	AC adaptor provided
Current draw:	typ. 50 mA
Input:	25-pole SUB-D female connector
	incl. 2m connection cable on the device
Output:	36-pin Centronics male, Interface
	can be plugged directly into the printer
Housing:	Plastic enclosure, 75x61x20 mm
Weight:	425 g incl. power supply
Packing list:	Interface RS422 > Centronics
	AC adaptor for office use