

**W&T**

# **Manual**

## **20mA > Centronics Interface**



Type  
Release

42008, 42009  
1.50

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**Interface 20mA > Centronics, 4+4 KByte, Model 42008****Function**

Interface 42008 allows you to connect parallel printers or plotters to any data source to a serial 20mA 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 black button once clears the built-in buffer (Clear). Pressing twice prints out the buffer contents again (Copy).

## 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

Data bit	S4
7	ON
8	off

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

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

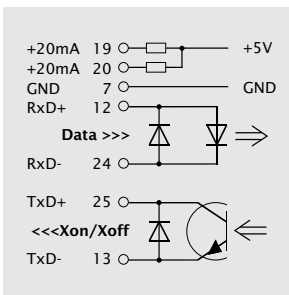
**Handshake:** The interface performs an XON/XOFF handshake. The built-in overrun buffer ensures that no data are lost when the computer sends up to 4 KBytes after Handshake Stop.

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

### Connector and pinouts

The 20mA 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#
Masse	7
RxD+	12
TxD-	13
20mA RxD	19
20mA TxD	20
RxD-	24
TxD+	25



**Technical Specifications**

Baud rate:	300 .. 19200 Baud
Data format:	7,8 data bits, No,Even,Odd Parity
Handshake:	XON-/XOFF Ready / Busy protocol (optional)
Modes:	Selectable active or passive operation of the transmit and receive loop
Isolation:	Galvanic isolation with an isolation voltage of 1 kV in passive mode
Buffer:	8K (4K + 4K overflow buffer)
Input:	25-pin SUB-D connector incl. 2m cable on the unit
Output:	36-pin Centronics connector, interface can be connected directly to the printer
Supply current:	typ. 75 mA
Supply voltage:	Plug-in power supply provided
Housing:	Plastic, 75x61x20 mm
Weight:	425 g incl. power supply
Included:	1 x Interface 20mA > Centronics 1 x plug-in power supply for office use

**Interface 20mA > Centronics, 1+1 KByte, Model 42009****Function**

Interface 42009 allows you to connect parallel printers or plotters to any data source to a serial 20mA 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 black button once clears the built-in buffer (Clear). Pressing twice prints out the buffer contents again (Copy).

## 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	off	off	off
1200	ON	off	off
2400	off	ON	off
4800	ON	ON	off
9600	off	off	ON
19200	ON	off	ON

data bit	S4
7	ON
8	off

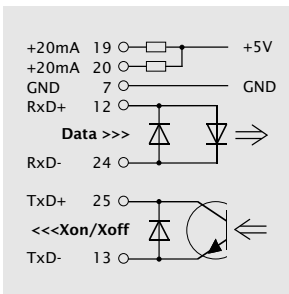
parity	S5	S6	S7	S8
no	ON	off	ON	ON
odd	off	ON	ON	ON
even	ON	ON	ON	ON
learn mode	off	off	ON	ON

**Handshake:** The interface performs an XON/XOFF handshake. The built-in overrun buffer ensures that no data are lost when the computer sends up to 1 KBytes after Handshake Stop.

**Connector and pinouts**

The 20mA 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#
Masse	7
RxD+	12
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Baud rate:	300 .. 19200 Baud
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Modes:	Selectable active or passive operation of the transmit and receive loop
Isolation:	Galvanic isolation with an isolation voltage of 1 kV in passive mode
Buffer:	2K (1K + 1K overflow buffer)
Input:	25-pin SUB-D connector incl. 2m cable on the unit
Output:	36-pin Centronics connector, interface can be connected directly to the printer
Supply current:	typ. 75 mA
Supply voltage:	Plug-in power supply provided
Housing:	Plastic, 75x61x20 mm
Weight:	425 g incl. power supply
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