

Manual

Interface 20mA >Centronics



Type
Release

42008
1.2

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Interface 20mA > Centronics

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

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.

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 |
|----------|-----|-----|-----|
| 150 Bd | ON | ON | ON |
| 300 Bd | off | off | off |
| 600 Bd | ON | off | off |
| 1200 Bd | off | ON | off |
| 2400 Bd | ON | ON | off |
| 4800 Bd | off | off | ON |
| 9600 Bd | ON | off | ON |
| 19200 Bd | off | ON | ON |

| Data bit | S4 |
|----------|-----|
| 7 | ON |
| 8 | off |

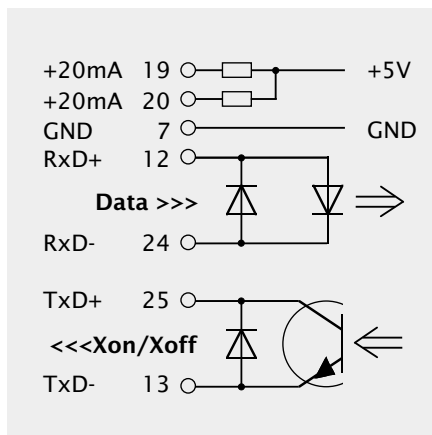
| Parity | S5 | S6 |
|-----------|-----|-----|
| no | ON | off |
| odd | off | ON |
| even | ON | ON |
| Learnmode | off | off |

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

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: | 150 .. 19200 Baud |
| Data format: | 7,8 data bits, No,Even,Odd Parity |
| Handshake: | XON-/XOFF |
| Modes: | Selectable active or passive operation of the send 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 |
| Current draw: | ca. 115 mA |
| Supply voltage: | Plug-in power supply provided |
| Housing: | Plastic, 75x61x20 mm |
| Weight: | 425 g incl. power supply |
| Included: | 1x Interface 20mA > Centronics 1x plug-in power supply for office use |