

# MDI-8

## Technical Documentation Parallel-Input-Module

*Please keep for further use !*

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This manual was edited using text formatting software on a DOS personal computer. The text was printed in *Arial*.

## **Fonts**

*Italics* and **bold** type are used for the title of a document or to emphasize text passages.

Passages written in *Courier* show text which is visible on the display as well as software menu selections.

"< >" refers to keys on your computer keyboard (e.g. <RETURN>).

## **Note**

Text following the "NOTE" symbol describes important features of the respective product.

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## Revision History

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**Note:**

The cover of this document shows the current revision status and the corresponding date. Since each individual page has its own revision status and date in the footer, there may be different revision statuses within the document.

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19.07.1996

Revision	Date

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## Submodule digital inputs 8 bit / 24 V (MDI-8)

### 1 General

The MDI-8 sub module presents an expansion of 8 digital inputs for the following basic devices:

Fiber Optic (Lightbus)

FOX-10

FOX-20

Profibus

PBX-21

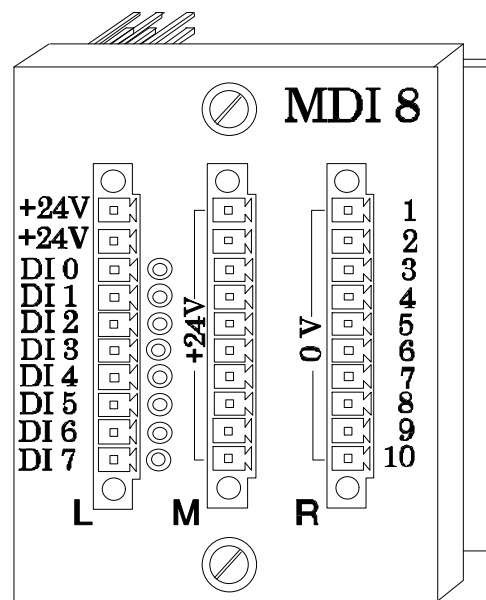
CAN-Bus

CNX-20

CNX-21

With FOX-10 and CNX-20 a maximum of 32 inputs per basic device is possible. You can also mix them with digital output submodules (MDO-8). Each MDI-8 submodule needs 8 bit from the 32-bit telegram.

The position of the byte inside the telegram is dependant on the slot number of the specific sub module.



**Modul: Digital Input, 8 Bit**

## 2 Technical data MDI-8

<b>Inputs</b>	8 Inputs 8 LED Status 1 LED Power
<b>Input level</b>	Power supply : 10V .. 32 V Standard: 24 V Triggerpoint is 1/2 of power supply Input resistor: 15 KOhm Input current: 24 V < 2 mA
<b>Input</b>	Opto coupled
<b>Filter</b>	The inputs are a) digital filtered with 6 msec b) by hardware with 3 msec
<b>Power supply</b>	24 V DC ( $\pm 20\%$ )
<b>Current</b>	0,05 A (without load)
<b>Case</b>	Module fixed with 2 screws in FOX-10-Basic
<b>Dimensions (W * H * D)</b>	58 * 72 * 50 mm
<b>Weight</b>	ca. 100 g
<b>Temperature range</b>	$\pm 0..+55$ °C
<b>Storage temperatur range</b>	-20..+70 °C

### 3 Description of the signals / terminal

Pin	Signal	I/O	Description
L-1	+ 24V	VCC	+ 24 V DC power supply (output driver)
L-2	+ 24V	VCC	+ 24 V DC power supply (output driver)
L-3	DI 0	In	Bit 0 of data byte 0, 1, 2 or 3
L-4	DI 1	In	Bit 1 of data byte 0, 1, 2 or 3
L-5	DI 2	In	Bit 2 of data byte 0, 1, 2 or 3
L-6	DI 3	In	Bit 3 of data byte 0, 1, 2 or 3
L-7	DI 4	In	Bit 4 of data byte 0, 1, 2 or 3
L-8	DI 5	In	Bit 5 of data byte 0, 1, 2 or 3
L-9	DI 6	In	Bit 6 of data byte 0, 1, 2 or 3
L-10	DI 7	In	Bit 7 of data byte 0, 1, 2 or 3
Pin	Signal	I/O	Description
M-1	+ 24V	VCC	+ 24 VDC power supply (sensors)
M-2	+ 24V	VCC	
M-3	+ 24V	VCC	
M-4	+ 24V	VCC	
M-5	+ 24V	VCC	
M-6	+ 24V	VCC	
M-7	+ 24V	VCC	
M-8	+ 24V	VCC	
M-9	+ 24V	VCC	
M-10	+ 24V	VCC	
Pin	Signal	I/O	Description
R-1	0V	GND	Ground, return of the outputs
R-2	0V	GND	
R-3	0V	GND	
R-4	0V	GND	
R-5	0V	GND	
R-6	0V	GND	
R-7	0V	GND	
R-8	0V	GND	
R-9	0V	GND	
R-10	0V	GND	

Pin marking:            L : row (left)  
                               M : row (middle)  
                               R : row (right)