QUICK INSTALLATION

MSX-E3121
Ethernet multifunction system

02.04 - 01/2016

Connecting the Ethernet system

- Please read the safety precautions (yellow leaflet) first!
- Afterwards, connect your Ethernet system as follows:

A) Connect the Ethernet system to your PC or network using an Ethernet cable (e.g. CMX-60).
B) Connect the desired functions.
C) Optional: Connect the cable for trigger/synchro signals (e.g. CMX-40) to the Ethernet system.
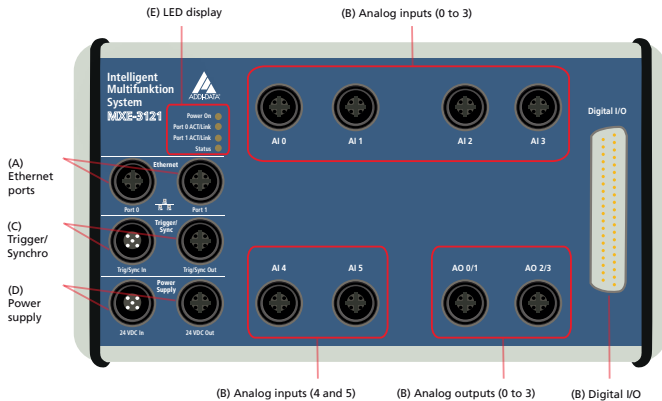
NOTICE!
Please ensure that the default IP address of the Ethernet system (192.168.99.99) is not assigned to another system on your network yet.

Starting the Ethernet system

D) Connect the Ethernet system to the power source using a power supply cable (e.g. CMX-20).
E) Check the status of the Ethernet system by means of the LED display:

Power On:	- lights green	= Power supply is OK
Port 0 ACT/Link:	- flashes yellow	= Ethernet cable is connected to Port 0
Port 1 ACT/Link:	- flashes yellow	= Ethernet cable is connected to Port 1
Status:	- lights green	= Ethernet system is ready for operation
	- lights yellow	= Ethernet system is booting
	- lights/flashes red	= Error while booting

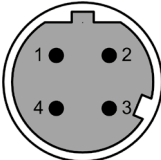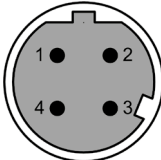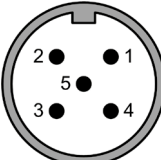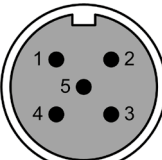As soon as the "Status" LED lights green, you can install the software (see page 6).

(E) LED display   (B) Analog inputs (0 to 3)

Intelligent Multifunktion System MXE-3121

Power On
Port 0 ACT/Link
Port 1 ACT/Link
Status

Digital I/O

AI 0   AI 1   AI 2   AI 3

(A) Ethernet ports

Ethernet
Port 0   Port 1

(C) Trigger/ Synchro

Trigger/ Sync
Trig/Sync In   Trig/Sync Out

(D) Power supply

Power Supply
24 VDC In   24 VDC Out

AI 4   AI 5   AO 0/1   AO 2/3

(B) Analog inputs (4 and 5)   (B) Analog outputs (0 to 3)   (B) Digital I/O

CMX-20: Power supply cable

Pin assignment

Ethernet
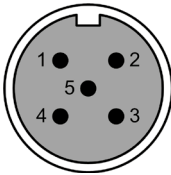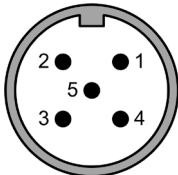
Pin No.	Port 0 Female connector, D-coded, M12	Port 1 Female connector, D-coded, M12	Cable (green) Lead colour
1	TD0+	TD1+	yellow
2	RD0+	RD1+	white
3	TD0-	TD1-	orange
4	RD0-	RD1-	blue

Trigger/Synchro

Pin No.	Trig/Sync In Male connector, 5-pin, M12	Trig/Sync Out Female connector, 5-pin, M12	Cable (purple) Lead colour	Lead pair
1	Trigger input -	Trigger input -	blue	1
2	Trigger input +	Trigger input +	white	
3	Synchro input +	Synchro output +	red	2
4	Synchro input -	Synchro output -	black	
5	GND	GND		

Power supply

Pin No.	24 VDC In	24 VDC Out	Cable (black)
	Male connector, 5-pin, M12	Female connector, 5-pin, M12	Lead colour
1	24 V	24 V	brown
2	24 V	24 V	white
3	GND	GND	blue
4	GND	GND	black
5	not connected	not connected	grey

Analog inputs

Pin No.	Female connector, 4-pin, M12	Cable (black)
		Lead colour
1	+24 V	brown
2	Diff. input -	white
3	GND	blue
4	Diff. input +	black

[1] To use the inputs as single-ended inputs, pins 2 and 3 have to be connected externally with each other.
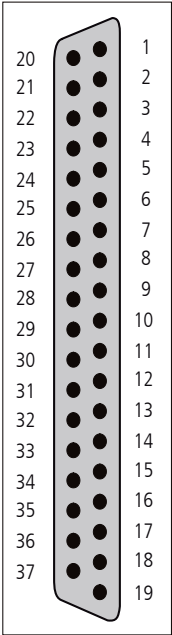
Analog outputs

Pin No.	Female connector, 5-pin, M12	Cable (black) Lead colour
1	+24 V (supply)	brown
2	Analog output -	white
3	GND (supply)	blue
4	Analog output 0+	black
5	Analog output 1+	grey

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      1 ●    ● 2
         5 ●
      4 ●    ● 3
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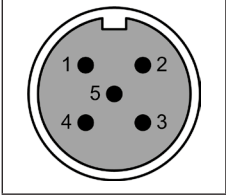
Digital I/O

Digital input 1	20	1	Digital input 0
Digital input 3	21	2	Digital input 2
Digital input 5	22	3	Digital input 4
Digital input 7	23	4	Digital input 6
Digital input 9	24	5	Digital input 8
Digital input 11	25	6	Digital input 10
Digital input 13	26	7	Digital input 12
Digital input 15	27	8	Digital input 14
24 V (external)	28	9	24 V (external)
Digital output GND	29	10	Digital input GND
Digital output 1	30	11	Digital output 0
Digital output 3	31	12	Digital output 2
Digital output 5	32	13	Digital output 4
Digital output 7	33	14	Digital output 6
Digital output 9	34	15	Digital output 8
Digital output 11	35	16	Digital output 10
Digital output 13	36	17	Digital output 12
Digital output 15	37	18	Digital output 14
		19	not connected

# Software tool "ConfigTools"

First steps

After connecting the required components to your Ethernet system and checking if the power supply is ensured, continue as follows:

- Install the software tool "ConfigTools", which is to be found on the supplied CD.

As soon as you have started the installed software tool from your computer, the connected Ethernet systems are scanned.

Main window structure

After scanning, all connected Ethernet systems are listed in the ConfigTools Explorer (on the left):
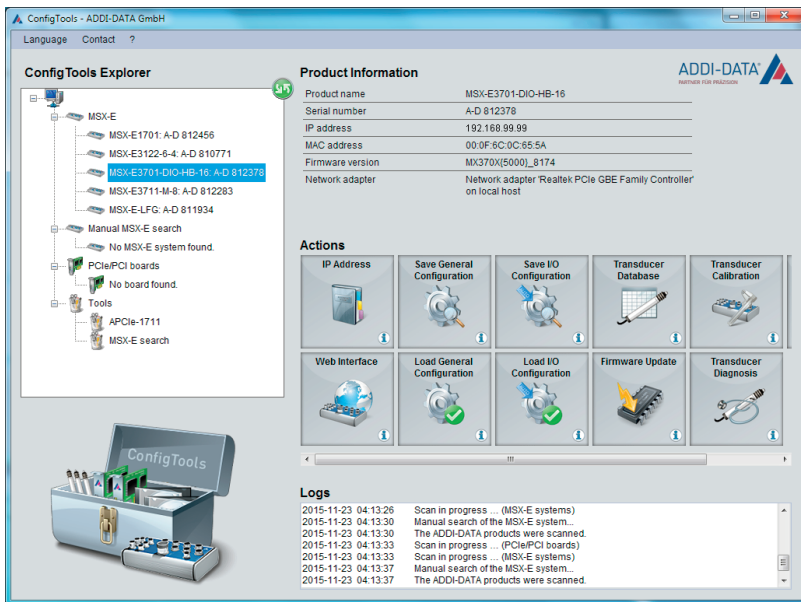
When you click on the name of one of these systems, corresponding product information such as IP address, MAC address and firmware version will be shown on the right side of the main window.
To scan the connected systems once again, for example after connecting another Ethernet system, you have to click on the green icon in the top right of the ConfigTools Explorer area.

Below the "Product Information" area, there are buttons that enable you to perform various actions and to access the web interface of your Ethernet system.
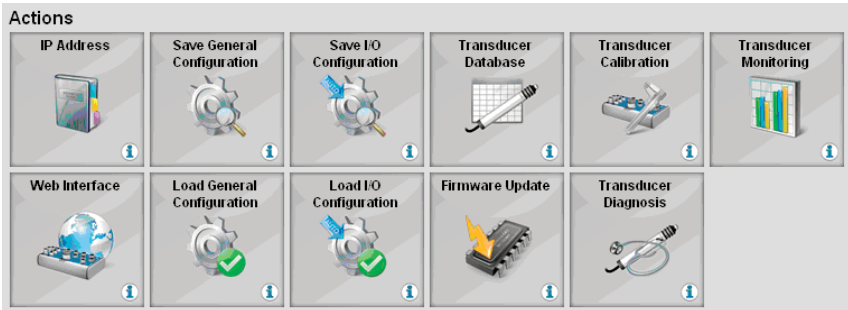
The following actions are possible:

- **IP Address:** Change the IP address of the Ethernet system in order to adapt it to your corporate network, for example.
- **Web Interface:** Access the web interface of your Ethernet system and change the configuration.
- **Save General Configuration:** Save the general configuration of the Ethernet system (including, for example, the network configuration), i.e. all the settings defined on the web interface apart from the I/O configuration.
- **Load General Configuration:** Load a file containing the general configuration of the Ethernet system.
- **Save I/O Configuration:** Save all function-specific settings defined on the web interface under "I/O Configuration".
- **Load I/O Configuration:** Load a function-specific configuration.
- **Transducer Database:** Edit the user's transducer database, that is, for example, change transducer features and add new transducers. The MSX-E database must contain the transducers that will be connected to the Ethernet in order for the system to detect them.
- **Firmware Update:** Update the firmware of the Ethernet system. The required firmware file is available on request. The file name corresponds to the firmware version.
- **Transducer Calibration:** Calibrate transducers connected to one or more channels.
- **Transducer Diagnosis:** Test transducers for errors (short-circuit, open load).
- **Transducer Monitoring:** Select the channels to be acquired and start the acquisition with monitoring. For each channel, each acquired value is immediately displayed in a diagram.

 NOTICE!
Depending on the Ethernet system, a different number of buttons and accordingly, different types of actions are available.

# Web interface: Quick access to the Ethernet system

From the web interface of your Ethernet system, you can access the system quickly and manage your functions conveniently without programming.

To open the web interface of your Ethernet system, proceed as follows:

- Open a web browser (such as Mozilla Firefox, Internet Explorer, etc.) and enter the following address: **http://IP address of the Ethernet system**.

A login window is displayed.

- Enter "mxadmin" as the user name <u>and</u> password.
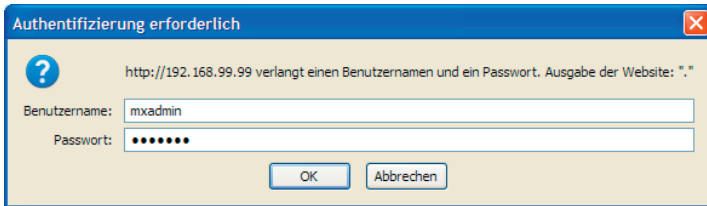
Do you have any questions?

Please find further information on our website:
www.addi-data.com.

Do not hesitate to call us or to send us an e-mail
(see front page for contact data).