JX6-SB / JX6-SB-I

Version Update

from V. 2.10 to V. 2.11

Jetter

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1   Introduction

Version Updates - Survey			
Version	**Function**	**upgraded**	**corrected**
V 2.11	*Expansion Modules* The JX6-SB(-I) submodule now supports the following expansions in the master-slave mode JX6-SB … - LJX7-CSL-108-ID16 - LJX7-CSL-109-ID16-NPN - LJX7-CSL-107-OD8-2A - LJX7-CSL-113-ID8-OD8 - LJX7-CSL-114-OD16 - Milan Drives	✓	
	Monitoring JX2-I/O Modules The behaviour of the JX6-SB(-I) submodule can be configured	✓	
	JX2-Dummy-Slaves There is no timeout, if JX2-dummy-slaves are applied	✓	
	FESTO CP-FB Modules Parallel mode with JX-SIO is possible	✓	
V 2.10	*JX6-SB Master-Slave Mode* This has been newly added; it is a special feature of this mode that its IO and register numbers match those of NANO, respectively JC-24X.	✓	
	Expansion Modules The JX6-SB(-I) submodule now supports the following expansions in the master-slave mode JX6-SB … - JX-SIO - Festo CPV-Direct - Festo CPX-Terminal Unit - SMC SI-Unit - Bürkert Valve Block - Lenze Frequency Converter	✓	
	Master-Master Mode A register for direct input of the latest register data number has been added now, 32-bit registers can be transferred	✓	

The operating system version 2.11 of the JX6-SB / JX6-SB-I submodule offers a great variety of new functions.

The full range of functions of operating system version V. 2.11 has been described in detail in the user information JX6-SB_bi_2112_user_information. The operating system update can be downloaded from the Website of Jetter AG www.jetter.de.

Important!

While the operating system is being updated, the voltage supply of the controller must must not be interrupted.

2   Expansions

2.1 LJX7-Compactbox Module with IP67

The system bus allows connection of Lumberg-Jetter brand compactbox modules. For information on how to connect Compactbox modules to the system bus, please refer to the corresponding user information.

LJX7-Compactbox Module with IP67

Technical Data of LJX7-Compactbox Modules	
Maximum number of LJX7-Compactbox modules with JX6-SB(-I) The maximum number of modules is limited by the maximum allowable I/O sum of the respective controller	10
Size of I/Os	16
Supported Compactbox modules	LJX7-CSL-108-ID16 16 digital inputs, IP67 LJX7-CSL-109-ID16-NPN 16 digital inputs (n), IP67 LJX7-CSL-107-OD8-2A 8 digital outputs 2A, IP67 LJX7-CSL-114-OD16 16 digital outputs, IP67

2.2 Milan Drives

The system bus of the JX6-SB-I submodule allows for connection of Milan Drives made by Werner Riester GmbH & Co. KG. For information on how to connect Milan Drives to the system bus, please refer to the corresponding user information.

Milan Drives

Technical Data of Milan Drives	
Maximum number of Milan Drives at the JX6-SB-I submodule	8
Size of I/Os	1 JX2-slave module
Supported Milan Drives	MI 1.5/075
	MI 2/090
	MI 4/110

2.3 Monitoring JX2-I/O Modules

The monitoring function of JX2-I/O modules can be freely configured and adjusted to the requirements of the specific controllers.

Register 3m0 2760:	Configuring the Timeout of JX2-I/O Modules
Function	**Description**
Read	Actual JX2-I/O timeout configuration
Write	New JX2-I/O timeout configuration
Value range	0 – 255
Value after reset	5

By means of configuring the JX2-I/O timeout, the maximum permitted number repeating an I/O upload to a JX2-IO module is set. The JX6-SB(-I) will not report a timeout error via status register 11m100, before the I/O update for a specific module has reached the configured value.

Register 3m0 2761:	Index to a JX2-I/O Timeout Monitoring Array
Function	**Description**
Read	Present index The index corresponds to the I/O module number
Write	New index
Value range	2 – 32, 70 – 79
Value after reset	2

Register 3m0 2762:	JX2-I/O Timeout Monitoring Array
Function	**Description**
Read	Actual value of the JX2-I/O timeout monitoring array Reg 3m0 2761 = 2 -> Reg 3m0 2762 : Entry for I/O module 2 Reg 3m0 2761 = 3 -> Reg 3m0 2762 : Entry for I/O module 3 Reg 3m0 2761 = 70 -> Reg 3m0 2762 : Entry for JX-SIO module 70
Write	By writing value zero into the register, the entry for the presently selected I/O module will be set to zero.
Value range	0 – 65535

Value after reset	0

If the JX6-SB(-I) submodule has not received a reply from a JX2-I/O or a JX-SIO module within the timeout time configured in register 3m0 2763, the value assigned to the module will be increased by one in the JX2-I/O timeout monitoring array.

By means of the JX2-I/O timeout monitoring array, the quality of the connection between the JX6-SB(-I) submodule and the individual expansion modules can be evaluated.

Register 3m0 2763: JX2-I/O Monitoring Timeout	
Function	**Description**
Read	Actual JX2-I/O monitoring timeout
Write	New JX2-I/O monitoring timeout
Value range	0 – 255
Value after reset	10

The maximum permitted time of the JX6-SB(-I) submodule waiting for a reply sent by the expansion module during I/O update can be configured via register 3m0 2763. Not before this time has expired, the entry assigned to te respective expansion module in the JX2-I/O timeout monitoring array will be incremented by one.

2.4 FESTO CP-FB Modules

Starting from version V. 2.11, Festo CP-FB modules connected to the sytem bus can be operated together with JX-SIO, Festo CPV-Direct, Festo CPX-Terminal and other third party modules The maximum allowable IO sum has still to be taken into account.
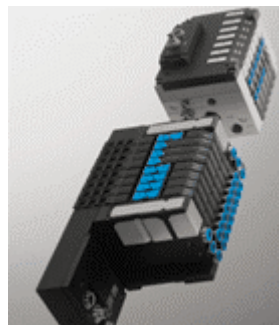
Note!

We recommend not to use Festo CP-FB modules for new developments. These modules should rather be replaced by Fest CPV-Direct or Festo CPX-Terminal modules. In contrast with CP-FB modules, they offer more functions, less complicated commissioning and installation.

3 Eliminated Software Bugs

3.1 Baud rate of the Festo CP-FB Modules

The baud rate for configurations, which only consist of Festo-CP-FB modules, can now be set to 500 kBaud or 250 kBaud again.
For this, please mind the setting of the baud rate at the Festo-CP-FB modules.