



SC Programming Board USB

6501.00096

6501.00097

MC Adapter Board USB

6501.00136

6501.00159

Instruction Manual

EN

Imprint

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from improper use of the devices.

The pertinent regulations regarding
safety engineering and interference suppression as well as
the specifications in this technical manual must be com-
plied with when using the equipment.

Subject to change without notice.

The respective current version of this technical manual is
available on FAULHABER's internet site:
www.faulhaber.com

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1 Important Information

This technical manual describes the installation, configuration and use of the Programming Boards 6501.00096, 6501.00097 (for SC) and the Adapter Boards 6501.00136 and 6501.00159 (for MC) from FAULHABER.

- Please read through the complete technical manual before using the boards.
- Keep this technical manual in a safe place for later use.
- FAULHABER is not liable for any data loss, damage or other problems which arise due to use of these boards.

Standard programming/adapter boards for configuration and changes of the operating modes.

- Board 6501.00096 is to be used for Speed Controller series SC2804.
- Board 6501.00097 is to be used for Speed Controller series SC1801.
- Board 6501.00136 is to be used for Motion Controller series MC3002 S/RS.
- Board 6501.00159 is to be used for Motion Control Systems 3242...BX4 Cx, 3268...BX4 Cx and 3564...B Cx.

1.1 Symbols used in this technical manual

NOTE



Note

This "Note" pictogram provides tips and recommendations for use and handling of the component.

2 Install Motion Manager 5 Software

Install the respective current version of the FAULHABER Motion Manager software onto your PC.
It can be downloaded from the FAULHABER internet site: www.faulhaber.com.

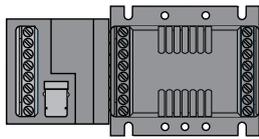
The appropriate USB driver which is needed to communicate with the chosen board is automatically installed on your PC with the Motion Manager setup or can alternatively be activated via program file "Motion Manager".

3 Connect the periphery

3.1 Hardware

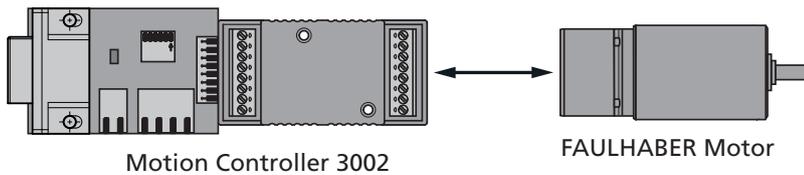
3.1.1 Speed Controller

Connect your Speed Controller to the multi-pin connector on the right side.



Speed Controller

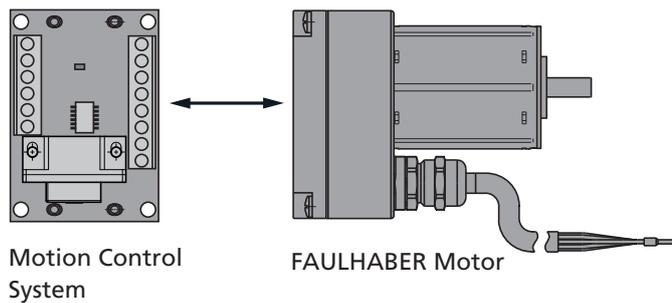
3.1.2 Motion Controller 3002



Motion Controller 3002

FAULHABER Motor

3.1.3 Motion Control Systems



Motion Control System

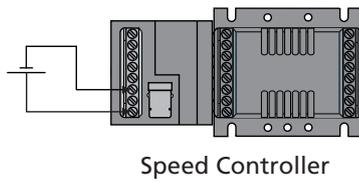
FAULHABER Motor

3 Connect the periphery

3.2 Power supply

3.2.1 Speed Controller

Connect the power supply to U_P and GND of the screwing terminal on the left side.

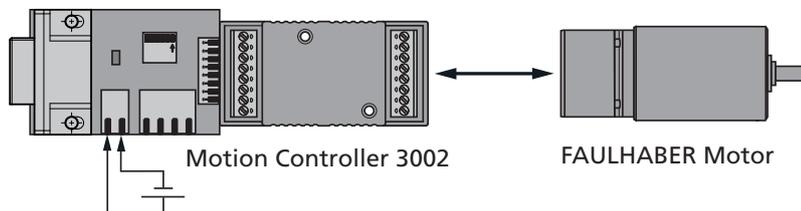


Note

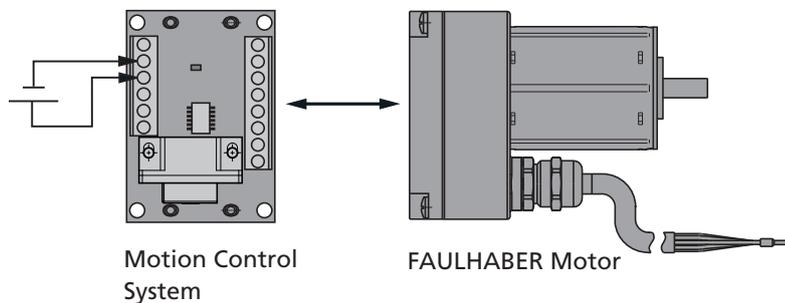


The programming board USB can also be connected directly between the application side and the speed controller.

3.2.2 Motion Controller 3002



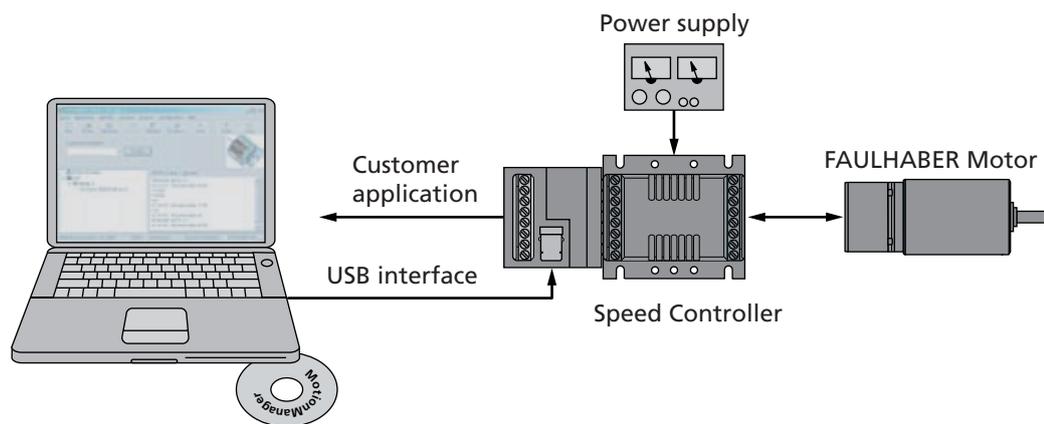
3.2.3 Motion Control Systems



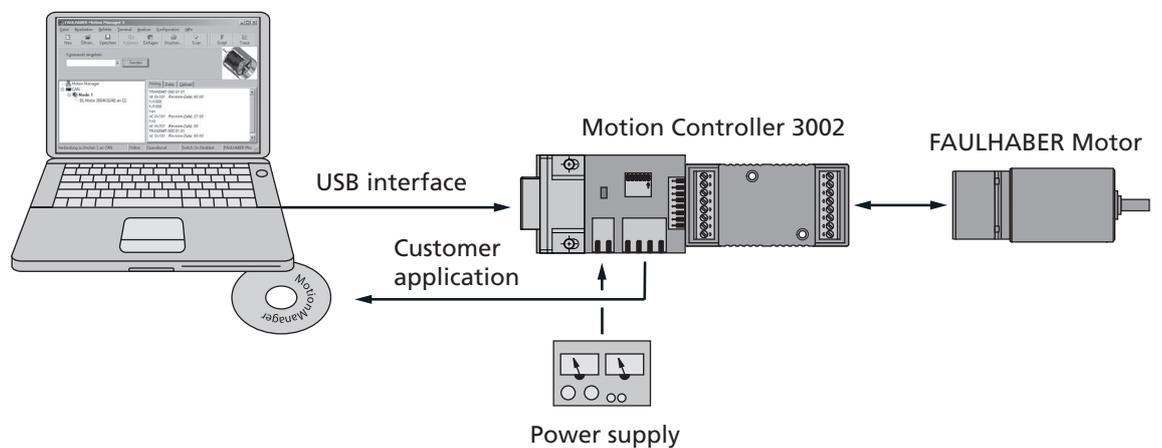
3 Connect the periphery

3.3 Overview

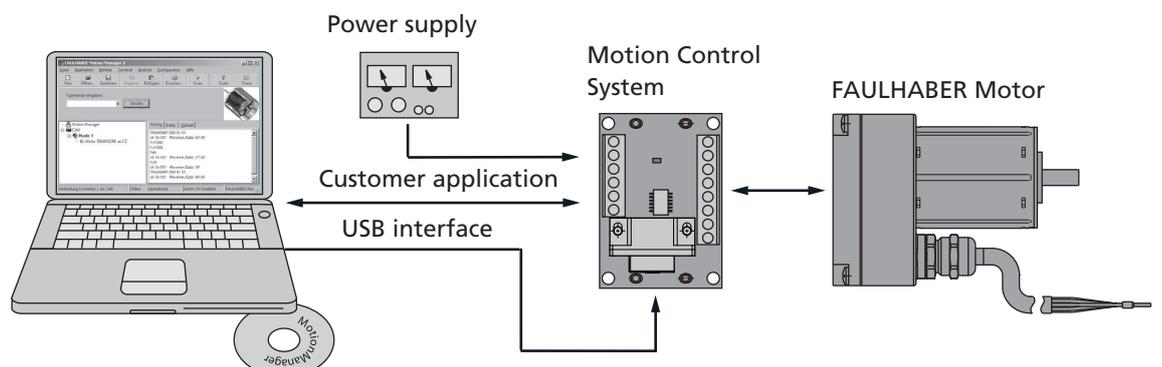
3.3.1 Speed Controller



3.3.2 Motion Controller 3002



3.3.3 Motion Control Systems



4 Establish Communication

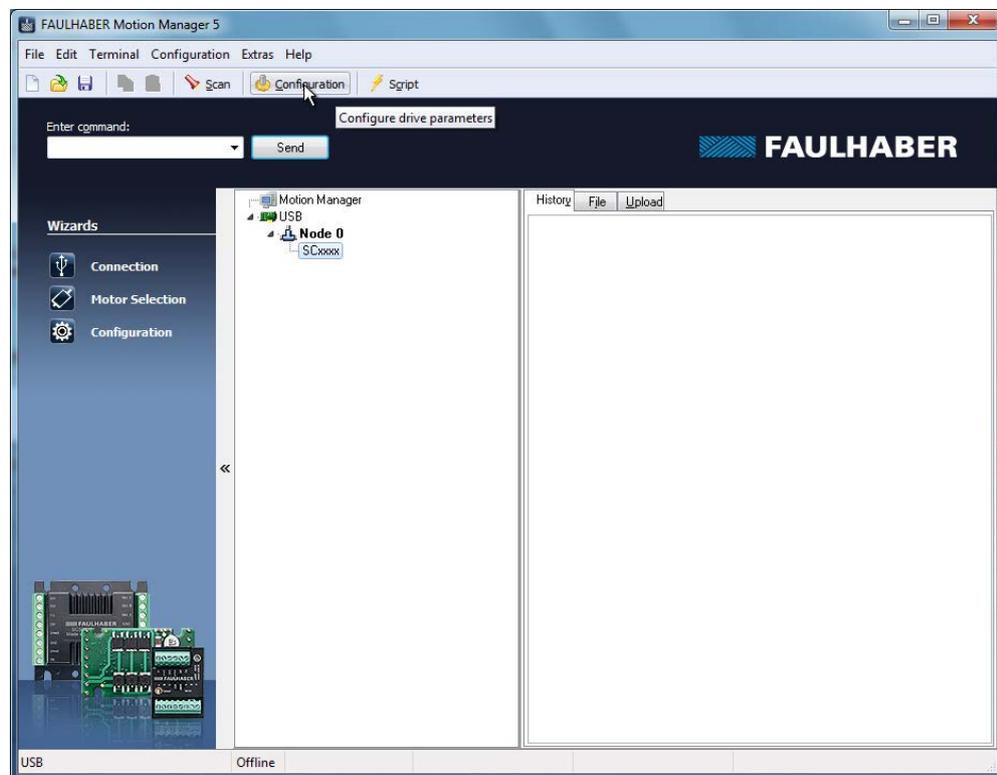
4.1 Speed Controller

Open the Motion Manager program and configure the software:

1. Choose the controller type "Speedcontroller" from the connection wizard and select the USB Port and the baud rate.

If the wizard doesn't appear, click the connection button on the wizard bar.

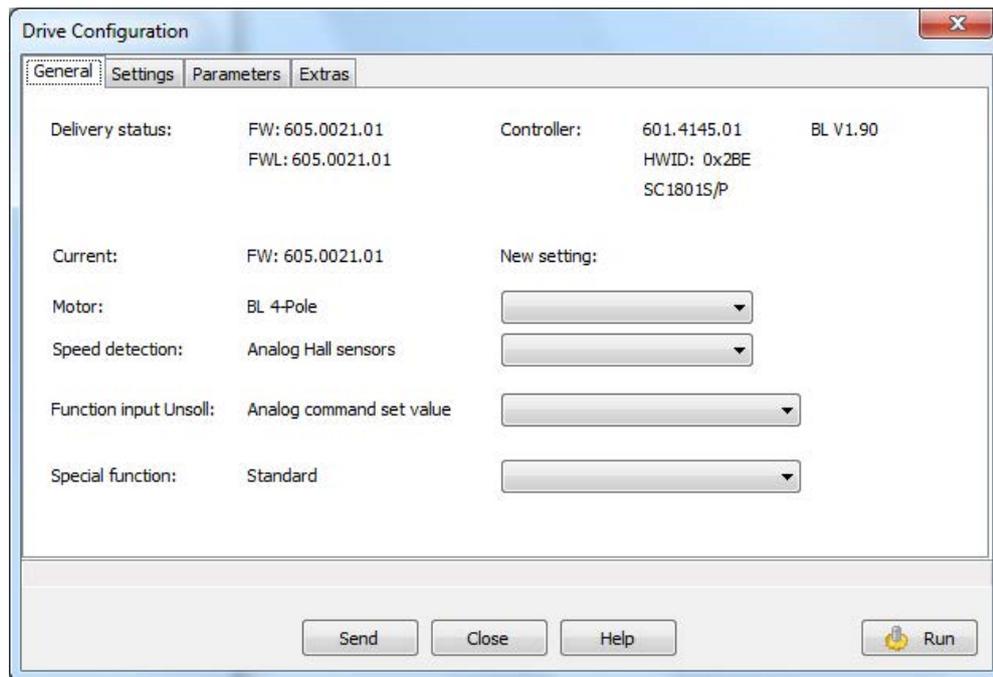
2. Click the "Configuration" button in the Motion Manager program.



4 Establish Communication

4.1 Speed Controller

3. Now settings and parameters can be configured.



The changes are transferred to the Speed Controller by using the button "Send". By using the button "Run" the communication to the PC is disconnected and the Speed Controller is activated.

The "Run" button changes to "Stop". By pressing this button again you'll return to config mode.

Note



For detailed descriptions of all parameters and settings see the technical manual of the Speed Controller.

4 Establish Communication

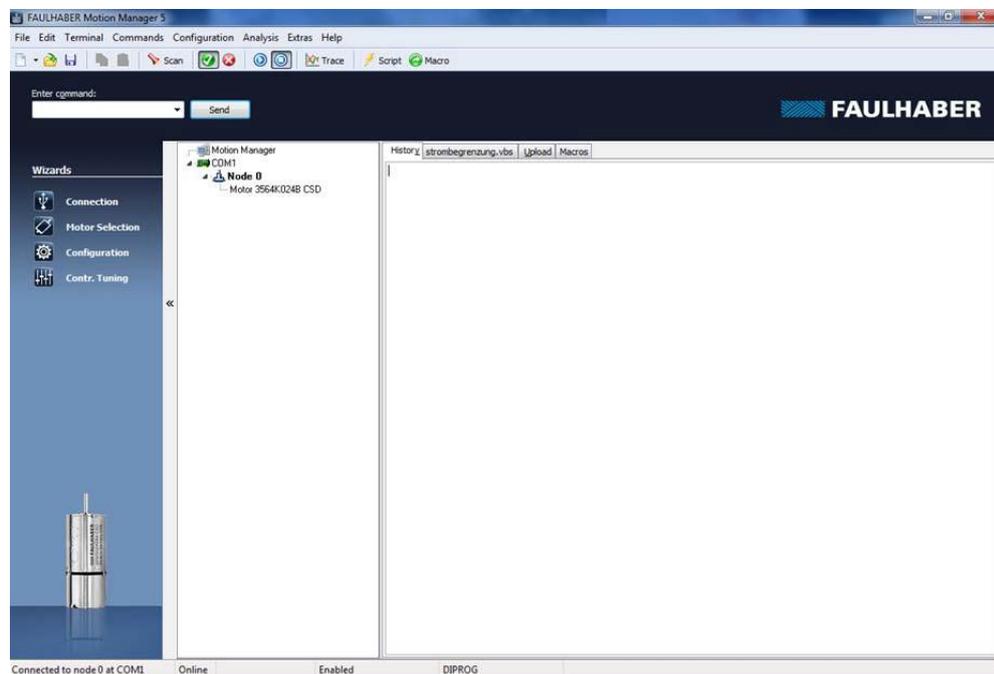
4.2 Motion Controller

Open the Motion Manager program and configure the software:

1. Choose the controller type "Motion Controller with RS232" from the connection wizard and select the USB Port and the baud rate. (9600 baud).

If the wizard doesn't appear, click the connection button on the wizard bar.

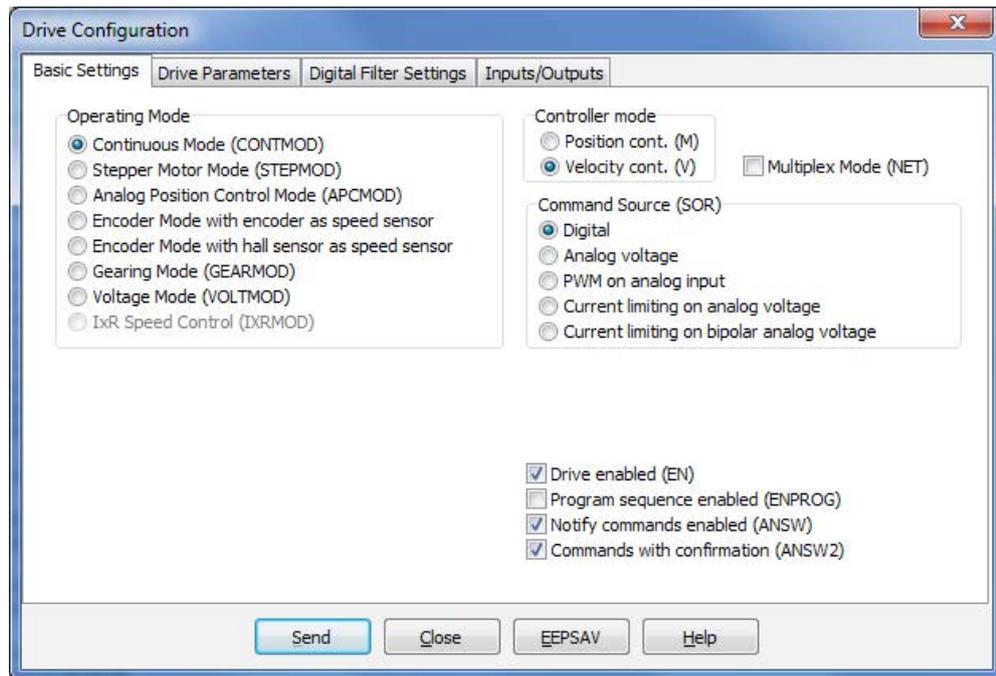
2. Click the "Configuration" button in the Motion Manager program.



4 Establish Communication

4.2 Motion Controller

3. Now settings and parameters can be changed over the “Configuration” button.



Note



For detailed descriptions of all parameters and settings see the technical manual of the Motion Controller.

5 Installing the USB Driver

5.1 System Requirements for SC/MC

- PC running Microsoft Windows XP, Vista, 7 or 8.
- A free USB 1.1 or 2.0 connector.
- 10 MB hard disk space.

The driver "FAULHABER USB Adapter" is used to operate the programming board via the USB interface.

This driver is included in the setup package of FAULHABER Motion Manager.

5.2 Setup instructions

5.2.1 Speed Controller

1. Connect the programming board with a standard USB cable type B to the PC.
2. Connect the power supply to U_P and GND.

Note



The maximum voltage of U_P depends on the speed controller, the minimum voltage is 5 V.

3. A new hardware will be found.
4. The Motion Manager is now useable together with the programming board.

5.2.2 Motion Controller

1. Connect the adapter board with a standard mini USB cable to the PC.
2. Connect the power supply to 24 Volt and GND.
3. A new hardware will be found.
4. The Motion Manager is now useable together with the adapter board.

6 EC Product Safety Directives

REGULATION! The following EC Product Safety Directives are important for users of the described products:



Machinery Directive (2006/42/EC):

Due to their small size, small standard electrical drives cannot cause any noteworthy risk of injuries to people.

Therefore, the Machinery Directive does not apply to our products.

The products described here are not “part machines” or “incomplete machines”.

Therefore, Faulhaber does not provide a standard Declaration of Incorporation.

Low-Voltage Directive (2006/95/EC):

It applies to all electrical equipment with a nominal voltage from 75 to 1 500 V DC, or from 50 to 1 000 V AC. The products described in this technical manual do not fall within the scope of this Directive as they are designed for smaller voltages.

EMC Directive (2014/30/EU):

The Electromagnetic Compatibility (EMC) Directive applies to all electronic and electrical equipment, plant and systems sold to end users (consumers). In addition, CE marking can be undertaken for built-in components according to the EMC Directive. Compliance is documented by the Declaration of Conformity.

7 Warranty

Note

Dr. Fritz Faulhaber GmbH & Co. KG products are produced to state of the art production methods and are subject to strict quality control.

All sales and deliveries made exclusively on the basis of our general Terms and Conditions of Business. These are available to view and download on the FAULHABER homepage at www.faulhaber.com/agb.

