Installation and operating instructions

Joystick III

Company details

Document	Installation and operating instructions
	Product: Joystick III
	Document number: 3032258305-02-EN
	As of software version: 7.03
	Original instructions
	Original language: German

Table of contents

1   Product description

Joystick III

(1)	Eight buttons	(4)	Numbering of the buttons
(2)	LED	(5)	Side-mounted switch
(3)	Rating plate [→ 12]		

The joystick is an ancillary operating device which can rapidly access the functions of an ISOBUS job computer.

The joystick is fitted with eight buttons and a single side-mounted switch, which enables switching between three levels. This enables the actuation of a total of 24 functions on the ISOBUS job computer. The current level is indicated by an LED.

The joystick can be used to operate ISOBUS job computers which support the Auxiliary ME or Auxiliary 2 protocols. Find out more about the protocol which you should choose here: [→ 7]

2 Assembly instructions

The joystick is available in three versions:

- With Sub-D connector (item no.: 3032258305)

    - Variant for vehicles with additionally installed ISOBUS basic vehicle harness from Müller-Elektronik.

- With CPC connector (item no.: 3032258606)

    - Variant for vehicles with integrated ISOBUS in-cab-connector.

- With CPC connector and CPC socket (item no.: 3032258106)

    - Variant for vehicles with integrated ISOBUS in-cab-connector and a CPC-Sub-D adapter cable between terminal and joystick.

2.1 Fitting a joystick with a Sub-D connector
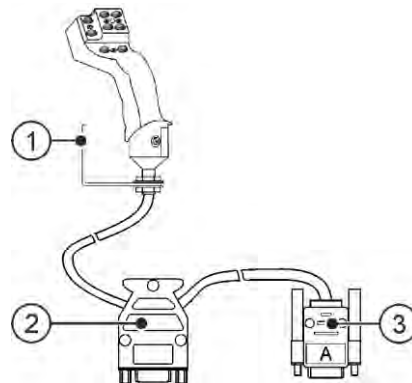
①	Angle brackets For attachment in the cabin	③	Connector for connection to the terminal
②	Socket for connection to the basic vehicle harness		

Procedure

You fit the joystick as follows:

1. Fit the joystick next to the driver on the right.

2. Plug the connector of the basic vehicle harness into the joystick socket.

3. Connect connector A of the joystick to the CAN bus socket of the terminal. For the majority of terminals from Müller-Elektronik this is going to be the A socket.
    ⇨ The joystick now connects the basic vehicle harness with the terminal.

⇨ When the terminal is switched on, the LED on the joystick lights up.
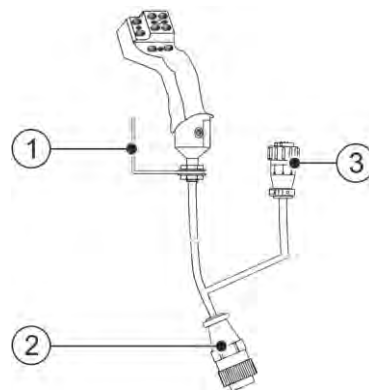
2.2 Fitting a joystick with a CPC connector
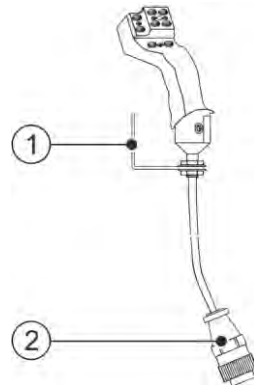
①	Angle brackets For attachment in the cabin	②	Connector for connection to the vehicle's ISOBUS In-Cab-Connector

Procedure

You fit the joystick as follows:

1. Fit the joystick next to the driver on the right.

2. Plug the connector into the ISOBUS in-cab-connector of your vehicle.
   ⇨ The joystick is now connected to your vehicle.

⇨ When the vehicle is switched on, the LED on the joystick lights up.

## 2.3 Fitting a joystick with a CPC connector and a CPC socket

①	Angle brackets For attachment in the cabin	③	Socket for connection to the CPC-Sub-D adapter cable.
②	Connector for connection to the vehicle's ISOBUS In-Cab-Connector		

Procedure

You fit the joystick as follows:

1. Fit the joystick next to the driver on the right.

2. Plug the connector into the ISOBUS in-cab-connector of your vehicle.

3. Connect the CPC socket to a CPC connector to connect the joystick to a terminal using an adapter cable.
   ⇨ The joystick now connects the vehicle with the terminal.

⇨ When the terminal is switched on, the LED on the joystick lights up.

3 Configuring the joystick
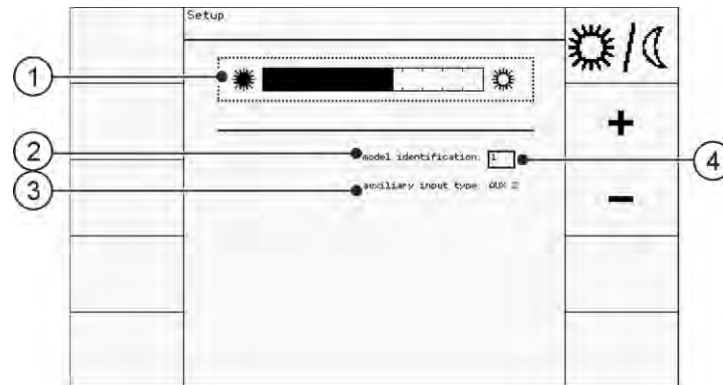
①	Brightness for day or night mode: Day mode	③	Selected auxiliary protocol
②	Selected joystick number	④	Cursor

Function icon	Meaning
☼ / ☾	Switches between day and night mode
+	Increase brightness
−	Reduce brightness

When configuring the joystick, you can make the following settings:
- Change the LED brightness in day and night mode.
- If you use several joysticks, select the joystick number.

  - The default value is "1". When using multiple joysticks, you must number these sequentially.

- Select the Auxiliary protocol.

  - "AUX1" (AUX ME)

    Select this protocol when your ISOBUS job computer and your terminal support Auxiliary ME. You can then assign functions to the joystick.

    OR

    Select this protocol if you use an ME sprayer or a SECTION-Control BOX.

  - "AUX2"

    Select this protocol when your ISOBUS job computer and your terminal support Auxiliary 2. You can then assign functions to the joystick.

    If you don't know which protocol your system supports, you can test this by selecting protocol "AUX2". If you can then assign [→ 9] functions for the ISOBUS job computer to the joystick, your system supports Auxiliary 2. Otherwise, select protocol "AUX1" (AUX ME).

Procedure

To configure the joystick:

☑ The terminal is switched off.

1. Hold button 2 on your joystick pressed down. You can recognize button 2 from its white surround.

2. Start the terminal.

3. Release button 2 after approx. 5 seconds.

4. - Open the Joystick application.

5. Configure the joystick.

6. Restart the terminal.

4 Operation

4.1 Executing functions

Each button on the joystick can be assigned three functions. The position of the side-mounted switch determines the function which is performed when the button is pressed:

Position of the switch	Color of the LED
	Red
	Yellow
	Green

Procedure

To operate the joystick:

1. Move the side-mounted switch to the desired position and hold it securely.
   ⇨ The LED is lit in the appropriate color.

2. Press the button with the desired function.
   ⇨ The function will be activated.

3. Release the side-mounted switch and the button to exit the function.

4.2 Changing the brightness of the LED

You can adjust the LED brightness to the daytime while working. You can choose from a day mode and night mode.

Procedure

To change the brightness of the LED:

1. Switch rapidly the side-mounted switch from its up position to the down position, or vice-versa.

⇨ The LED mode will change.

4.3 Assigning functions

You assign ISOBUS job computer functions using the terminal. You can read how to do this in the operating instructions for the terminal.

4.4 Viewing functions

To view the functions which are assigned to the joystick:

☑ You have selected the appropriate protocol when configuring the joystick. [➙ 7]

☑ Your ISOBUS job computer is connected to the vehicle's ISOBUS in-cab-connector.

☑ You have assigned functions to the joystick. [➙ 9]

1. Start the terminal.

2. Open the selection menu.

3. - Open the Joystick application.

⇨ The following screen appears:
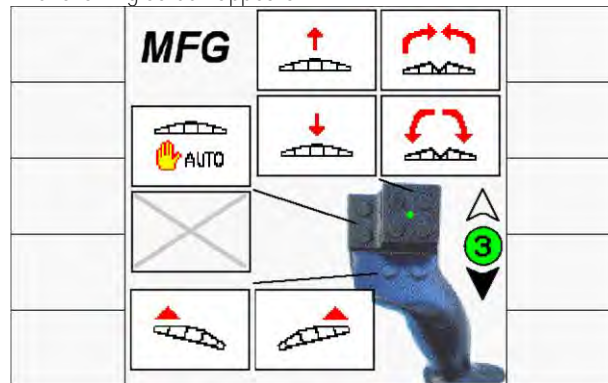
⇨ You can then see which joystick button has been assigned to an ISOBUS job computer function. The current level is shown on the right of the screen.

5   Technical specifications
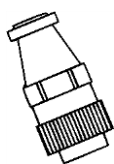
5.1   Technical specifications of the joystick

Parameters	Value
Operating voltage	10.5 V to 16V DC
Temperature range	-20°C to +70°C
Current consumption	40 mA
Protection rating	IP20

5.2   Sub-D connector pin assignment
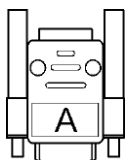
Pin no.	Signal	Pin no.	Signal
1	CAN_L_out	6	GND_E
2	CAN_L_in	7	CAN_H_in
3	CAN_GND	8	CAN_EN_out
4	CAN_H_out	9	+12 VE
5	CAN_EN_in		

5.3   CPC connector pin assignment

Pin no.	Signal	Pin no.	Signal	Pin no.	Signal
1	12 VE	4	CAN_H	7	12 VE
2	CAN_L	5	CAN_H	8	
3	CAN_L	6		9	0 VE

5.4   Disposal

When it has reached the end of its service life, please dispose of this product as electronic scrap in accordance with all applicable waste management laws.

5.5   Information on the rating plate

The nameplate is located on the underside of the joystick.

Abbreviations on the rating plate

Abbreviation	Meaning
K.-Nr.:	Customer number
	If the product was manufactured for an agricultural machinery manufacturer, the agricultural machinery manufacturer's item number will be shown here.
HW:	Hardware version
ME-NR:	Müller-Elektronik item number
DC:	Operating voltage
	The product may only be connected to voltages within this range.
SW:	Software version upon delivery
SN:	Serial number

6   EU declaration of conformity

Herewith we declare that the design and construction of this product and its identical variants, as well as the form brought onto the market by us, is in accordance with the relevant safety and health requirements of the EU Directive of Electromagnetic Compatibility 2014/30/EU. If alterations are made to the product without prior consultations with us, this declaration becomes invalid.

Harmonised standards applied:	EN ISO 14982:2009
	(EMC Directive 2014/30/EU)