

**Connection Cable VK-16
Art. No. 0091-0016**

MANUAL



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SAFETY INSTRUCTIONS

This manual contains notices which you should observe to ensure your own personal safety, as well as to protect the product and the connected equipment. These notices are highlighted in the manual by a warning symbol and are marked as follows according to the level of danger:



Only qualified personnel should be allowed to install and work on this equipment. Qualified persons are defined as persons who are authorized to commission, to ground and to tag circuits, equipment and systems in accordance with established safety practices and standards.



Turn off the power supply before performing any wiring operations! Short circuits can be harmful, critical and can cause explosions and serious burns!



Please read this manual carefully and observe all safety instructions!

DESTINATED USE

The Connection Cable VK-16 is designed for universal measuring, controlling and regulating applications in combination with BARTH[®] Mini-PLCs. It must not be used for life critical, medical or fail safe applications.

Supported BARTH[®] Mini-PLCs:

STG-32
STG-85
STG-550
STG-570
STG-580
STG-606
STG-650
STG-680
STG-700
STG-800
STG-810
STG-820
WCU-650

DISCLAIMER

BARTH Elektronik GmbH assumes no liability for usage and functionality of the VK-16 in case of disregarding this manual. The strict accordance of this manual is important since the installation methods, peripheral connections, usage and maintenance can not be controlled by BARTH Elektronik GmbH. Therefore BARTH Elektronik GmbH assumes no liability for any claim.

1 Product description

The picture below shows the BARTH[®] Connection Cable VK-16 (Art. No. 0019-0016).



1.1 Features

- Communicating via TTL-232/USB
- Mandatory for miCon-L Communication
- Internal molded FTDI Converter
- Length: 1.5m
- Color: black

1.2 Applications

- BARTH[®] Mini-PLCs

1.3 General description

The VK-16 Connection Cable is mandatory to ensure communication between a BARTH[®] Mini-PLC and the miCon-L Software Suite.

1.4 Delivery content

- BARTH[®] Connection Cable VK-16
- miCon-L Software Suite (Download)
- Virtual COM Port Driver (Download)
- Open Source Templates (Download)
- Manual and Sample Programs (Download)

2 Connecting a BARTH® Mini-PLC

To operate a BARTH® Mini-PLC with the miCon-L Software Suite, please first download the FTDI virtual COM Port Driver which is part of the miCon-L Software package.

<http://www.miCon-L.de>

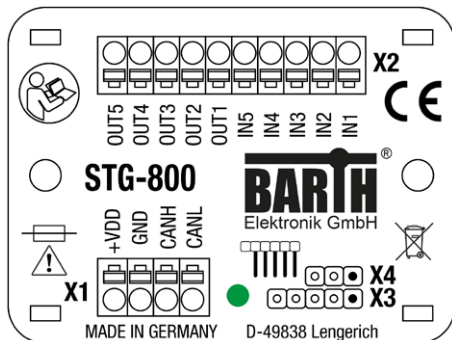
Please follow the setup instructions. For proper operation a PC with installed Windows operating system and installed miCon-L Software are mandatory. For Mini-PLC connection please use the 3-way X4 terminal.



The Mini-PLC must be installed and wired by a trained technician who knows and complies with both the universally applicable engineering rules and the regulations and standards that apply in specific cases.

X4 connector: TTL232 interface (via VK-16)

1	GND	ground terminal
2	TX	3V3/5V TTL TX terminal
3	RX	3V3/5V TTL RX terminal



3 Appendix

3.1 Specifications

3.1.1 General

Hardware design	USB/TTL232 connection cable with molded FTDI chip.
Interface	UART TTL232 (3.3V/5V TTL level) config: 8N1, 2400 to 115.2 kbit/s

3.1.2 Environmental conditions

Operation temperature	-20 to +60 °C (IEC 60068-2-1/2)
Storage temperature	-30 to +60 °C (IEC 60068-2-1/2)
Relative humidity	5 to 95% n-c (IEC 60068-2-30)
Air pressure (in operation)	500 to 1500 hPa
Shock resistance	min. 100 m/s ² (IEC 60068-2-27)
Vibration resistance	min. 50 m/s ² @ 10..100 Hz (IEC 60068-2-6)
Degree of protection	IP 00 (EN 50178, IEC 60529)
Drop height	1000 mm (IEC 60068-2-31)
Free fall (packaged)	1500 mm (IEC 60068-2-32)

3.1.3 Weight and dimensions

Weight	80 g
Lenght	1.5 m

3.1.4 Ordering information

Ordering information	Connection Cable VK-16 Art. No. 0091-0016 GTIN 4251329400187
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3.2 Documents, videos and software

Detailed information, additional documents, application notes and videos relating to this product are downloadable from www.barth-elektronik.de and www.micon-l.de

3.3 Disposal



If you wish to finally dispose of the product, ask your local recycling centre or dealer for details about how to do this in accordance with the applicable disposal regulations.

3.4 Conformity declaration

For the following designated product it is hereby confirmed, that the construction in that technical design brought by us in traffic corresponds to the standards specified below. In the event of any alternation which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

Description	Connection Cable
Type	VK-16
Art. No.	0091-0016
Directive 2004/108/EG relating to electromagnetic compatibility (EMC)	Applied norms: 2004/108/EG 2004/108/EC 2014/30/EU
CE	
RoHS Directive 2011/65EU	We herby declare that our product is compliant to the RoHS Directive on restriction of the use of certain hazardous substances in electrical and electronic appliances.

BARTH® Elektronik GmbH
Lengerich, 03.10.2016

D. Barth

Dipl.-Ing. (FH) D. Barth
Managing Director