



### Warning

This manual is part of the product.



Please read carefully before the installation or the application of the product.

Note all safety warning, caution marks incl. all warning labels placed at the equipment.

Make sure that the warning labels are kept in good condition and replace missing or damaged labels.

### For further Information:

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#### **Definitions and Meanings**

For all different safety instructions special symbols are used in this manual.

Follow all hints and warnings to avoid any injury or material damage. The user of the device is fully responsible.



#### WARNING!

"Warning" indicates that death, severe personal injury or extensive property damage can result if proper precautions are not taken.



#### **DANGER!**

"Danger" indicates an immediate risk of electric shock which will result in death, injury or serious damage if the applicable safety regulations are not followed



#### HINT!

The symbol refers to a possible hazardous situation that could cause material or environmental damage.



Recommendation and Useful information for an efficient and Failure-free operation

#### Qualified personal only

Only **qualified person(s)** must operate with the present device. This qualified personal must be familiar to these types of products and associated with danger and risks, authorized to install, mount, commission and use these types of product.

#### **Intended Use**

Use this device only in the manner intended by the manufacturer, according to the manual and only in combination with the described products only.

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### 1 Overview

All devices of brand **vbk.**cmd are battery-operated, electric handhelds to control special devices with RS485-based interfaces (i.e. EC-Drives from different brands).

### 2 General Description

A clear and simple menu guide has been realised bilingual (English/German). The amber lighted full graphic display is designed for comfortable use at all lighting conditions. The Mini-USB-link can be used for Battery charge as well as a data interface. A 5V-Power supply with a wide selection of variable, removable adapters that fit numerous different AC outlet sockets. The flexible design offers possibilities for a customized OEM-solution in front design and software.





### 3 Technical Properties

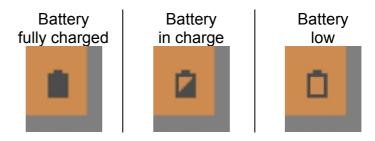
Voltage Supply

### 3.1 General Properties of the Device

USB-interface, incl. 5V power supply

Rechargeable Li-Ion battery; 3,7V – 2300mAh

automatic charge state detection incl. safety switch off



Use Handheld for inside application, protection grade IP20 (acc. EN 60529)

Temperature 0°C ... 40°C

ambient temperature at stock and usage

Display Amber coloured full graphic display

Access easy access push encoder (IGR)

Time base Real-time-clock

3.2 Inputs and Outputs

I/Os RS485 - Fieldbus USB-Interface



**Fieldbus** 

Phoenix Contact IC 2,5/3



 $GND \Rightarrow$   $RSA (D1) \Rightarrow$   $RSB (D0) \Rightarrow$ 



USB-Interface Mini USB Typ B for battery charge and as data link



3.3 Interface – General Information

Hardware Structure according RS485 Specification

(Half duplex – 1/8 Load up to 256 points – max. 400m

wiring length)

Characteristic Baud rate: 9600, 19200, 38400, 57600

Parity: none, even, odd

Stop bits: 1, 2

### 4 Menu Structure

### 4.1 Software

Scan Line Network scan to find all connected devices with the

chosen protocol

Single Monitor Cyclic scan of single device and monitoring of

requested data

Single Control Control Parameterizing of a single addressable

device with feedback

Broadcast Control / Parameterizing of all connected devices

without feedback (broadcast)

Datalog Log-function for single device and save in the external

flash

### 4.2 Menustructure - Basisvariation

Main level	Sublevel 1	description
Properties	<u></u>	Back to main level
	Change Language	English / Deutsch
	Set Clock	date – rime
	Timeout Light	Time to switch off display lighting
	Update Firmware	Service feature (coded)
Software variation		→ (Software) Appendix
Power Off	-	Switch off device

### 5 Technical Data

Operation Voltage Li-lon 3,7V – 2300mAh

**USB** Interface

Protection Level IP20 (acc. EN 60529)

Temperature 0°C ... 40°C

Storage and Operating

Display Single colour full graphic display with background

lighting

Access easy access push encoder (IGR)

Dimensions in mm



Weight 350g

Accessory (included) 5V-Power supply with a wide selection of variable, removable adapters that fit numerous different AC

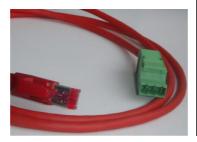
outlet sockets.



Accessory (on demand)

Data cable, 1,50m

Phoenix Contact → RJ45



USB Data cable, 1,80m USB-A → mini-USB-B





### 6 Additionnel Hints

### 6.1 Manufacturing

All devices of **vbk.**cmd series are manufactured according

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

### 6.2 Packing and Shipping

The shipping is realised inclusive power supply in fitting individual packings.

Individual packing, incl. power supply

Accessory on demand

- Data cables



For Export vbk.cmd is categorized to the following HS code

### 85176200

Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks)

All claims for damage must be reported immediately.

### 6.3 Service

Technical queries about **vbk**.cmd under:

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### 7 Notices

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