

## Digital Counter - VEK CN1-1



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Stand: 07.12.11 as/ws  
BES\_CN1-1\_2011\_12\_07\_GB.doc

**FEIG**  
ELECTRONIC

## Note

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*This edition replaces all earlier editions of the document.*

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*Since errors can never be completely precluded in spite of all our efforts, we are always grateful for corrections and suggestions.*

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***Please read these operation instructions prior to install the equipment!***



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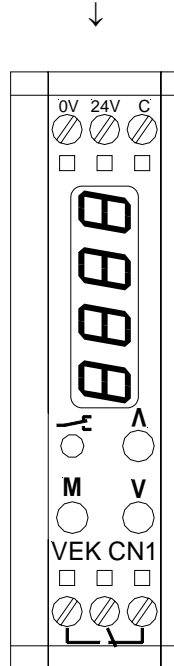
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# 1 Functional Description

## 1.1 General

6-pin plug: 4 Counting Inputs, Reset Input, Common



The digital counter VEK CN1 is designed to control small medium car-parks. Four counting inputs are used to accept outputs from loop detectors and/or traffic gate controllers. The counting inputs increment or decrement the counter and is displayed on the 4-digit display. The output relay is used to turn on/off traffic signs or lot full signs. Available open space counter and counter hysteresis are adjustable. The output relay can be used to directly control a traffic light or a lot full sign.

### Characteristics

- Especially developed for small to medium car-parks
- Vehicle counter and open space counter
- 4-digit display
- Totalize counter -999 ... 9999
- 4 universal inputs with noise suppression
- Inputs function individually adjustable for increment, decrement or reset
- 1 reset input
- 1 relay output 150V, 5A for traffic lights and lot full signs (or others)
- Output function is adjustable for automatic, permanent free, permanent occupied
- Relay is adjustable to normally open or normally closed mode
- LED to display relay status
- 4 independent input counter up to 9,999,999 for statistical use independently displayed
- Available open space counter and counter hysteresis are adjustable
- Upper and lower counter threshold is adjustable
- 3 push buttons for user interface
- Power Supply 12..24 V DC/AC
- No loss of current data storage in case of power failure
- Display of temporary power failure
- Compact plastic housing 0.88 " (22,5 mm) x 3.15 " (80 mm) x 3.35 " (85 mm), with DIN-Rail mounting

## 1.2 Operating Modes

The counting unit can be operated in mode "Open Space Counting" or in mode „Passing Vehicle Counting“. The choice of operating mode occurs with set up the switching threshold. (see 2.4.1 Operating Modes switching )

Operating Mode	set to switching threshold $S_{oc}$	Output relay switches	
		at counter reading	on output state
Open Space Counting	0	$\leq 0$	used
		$\geq HYS$	free
Passing vehicle Counting	Requested value	$\geq S_{oc}$	used
		$\leq (S_{oc} - HYS)$	free

$S_{oc}$  = adjusted switching Threshold (switch occupied)

hys = adjusted Counter Hysteresis (see 2.4.2 Counter Hysteresis)

### 1.2.1 Operating Mode "OPEN SPACE COUNTING"

The "OPEN SPACE COUNTING" is preferably used when the counting reading of the parking spaces is done when the car-park is full so less open spaces has to be counted. Vehicles leaving the car-park will increment the counter (Input 1) and vehicles entering the facility will decrement the counter (Input 2). The counter will activate the output relay whenever the open space counter is equal or less than "0". The output relay will be released as soon the counter reached the adjusted counter hysteresis.

### 1.2.2 Operating Mode "PASSING VEHICLE COUNTING"

The "PASSING VEHICLE COUNTING" is preferably used when the counter reading of the parking spaces is done when the car-park is empty so less occupied parking spaces must be counted. Vehicles entering the car-park will increment the counter (input 1) and vehicles leaving the facility will decrement the counter (input 2). The counter will activate the output relay whenever the vehicle counter reaches or is higher than the adjusted maximum. The output relay will be released as soon the counter reaches or is lower than the adjusted lower counter hysteresis.

## 1.3 Pulse Inputs

The switching status of inputs is in normal operating mode displayed with four decimal points on the display. The function of Inputs can be independent set on:

- *increment*
- *decrement*
- *reset counter* or
- *no function*

(see 2.4.3 Counter Level). Factory setting for input 1 and 3 is set to *increment* and for input 2 and 4 set to *decrement*.

The inputs are interference-suppressed against switch bounces. Input pulses are counted separately of adjusted function until 9.999.999. Each input pulse counter can be set up and reset separately. (see 2.3.4 Display and Counter Reset).

## 1.4 Reset Input

With the Reset Input the counter reading can be reset to 0. The relay output will be adequate to the preferences set on *free* or *used*. The adjustment parameters and the input pulse counter will not be changed. Is the output state manually set on *free* or *used* (see 2.3.3 Set Relay Output manually to "Free" or "Occupied") so the relay will stay in this state.

## 1.5 Relay Output

The relay output signals „Free Parking Area“ or “Used Parking Area”. The relay changeover contact can directly control a traffic light. The method of operating for the relay can be set on load current principle or rest current principle (see 2.4.5 Output settings). The LED displays the status of the relay.

Output Status	Relay Operating Principle	Relay	LED
Free	Load Current Principle	energized	Off
Used	Load Current Principle	de-energized	On
Free	Rest Current Principle	de-energized	On
Used	Rest Current Principle	energized	Off

If the operating of the output isn't used, the output state can be manually set on „always free“ or „always used“ (see 2.3.3 Set Relay Output manually to “Free” or “Occupied”).

## 1.6 State Storage during Voltage Breakdown

During voltage breakdowns the setting values and the counter states remain unchanged. After the voltage returns the counter works on normally. A flashing display shows the counter state must be checked and maybe fixed (see 2.3.1 Power Failure).

## 2 Display and Setup




### 2.1 Display during normal operation

In normal operating mode you can have the display show either how many vehicles entered the car-park or how many open spaces are left (see 1.4.1 Operating Mode/Switching point). The relay status is displayed with the LED. Input states are indicated with the 4 dots in the display. Special states of the counting unit are shown directly.

Display	State
Number, for example 1234	Normal operation, Current counter
Number, all 4 numbers flashing	temporary voltage breakdown occurred
Number / □ □ □ □ , alternating	Current counter, Output manually set to "occupied".
Number / F r E E , alternating	Current counter, Output manually set to "free".
□ □ □ □	Reset Input active (optional)
Dots	Input Status, left to right 1,2,3,4
LED on/off	Output relay status: activated = on/deactivated = off
Display off, if unit was idle for 30 s	Power save mode

### 2.2 User Interface Buttons






The VEK CN1 digital counter is adjusted with three user interface buttons located on top of the unit. The display shows the current menu and state of the setup. The buttons have following functionality:

Button	Function
 Short	Next Menu, next digit, Cancel settings.
(Mode) Long	Activate System menu, Save changes, exit menu.
 Short	Display value, increment + 1
(Up) Long	Display value, fast increment
 Short	Display value , decrement – 1
(Down) Long	Display value, fast decrement
Two simultaneously	Cancel changes, back to operating mode.




The menu navigation is divided in a base menu and a system menu. During setup the flashing display signalsizes that the settings aren't saved yet. If the unit was idle for 30 s the unit goes back to normal operating mode without saving changes.

### 2.3 Base Menu

The base menu contains all settings for the different operating modes. The existing counts can be displayed, modified and reset the original stage. The relay output can be manually set to "FREE" or "OCCUPIED"

Display	Menu	Setting
1234	Normal Operation, Current Counter	
□ □ □ □	Relay output manually	 Short → next, next menu item
[ n ] 1	Input 1	
[ n ] 2	Input 2	Two buttons simultaneously or
[ n ] 3	Input 3	 long → <b>End</b> =back normal operation
[ n ] 4	Input 4	
r E 5	Reset all Counter	 or  →change  long →save

#### 2.3.1 Power Failure

Display	Status	Setting
1234 (flashing)	Return after power failure	 or  → update open space counter  →confirm existing counter

### 2.3.2 Modify/Correct Counter

Display	State	Settings
1234	Normal Operation	<input type="checkbox"/> or <input type="checkbox"/> → First digit flashing → modify counter
1234 one digit flashing	Modify Counter	<input type="checkbox"/> or <input type="checkbox"/> → Digit + / - 1 <input type="checkbox"/> or <input type="checkbox"/> 1 sec. → Fast scroll <input type="checkbox"/> or <input type="checkbox"/> 3 sec. → 10's → 100's → 1000's <input type="checkbox"/> short → 100's → 10's → 1's → Cancel <input type="checkbox"/> long → <b>Stor</b> = saved

### 2.3.3 Set Relay Output manually to "Free" or "Occupied"

If, for any reasons, the relay output needs to be disabled the output can be manually set to maintain either the always "FREE" or always "OCCUPIED" state.

Display	State	Settings
1234	Normal Operation	<input type="checkbox"/> 1 x short → <b>Out</b> = Output status display
<b>Out</b> Automatic Occupied FREE (alternating)	Output Status display	<input type="checkbox"/> short → next, next menu item <input type="checkbox"/> long → <b>End</b> = back to normal operation <input type="checkbox"/> or <input type="checkbox"/> → select output state
<b>Out</b> Occupied FREE (flashing)	Select Output status	<input type="checkbox"/> → FREE → <b>Out</b> → Occupied <input type="checkbox"/> → Occupied → <b>Out</b> → FREE <input type="checkbox"/> short → cancel changes <input type="checkbox"/> long → <b>Stor</b> = Output state saved

### 2.3.4 Display and Counter Reset

The inputs can individually count up to 9,999,999 and can individually be displayed or if necessary reset to zero.

Display	State	Setting
1234	Normal Operation	<input type="checkbox"/> 2 x short → <b>Cnt 1</b> = Input counter 1 : <input type="checkbox"/> 5 x short → <b>Cnt 4</b> = Input counter 4
<b>Cnt 1...4</b> 1234 (alternating)	display current counter 0...9999	<input type="checkbox"/> short → continue, next menu item
<b>Cnt 1...4</b> 1234. .456 (continuously)	display input counter 10.000...9.999.999	<input type="checkbox"/> → current input counter <input type="checkbox"/> → start input counter reset
<b>Out</b> flashing	Reset	<input type="checkbox"/> long → <b>Stor</b> = reset input counter <input type="checkbox"/> short → cancel reset

Note:

1. The open space or quantity of passed vehicle counter will not be affected during reset of any of the input counter!
2. If display of one input counter is activated, it will not switch back to normal operating display by itself.

### 2.3.5 Reset all Counter

The open space and passed vehicle counter as well as the four (4) input counter can be reset at ones using the following menu:

Display	State	Setting
1234	Normal operation	<input type="checkbox"/> 6 x short → <b>RES</b> = Reset menu
<b>RES</b>	Menu item Reset	<input type="checkbox"/> long → reset all counter <input type="checkbox"/> short → back to normal operation without reset



## 2.4 System Menu – Installation specific Settings

In the system menu all installation specific settings can be made.

Display	Menu Item	Setting
1234	Normal Operation	<input type="checkbox"/> long → Display 545 = System menu alternating shows program version; for example A02
5 0 c 1234 (alternating)	Switch threshold 0...9999	<input type="checkbox"/> short → next menu item  <input type="checkbox"/> or <input type="checkbox"/> → change <input type="checkbox"/> long → save  Two buttons simultaneously or <input type="checkbox"/> long → End = back in normal operation
H45 1234 (alternating)	Counter hysteresis 1...250	
5 P P 1234 (alternating)	Upper counter threshold 0...9999	
5 P P - 123 (alternating)	Lower counter threshold 0...999	
in P 1...4 (alternating) Add Sub RES no.F	Input functions <ul style="list-style-type: none"> <li>• Increment counter</li> <li>• Decrement counter</li> <li>• Reset counter</li> <li>• No function</li> </ul>	
rEL (alternating) oc.on Fr.on	Output function <ul style="list-style-type: none"> <li>• Normally closed</li> <li>• Normally open</li> </ul>	
L o P o (alternating) oFF on	Power Save Mode <ul style="list-style-type: none"> <li>• off (Display on)</li> <li>• on (Display off)</li> </ul>	

### 2.4.1 Operating Modes switching threshold

The digital counter can be set to operating mode "OPEN SPACE COUNTING" or "PASSING VEHICLE COUNTING". Two options can be selected by setting the counter threshold to:

- Threshold = 0 → Operating Mode "OPEN SPACE COUNTING" (see 1.2.1)
- Threshold = 1..9999 → Operating Mode "PASSING VEHICLE COUNTING" (see 1.2.2)

Display	State	Setting
1234	Normal Operation	<input type="checkbox"/> long → 5 P 5 → 5 0 c = threshold
5 0 c 1234 (alternating)	Display Counter Threshold	<input type="checkbox"/> short → next, next menu item <input type="checkbox"/> long → End = back to normal operation <input type="checkbox"/> or <input type="checkbox"/> → change threshold
1234 (one digit flashes)	Change Threshold 0...9999	<input type="checkbox"/> or <input type="checkbox"/> → Digit + / - 1 <input type="checkbox"/> or <input type="checkbox"/> 1 sec. → fast scroll <input type="checkbox"/> or <input type="checkbox"/> 3 sec. → 10's → 100's → 1000's <input type="checkbox"/> short → 100's → 10's → 1's → cancel <input type="checkbox"/> long → 5 P o r = save

### 2.4.2 Counter Hysteresis

With the counter hysteresis you can set the amount of vehicles that have to leave the facility after the "OPEN SPACE COUNTING" or the "PASSING VEHICLE COUNTING" have reached the maximum and triggered the output relay. Factory default is 0.

Display	State	Setting
1234	Normal Operation	M long → 545 → 5 ac M 1 x short → H45 = counter hysteresis
H45 1234 (alternating)	Display counter hysteresis	M short → continue, next menu item M long → End = back to normal operation ^ or v → change threshold
1234 (one flashing digit)	Change counter hysteresis 1...9999	^ or v → Digit +/- 1 ^ or v 1 sec. → fast scroll ^ or v 3 sec. → 10's → 100's → 1000's M short → 100's → 10's → 1's → cancel M long → 5tr = save

### 2.4.3 Counter Level

The maximum and minimum range of the total counter can be adjusted using this menu. This enables the counter to automatically adjust the total in case the maximum or minimum level reached to prevent an incorrect counter to continue. The default is 9999 for upper and -999 for the lower level.

Display	State	Setting
1234	Normal operation	M long → 545 → 5 ac M 2 x short → 5tr = upper level 0...9999 M short → 5tr = lower level -999...0
5tr / - 1234 (alternating)	Display counter level	M short → continue, next menu item M long → End = back to normal operation ^ or v → change counter level
1234 (one flashing digit)	Change counter level 0...9999	^ or v → Digit +/- 1 ^ or v 1 sec. → fast scroll ^ or v 3 sec. → 10's → 100's → 1000's M short → 100's → 10's → 1's → cancel M long → 5tr = save

### 2.4.4 Display / Input settings

Independent from each other the inputs can set to:

- *Incrementing*
- *Decrementing*
- *Reset Counter*
- *No function*

Display	State	Setting
1 2 3 4	Normal operation	<input type="checkbox"/> long → 5 4 5 → 5 0 c <input type="checkbox"/> 4 x short → I n P 1 = function Input 1
I n P 1 ... 4 (alternating) A d d S u b r E S n o . F	Display input function 1 to 4 • Incrementing • decrementing • Reset count • No function	<input type="checkbox"/> short → next Input, net menu item <input type="checkbox"/> long → E n d = return to normal operation <input type="checkbox"/> or <input type="checkbox"/> → change function
A d d S u b r E S n o . F (flashing)	Change function	<input type="checkbox"/> → n o . F → r E S → S u b → A d d <input type="checkbox"/> → A d d → S u b → r E S → n o . F <input type="checkbox"/> short → cancel <input type="checkbox"/> long → S t o r = save

Factory default is incrementing for input 1 and 3 and decrementing for input 2 and 4.

### 2.4.5 Output settings

The output relay can be adjusted to Normally Open (NO) or Normally Closed (NC):

Display	State	Setting
1 2 3 4	Normal Operation	<input type="checkbox"/> long → 5 4 5 → 5 0 c <input type="checkbox"/> 8 x short → r E L = relay function
r E L (alternating) F r . o n o c . o n	Display Relay function • If free NC • If full NC	<input type="checkbox"/> short → next, next menu item <input type="checkbox"/> long → E n d = return to normal operation <input type="checkbox"/> or <input type="checkbox"/> → change function
F r . o n o c . o n (flashing)	Change Relay function	<input type="checkbox"/> → F r . o n → o c . o n <input type="checkbox"/> → o c . o n → F r . o n <input type="checkbox"/> short → cancel <input type="checkbox"/> long → S t o r = save

Factory default is Normally Open mode for the output relay.

### 2.4.6 Power Saving Mode

If the Power Saving Mode is activated the display turns off if there was no activity on the user interface for more than 30 s. The counter function continues to run in the background. The Power Saving Mode can be adjusted using the following menu:

Display	State	Setting
1234	Normal Operation	<input type="checkbox"/> long → 595 → 5 ac <input type="checkbox"/> 9 x short → L o P a = power saving mode
L o P a (alternating) a F F a n	Display Power Saving Mode • OFF (Display on) • ON (Display off)	<input type="checkbox"/> short → next, next menu item <input type="checkbox"/> long → E n d = return to normal operation <input type="checkbox"/> or <input type="checkbox"/> → change function
a F F a n (flashing)	Change Function	<input type="checkbox"/> → a F F → a n <input type="checkbox"/> → a n → a F F <input type="checkbox"/> short → cancel <input type="checkbox"/> long → S t o r = save

### 2.5 Factory Setting

All parameter and counter can be reset to factory default values using the following procedure:

Display	State	Setting
		Turn off power supply for more than 2 seconds
1234 (flashing)	Return after power failure	Press two buttons simultaneously → E r r
E r r (flashing)	System error	<input type="checkbox"/> long → S t o r = reset to factory default → 0000 flashing = factory default <input type="checkbox"/> short → cancel, restart without factory default settings

After a reset to factory default values all parameters are set to the following (see table below) and all counter are set to zero (0).

Parameter	Setting
<input type="checkbox"/> u t Relay output	R u t a Automatic
5 a c Switch threshold	0 0 = Open Space Counting
H y s Counter hysteresis	1 one vehicle
S t P ~ Upper counter level	9999 9999
S t P _ lower counter level	-999 -999
I n P 1 Function Input 1	R d d incrementing
I n P 2 Function Input 2	S u b decrementing
I n P 3 Function Input 3	R d d incrementing
I n P 4 Function Input 4	S u b decrementing
r E L Output functionality	a c, a n Normaly Open Mode
L o P a Power Save Mode	a F F off, Display continuously activated

### 3 Installation Instructions

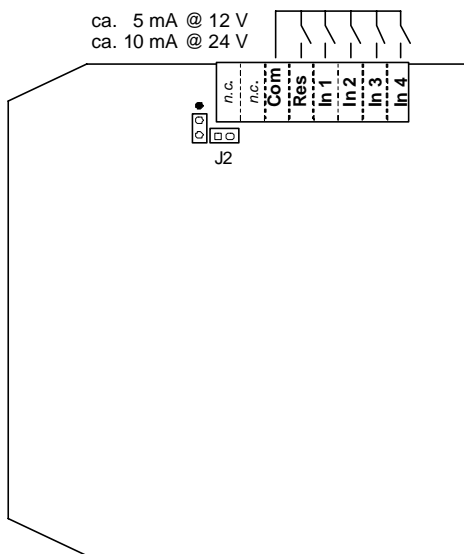
#### 3.1 Input voltage

All inputs are provided with photo couplers. To activate the inputs you can either use the internal voltage supply or use an external supply. When using an external supply you must first change the internal jumper J2 in accordance with the drawing and table below.

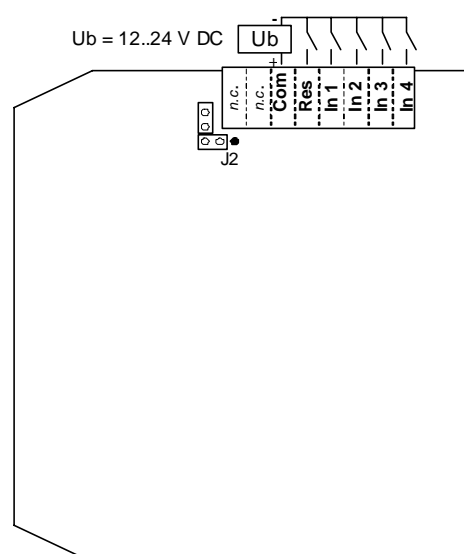
**Attention!**

The printed circuit board consists of electrostatic sensitive components. While working with the printed circuit board please use electrostatic protective measures to prevent any damage to the components. Do not touch the board or any of the components!

Internally provided inputs,  
No galvanic isolation



Externally provided inputs,  
galvanic isolation inside counter



**Attention!**

Terminal „C“ at the front side, near to the terminals of the supply voltage, can only be used with internal Power Supply as an alternative connection to terminal „Com“. Terminal „C“ mustn't be wired if external Power Supply is used.

Inputs of several counter units can be connected in parallel as follows:

Power Supply	Input power	Attention
12..24V DC	Internal J2 to down and right	<ul style="list-style-type: none"> <li>Use only one power supply for all counter units!</li> <li>Do not connect terminal „C“. Terminals „In1..4“ and „Res“ are internally connected to 0 V.</li> </ul>
12..24V AC	Internal J2 to down and right	<ul style="list-style-type: none"> <li>Do not connect multiple counter units in parallel!</li> </ul>
12..24V AC/DC	External 12..24V DC J2 to up and left	<ul style="list-style-type: none"> <li>Use only one external power supply for all inputs!</li> </ul>

### 3.2 Wiring of Relays Outputs

By switching of inductive loads additional external noise suppression is needed.

The output relay is constructed for small and large loads. Look for maximum and minimum load in the technical data.

#### **Attention!**

If the relay contacts are loaded once for more than 100 mA, the gold gladding of the relay contacts becomes destroyed. The use in systems with small loads isn't possible anymore!

## 4 Technical Data

Dimensions	3 " (79 mm) x ¾ " (22.5 mm) x 3.5 " (90 mm) (H x W x L without plug)	
Protection Class	IP 40	
Power Supply	12 V to 24 V AC/DC ±10%	
Power Consumption	max. 2 W	
Operating Temperature	-20 °C to +70 °C	
Storage Temperature	-40 °C to +70 °C	
Humidity	max. 95 %, non-condensing	
Counting range	Total –999 to 9.999 0 .. 9.999.999 for each counting input	
Inputs	Photo Coupler, common anode (minus-switching) 4 Inputs 1 Reset input	
Minimum input time	50 ms	
Input current	ca. 5 mA at 12 V ca. 10 mA at 24 V	
Relay output	Form C	
max. Current Rating	AC: 250 V / 5 A / 125 VA DC: 220 V / 2 A / 60 W	
min. Current Rating	0,25 W / 10 mV / 1 mA	
Fuse	none, must be external	
Suppressors	none, if needed external	
Air- and Leakage Path:		
between Power Supply/Electronics and pins	5.5 mm	
between pins	3.0 mm	
between Power Supply/Electronics and pins	0.5 mm	
Connection	Screw Terminal (Power Supply, Relay output) Block Terminals (Input)	
CE-Standards	EN 50082-2, Feb. 1996 EN 50081-1, March 1993	

## 5 Safety instructions and Warnings

- The device may only for the purpose intended by the manufacturer.
- These operating instructions have to be handed out to every user and kept in an easily accessible place.
- Unacceptable changes as well as the use of spare parts and special features which are not sold or recommended by the manufacturer may cause fire, electric shocks and injuries. Such measures do therefore lead to nonliability of the manufacturer and a lapse of all warranty claims.
- The appliance is subject to the manufacturer's guarantee regulations in the version valid at the time of purchase. We cannot be held liable for improper or faulty manual or automatic adjustment of parameters resp. improper use of the appliance.
- Repair work may only be carried out by the manufacturer.
- Installation, initiation, maintenance, measuring and adjustment of the counting unit should only be carried out by electricians with a good knowledge of the rules for prevention of accidents.
- When handling appliances that get in contact with electricity, the valid VDE-regulations have to be observed. In particular, these are: VDE 0100, VDE 0550/0551, VDE 0700, VDE 0711, VDE 0860, VDE 0105 as well as the rules for the prevention of accidents and fire VBG4.
- Before opening the device be assure that power is turned off and re-measure if power is down.
- If an operation display goes out, this is not a proof that the appliance is disconnected from the mains and idle.
- All labour that is carried out on the appliance as well as its installation has to conform to the national as well as the local electric regulations.
- The user has to make sure that the appliance is installed and operated according to the technical rules of the country of installation as well as other regional regulations. Cable dimensions, protection, grounding, disconnection, insulation control and excess current protection should be especially considered.
- The gold gladded relay contacts will be destroyed for switching currents higher than 100 mA. Relays with such pre-stressed contacts can certainly switch only currents higher than 100 mA.

# Start-up protocol - Digital Counter Unit VEK CN1-1

Location: \_\_\_\_\_

Date: \_\_\_\_\_ Name: \_\_\_\_\_

- Hold **M** 2 s in normal operation → Display alternating **5 4 5** and program version (e.g. **R 0 3**)
- Hold **▲**, **▼** → change settings
- Hold **▲**, **▼** long → fast scroll
- Hold **M** 2 s → save
- Hold **M** short → next menu item
- Hold two simultaneously → back to normal operation

Display	Menu item	Setting
	Program Version	Vers.: _____ (read only)
<b>5 0 c</b>	Threshold 0...9.999	Value: _____
<b>H 4 5</b>	Counter Hysteresis 1...250	Value: _____
<b>5 1 P ~</b>	Upper Counter Threshold 0...9.999	Value: _____
<b>5 1 P _</b>	Lower Counter Threshold 0...-999	Value: _____
<b>1 n P 1</b>	Input Function 1	<input type="checkbox"/> <b>R d d</b> increment <input type="checkbox"/> <b>S u b</b> decrement <input type="checkbox"/> <b>r E S</b> reset <input type="checkbox"/> <b>n o. F</b> no function
<b>1 n P 2</b>	Input Function 2	<input type="checkbox"/> <b>R d d</b> increment <input type="checkbox"/> <b>S u b</b> decrement <input type="checkbox"/> <b>r E S</b> reset <input type="checkbox"/> <b>n o. F</b> no function
<b>1 n P 3</b>	Input Function 3	<input type="checkbox"/> <b>R d d</b> increment <input type="checkbox"/> <b>S u b</b> decrement <input type="checkbox"/> <b>r E S</b> reset <input type="checkbox"/> <b>n o. F</b> no function
<b>1 n P 4</b>	Input Function 4	<input type="checkbox"/> <b>R d d</b> increment <input type="checkbox"/> <b>S u b</b> decrement <input type="checkbox"/> <b>r E S</b> reset <input type="checkbox"/> <b>n o. F</b> no function
<b>r E L</b>	Output Function	<input type="checkbox"/> <b>a c. a n</b> normally closed <input type="checkbox"/> <b>F r. a n</b> normally open
<b>L a P a</b>	Power Saving Mode	<input type="checkbox"/> <b>a F F</b> off (Display on) <input type="checkbox"/> <b>a n</b> on (Display off)



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