KERN & Sohn GmbH
Ziegelei 1
D-72336 Balingen
E-Mail: info@kern-sohn.com
Phone: +49-[0]7433- 9933-0
Fax: +49-[0]7433-9933-149
Internet: www.kern-sohn.com

Additional description interfaces

KERN KIB-TM

Version 1.4
2023-01
GB

KIB-TM-ZB-e-2314

GB

KERN KIB-TM

Version 1.4 2023-01

Additional description interfaces

Contents

1 RS 232 (standard)

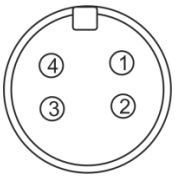
You can print weighing data automatically via the RS 232C interface or manually by pressing PRINT via the interface according to the setting in the menu.

This data exchange is asynchronous using ASCII - Code.

The following conditions must be met to provide successful communication between the weighing system and the printer.

- Use a suitable cable to connect the display unit to the interface of the printer. Faultless operation requires an adequate KERN interface cable.
- Communication parameters (baud rate, bits and parity) of display unit and printer must match. For a detailed description of interface parameters, please refer to chapter 9, Menu block “P2 COM“

1.1 Technical data

Connection	4 pin d-subminiature bushing			
		Pin1	RX	Input
		Pin2	TX	Output
		Pin3	GND	Signal ground
		Pin4	N/C	Not connected
Baud rate	Optional 600/1200/2400/4800/9600			
Parity	8 bits, no parity / 7 bits, even parity / 7 bits, odd parity			

1.2 Printer operation / sample logs (KERN YKB-01N)

- **Weighing**

  1. Continuous data output
     (menu setting P2 Com ➡ Mode ➡ Com ➡ S0 on)

Menu setting P2 Com ➡ LAb 0 / Prt 0:

```
*****************************
 ST, GS            53.2 kg
*****************************
```

```
*****************************
 US, GS            53.2 kg
*****************************
```

  2. Data output after pressing of PRINT/C
     (menu settings: P2 Com ➡ Mode ➡ Pr1,
     Changes to menu settings Lab and Prt do not affect the layout of the sample log)

Menu setting P2 Com ➡ LAb 0 / Prt 0~3 or LAb 3 / Prt 4~7:

```
*****************************
 ST, GS            53.2 kg
*****************************
```

```
*****************************
 ST, NT :          52.6 kg
*****************************
```

- **Counting**

```
*****************************
PCS                  100
*****************************
```

- **Totalization**

3. Data output after pressing M+ CAL
   (menu setting P2 Com ➡ Mode ➡ Pr2)

P2 Com ➡LAb 3 / Prt 4~7:

```
**********
No.:       1
NT:    2.006kg
TW:    0.501kg
GW:    2.507kg
Total:    2.006kg
**********



**********
No.:       2
NT:    0.993kg
TW:    0.501kg
GW:    1.494kg
Total:    2.999kg
**********



**********
No.:       3
NT:    3.008kg
TW:    0.501kg
GW:    3.509kg
Total:    6.007kg
**********



**********
    Total
No.:       3
Total:    6.007kg
**********
```

P2 Com ➡LAb 0/Prt 0:

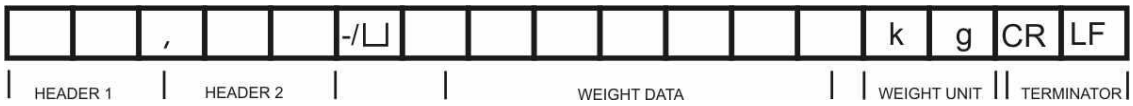
```
**********
GS:    1.003kg
**********



**********
GS:    2.005kg
**********



**********
GS:    3.008kg
**********



**********
    Total
No.:       3
Total:    6.016kg
**********
```

Symbols:

ST	Stable value
US	Instable value
GS / GW	Gross weight
NT	Net weight
TW	Tare weight
NO	Number weighing processes
TOTAL	Total of all individual weighings
<lf>	Space line
<lf>	Space line

1.3 Output log (continuous output)

- Weighing



HEADER1: ST=STABLE, US=UNSTABLE

HEADER2: NT=NET, GS=GROSS

- Menu setting P2 Com ➡ PTYPE ➡ tPUP or LP50

1.4 KERN Communications Protocol (KERN Interface Protocol)

KCP (KERN communication protocol) contains the commands that are used to control the KERN balances via the interface.

- Menu setting P2 Com ➡ Mode ➡ ASK
- Menu setting P2 Com ➡ PTYPE ➡ KCP
- Finish commands with CR/LF character.
- Consult the KCP manual for more information, available on our KERN website (**www.kern-sohn.com**).

The following commands are supported:

@	Cancel
I0	List all implemented KCP commands
I1	Query KCP level and KCP versions
I2	Query device information (type, capacity)
I3	Query device software version
I4	Query serial number
I4␣A␣"xxxxxxxx"	Set serial number (default value is K123456)
I5	Query SW-Identification number
S	Send stable weight value
SI	Send weight value immediately
SIR	Send weight value immediately and repeat
Z	Zero
ZI	Zero immediately
D	Display: Write text to display
D␣"␣"	Clear Display (after D-Command)
K	Keys: Set configuration

SR	Send weight value on weight change (send and repeat)
T	Tare
TA	Query/preset tare weight value
TAC	Clear tare value
TI	Tare immediately

Polling-Interval

- The time between the cyclic inquiries or when sending commands (Polling) via the interfaces must be longer than 100 ms.

2 USB interface (KIB-A03) (optional)

Set the following menu items (see chap. 9)

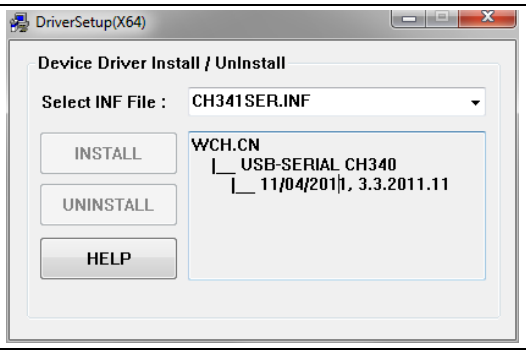
⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨"**intF**" ⇨"**USB**"
⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨"**ModE**" ⇨"**CoUnt**"

Several programs are available for data transmission on the balance to a PC.
The description below refers to "Kern Balance Connection".

- A 10-day free trial of the KERN Balance Connection test version is available for download under www.kern-sohn.com/Downloads/Software.

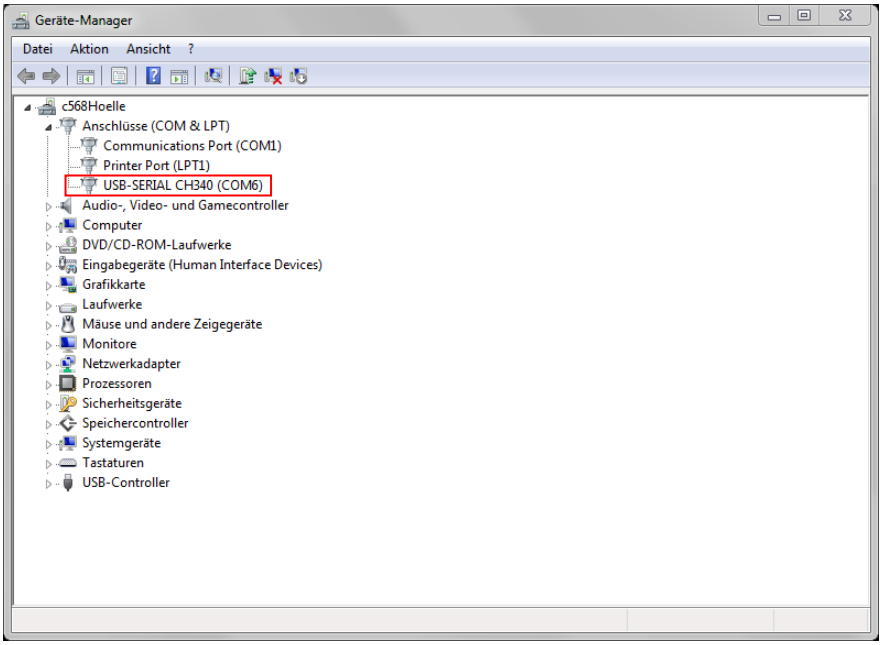
How to install a USB driver
(In menu "Downloads/Operating Instructions, Single Brochures, Conformity Declarations, Driver" on the KERN Homepage (www.kern-sohn.com)

Select driver CH341

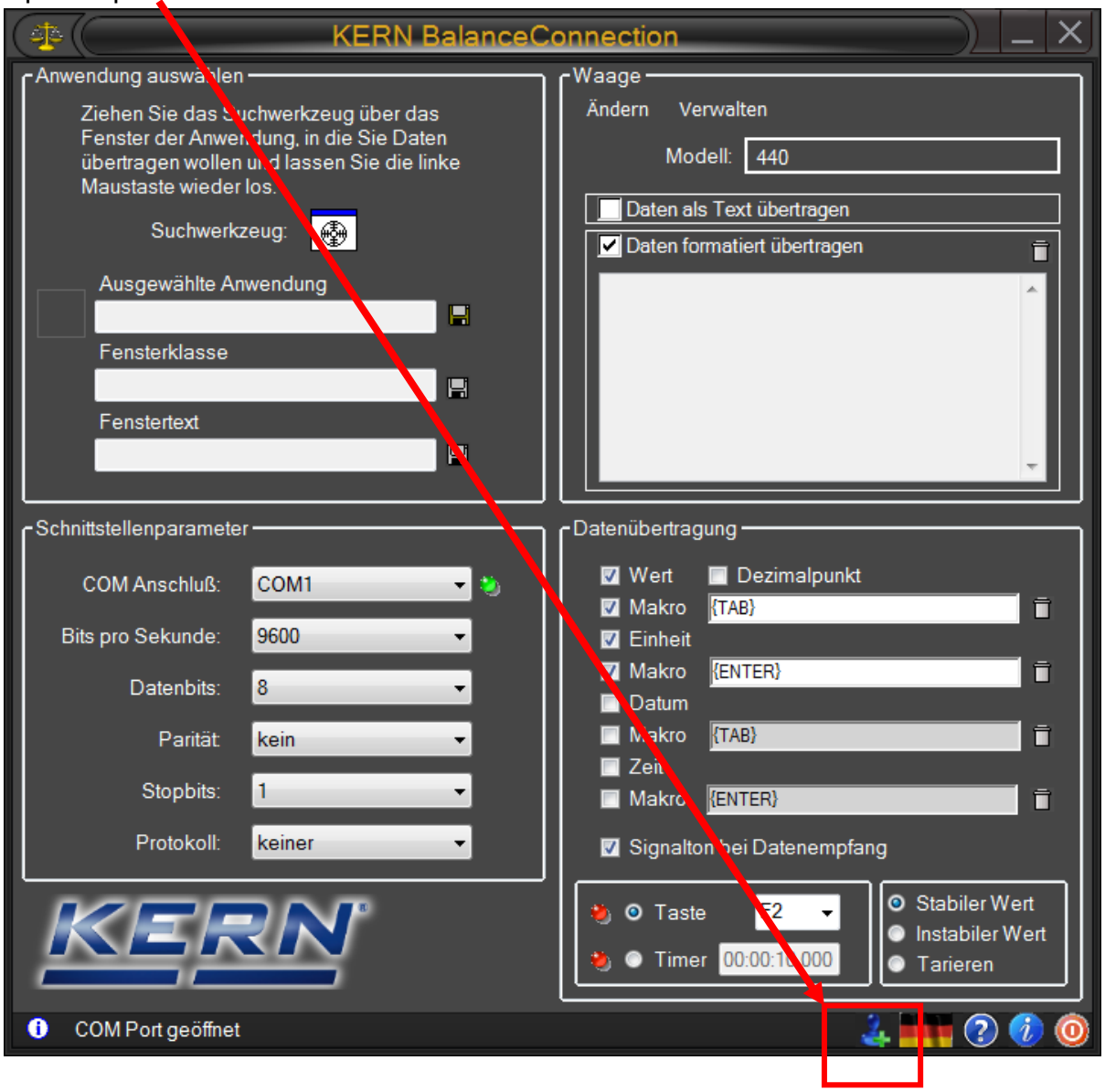


Connect USB interface KIB-A03 of balance with PC

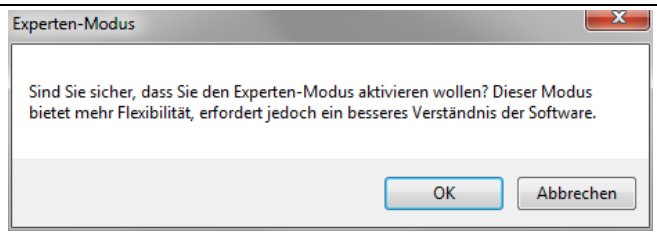
Go to device manager of PC and search for "USB Serial CH340 (COM6).
(This COM Port will later be entered in Balance Connection.)

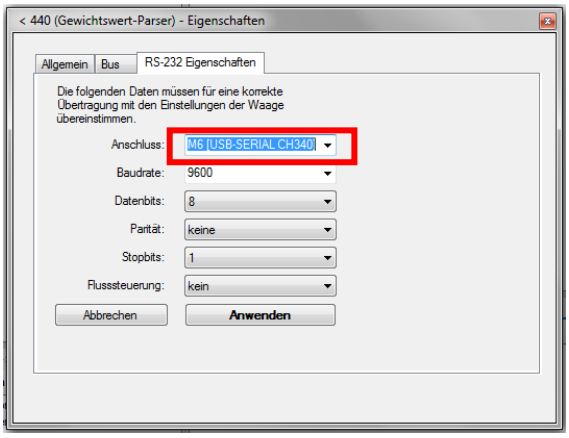
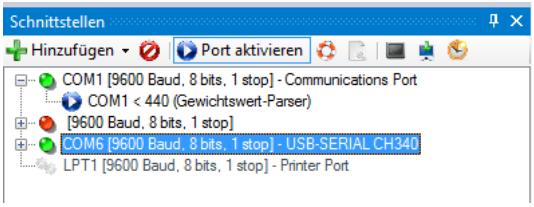
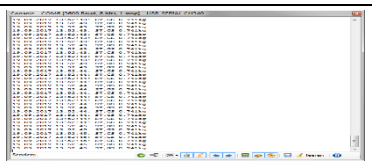


Open expert mode:



Click on OK



Adding an interface: - Click on "Add" - Click on "RS-232 Port (manual)" - Tab "RS-232 properties"	
In Balance Connection choose the selected COM Port of the PC and set the interface parameters (baud, data bit, stop bit, etc.). Click Apply, close window.	
Right-click to enable COM 6 or click on "Enable Port"	
Ensure that balance is switched on.	
Right-click on COM 6→Open Console→ and data will be transferred	

- Now you can set all the other output methods in Balance Connection.
- If data transmission is not happening, check the settings described above and re-enter as required.

3 Ethernet (optional)

The Ethernet allows you to transmit data via cable to devices (such as computers, printers etc.) that are interconnected in a local network. No direct connection between KIB-TM and PC is necessary.

Set the following menu items in **KIB-TM** (See chap. 9)

- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**intF**" ⇨ "**EnEt**" (Enable output Ethernet)
- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**ModE**" ⇨ " **Count**" (Output mode continuous data output)
- ⇨ Menu item "**P9Prt**" ⇨ "**oPt**" ⇨ "**iP1-4**" Set IP address KIB-TM as follows: Enter IP address not yet allocated in network:

Example: **10.0.1.104**
It is always necessary to enter three numbers according to the following scheme:

10.	**0.**	**1**	**104**	**IP address**
010	000	001	104	Entry sequence in KIB-TM
IP1	IP2	IP3	IP4	

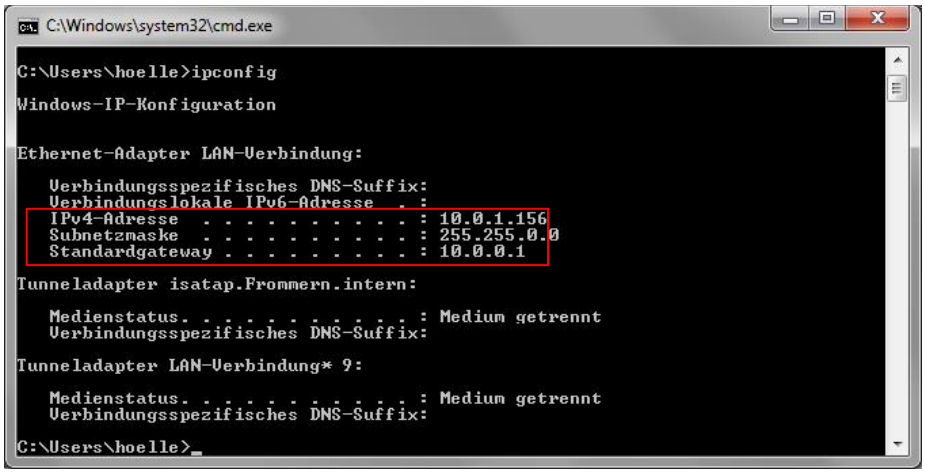
The same principle is used to configure the following settings:

- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**MASK_1-4**" (Subnet mask)
- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**GATE_1-4**" (Gateway)

Now enter the IP address for the **PC** on the display unit

(If unknown proceed as follows:

- ⇨ Press Windows key and "R" simultaneously
- ⇨ Enter "cmd" and press Enter to confirm
- ⇨ The entry prompt will appear
- ⇨ Enter "ipconfig" and press Enter to confirm
- ⇨ The PC‘s IP address will appear on the screen)

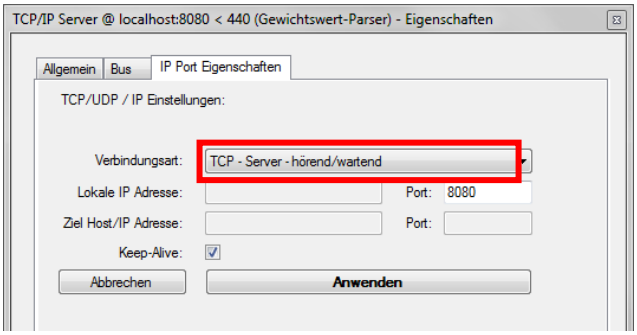
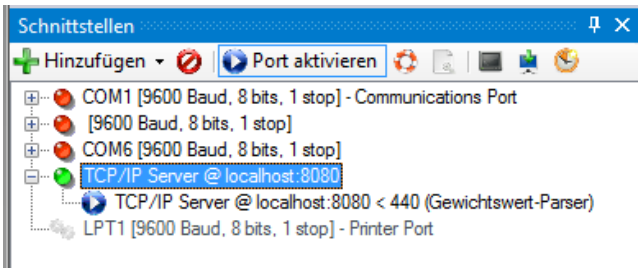
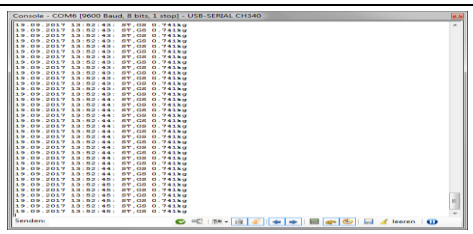


As the IP address is saved to the KIB-TM we recommend using a static IP address of the computer.

Now enter the IP address for the PC on the display unit:

⇨ Menu item "**P9Prt**" ⇨ "**oPt**"⇨"**riP_1-4**" (IP address PC)

⇨ Connect KIB-TM to network (router/switch).
⇨ Start Balance Connection
⇨ Start Expert mode (See chap. 2)

Adding an interface: - Click on "Add" (green +) - Click on "TCP/IP Server" - Tab "IP Port Properties"	
Set "TCP – Server listening/waiting" **How to set port**: The settings must match the settings of the KIB-TM: „**P9Prt**“ ⇨ „**opt**“ ⇨ „**rPort**“ The port is user definable. It must not be blocked by the router. Click Apply, close window.	
Enable port: Right-click → Open console	
→ Data will be transmitted (The console is merely used to check data transmission). All other output methods can only be set in Balance Connection.)	

- If data transmission is not happening, check the settings described above and re-enter as required.

4 WLAN (Optional)

Set the following menu items in **KIB-TM** (See chap. 9)

- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨"**intF**" ⇨"**WiFi**" (Enable output mode WLAN)
- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**ModE**" ⇨ " **Count**" (Output mode cont. data output)
- ⇨ Menu item "**P9Prt**" ⇨ "**oPt**" ⇨ "**iP1-4**" Set IP address KIB-TM as follows: Enter IP address not yet allocated in network:

Example: **10.0.1.104**
It is always necessary to enter three numbers following scheme below:

10.	**0.**	**1**	**104**	**IP address**
010	000	001	104	Entry sequence in KIB-TM
IP1	IP2	IP3	IP4	

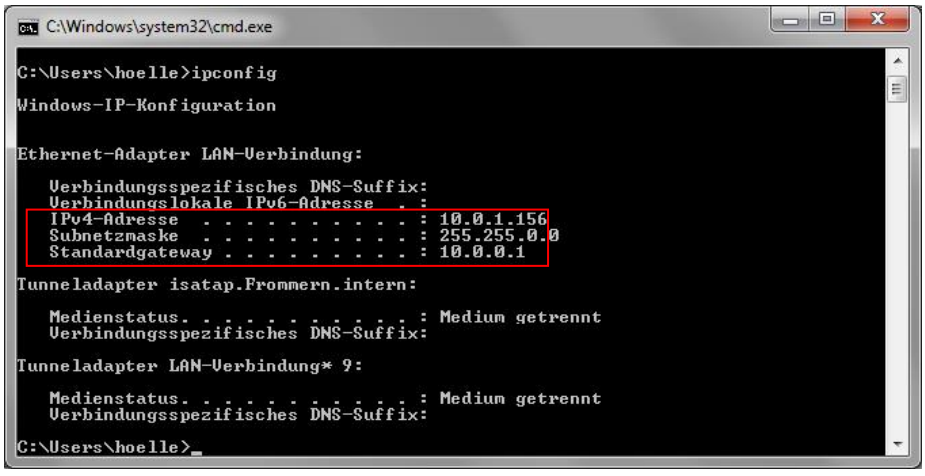
The same principle is used to configure the following settings:

- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**MASK_1-4**" (Subnet mask)
- ⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨ "**GATE_1-4**" (Gateway)

Now enter the IP address for the **PC** on the display unit

(If unknown proceed as follows:

- ⇨ Press Windows key and "R" simultaneously
- ⇨ Enter "cmd" and press Enter to confirm
- ⇨ The entry prompt will appear
- ⇨ Enter "ipconfig" and press Enter to confirm
- ⇨ The PC‘s IP address will appear on the screen)

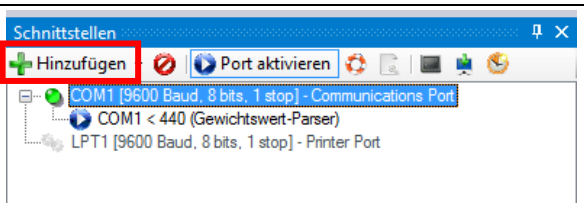
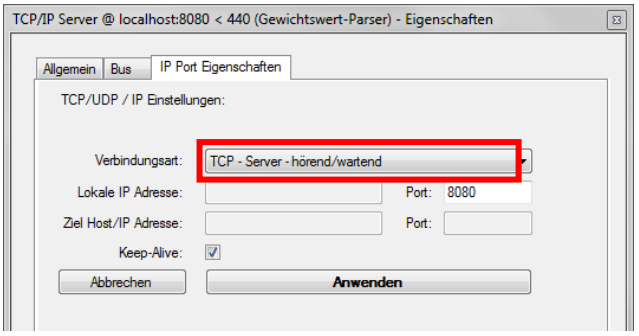
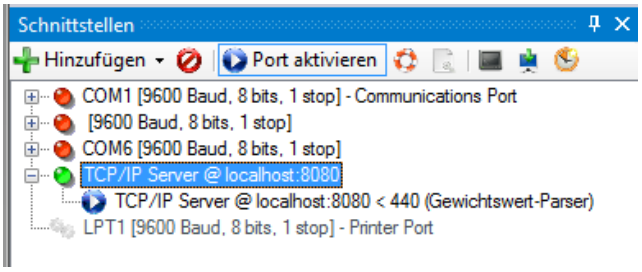
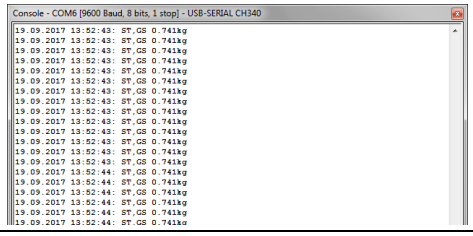


As the IP address is saved to the KIB-TM we recommend using a static IP address of the computer.

Now enter the IP address for the PC on the display unit:

⇨ Menu item "**P9Prt**" ⇨ "**oPt**"⇨"**riP_1-4**" (IP address PC: 192.168.1.104)

⇨ Connect KIB-TM to network (router/switch).
⇨ Start Balance Connection
⇨ Start Expert mode (See chap. 2)

Adding interface: - Click on "Add" (green +) - Click on "TCP/IP Server" - Tab "IP Port Properties"	
Set "TCP – Server listening/waiting" **How to set port**: The settings must match the settings of the KIB-TM: „**P9Prt**“ ⇨ „**opt**“ ⇨ „**rPort**“ The port must be set to "8080" or "6000". It must not be blocked by the router. Click Apply, close window.	
Enable port: Right-click → Open console	
→ Data will be transmitted (The console is merely used to check data transmission). All other output methods can only be set in Balance Connection.)	

- If data transmission is not happening, check the settings described above and re-enter as required.

- Restart of KIB-TM is required after making changes to WLAN settings.
- After the restart it may take up to 20 sec until the WLAN module is displayed.

5 Bluetooth (Option)

Wireless data transmission over a short distance between devices is possible with the help of Bluetooth.

Establish connection between KIB-TM and computer/mobile phone. To that end enter the following:

- Password: 0000 (alternatively 1234)
- Name: HC-06

The menu items shown below must be set in KIB-TM

⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨"**intF**" ⇨"**Bt**"
⇨ Menu item "**P9 Prt**" ⇨ "**oPt**" ⇨"**ModE**" ⇨"**Count**"

Among other things Balance Connection can be used to process data.

⇨ The Bluetooth interface is not IOS-capable
⇨ KIB-A04 supports Bluetooth Low Energy (BLE). (not compatible with old Bluetooth versions)

6 Alibi memory (Option)

For weighings with obligatory verification, which are evaluated and processed by a connected PC, the verification law prescribes in the interest of consumer protection an electronic storage in the form of a verifiable data storage device that cannot be manipulated. Alibi memories by KERN meet this requirement.
This is used for paperless storage of weighing results.
All data transmitted to the PC will be saved including date, time and all the important weighing values. These saved data records are available for viewing on the weighing balance at any time.

Data that can be transmitted include:

- Number of measurement
- Date of measurement
- Time of measurement
- Gross weight
- Tare value
- Net weight
- Weighing unit

6.1 General information about the alibi-memory option

- For the transfer of weighing data from a verified balance via an interface, KERN offers the alibi-memory option KIB-A13
- This means a factory option, installed and preconfigured by Messrs. KERN, when a product with this optional function is acquired.
- The alibi-memory offers the possibility to store up to 250.000 weighing results. When the memory is full, the already used IDs are overwritten (starting with the first ID).
- The storing process can be carried out either by operating the Print button or via the KCP-command “S” or “MEMPRT”.
- The weighing value (N, G, T), date and time, as well as a definitive alibi-ID are stored.
- For data output, the definitive alibi-ID is also emitted for identification needs.
- The stored data can be called up via the KCP command "MEMQID". Therefore a certain single ID or a series of IDs can be queried.
- Example:
  - MEMQID 15 → the data record stored under the ID 15 will be returned.
  - MEMQID 15 20 → all data records stored from ID 15 to ID 20 are returned.

6.2 Description of the components

The alibi-memory module KIB-A13 combines the memory and the real-time clock for all functions of the alibi-memory.

6.3 Protection of the stored legally-relevant data and measures to prevent data loss

- Protection of the stored legally-relevant data:
  - After having stored a data record, it will be read back at once and checked byte per byte. If an error is found, the data record will marked as invalid. If no error is found, the data record can be printed, as necessary.
  - In every data record a checksum protection is stored.
  - All information on a printout are read from the memory with checksum monitoring, not directly from the buffer.

- Measures to prevent data loss:
  - When switching-on, the memory is write-protected.
  - Prior to writing a data record into the memory, writing will be enabled by a respective procedure.
  - After storing a data record, writing rights will be locked at once (prior to verification).
  - The memory can keep the data for more than 20 years.

6.4 Enabling the alibi memory

Set the following menu items (see chap. 9)

⇨ Menu item „**P9 Prt**“ ⇨ „**oPt**“ ⇨“**intF**“ ⇨ „**UdiSK**“
⇨ Menu item „**P9 Prt**“ ⇨ „**oPt**“ ⇨“**ModE**“ ⇨ „**EXPT**“

Store data:

⇨ Set menu item "**P2 Com**" ⇨ "**ModE**" ⇨"**Pr1**" (See chap. 9)

Data will be saved after pressing PRINT C.

6.5 Show the alibi data

The data filed in the alibi memory can be displayed as follows:

⇨ Set menu item „**P8 ind**“ ⇨ „**ALibi**“ ⇨“**rdAtA**“ confirming by →0← ↵ (see chap. 9)
⇨ Using TARE ↑ the following data can be selected one after the other:

- Number of measurement
- Date of measurement
- Time of measurement
- Gross weight
- Tare value
- Net weight

⇨ Use M+ CAL ← to scroll up, MR F → to scroll down

⇨ Press BG/NET ESC or →0← to exit menu

6.6 Exporting the alibi data to an USB-stick

For exporting the alibi data to an USB stickplease proceed as follows:

⇨ In weighing mode press M+/CAL and keep pressed, Pn appears
⇨ Enter password and set the menu items as described in chap. 2

6.7 Export alibi data to PC

The data thus ascertained will be saved automatically by pressing PRINT/C. The user can view and print these data records. When the capacity of the memory is exhausted, data records will be overwritten in turn, starting with the first data record.

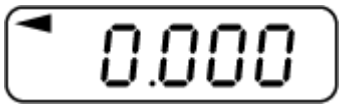
For exporting the alibi data to an USB stickplease proceed as follows:

⇨ In weighing mode press M+/CAL and keep pressed, Pn appears
⇨ Enter password and set the menu items as described in chap. 2

Export saved data:

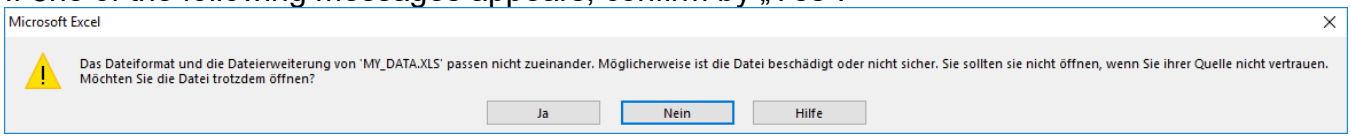
⇨ Menu item "**P8 ind**" ⇨ "**ALibi**" ⇨" **EXPT**"

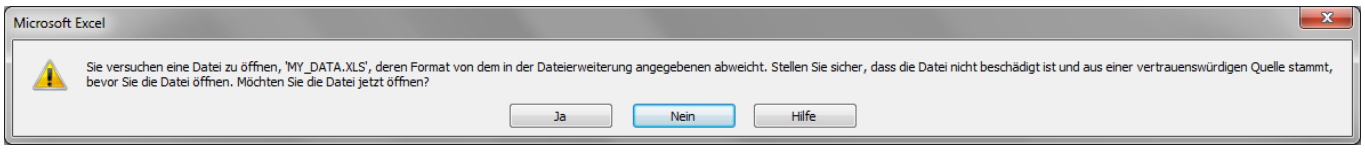
⇨ Connect USB stick to USB interface type A.
As soon as the USB stick is connected correctly, an arrow will appear in the top left corner of the display:



⇨ Save data as described above
⇨ Insert USB stick in PC
⇨ Open Excel table. Now you can evaluate and, where an optional printer is connected, printout the saved data.

If one of the following messages appears, confirm by „Yes“:





Example of exported data in Microsoft Excel:

	A	B	C	D	E	F	G
1	1	15.02.2018	11:43:27	2.995	1.000	1.995	kg
2	2	15.02.2018	11:43:55	6.000	1.000	5.000	kg
3	3	15.02.2018	11:49:14	6.000	5.008	0.992	kg
4	4	15.02.2018	11:54:23	2.994	2.003	0.991	kg
5							
	Number of the data record	Weighing date	Weighing time	Gross weight	Tare value	Net weight	Weighing unit

6.8 Corrective measures

To open a device or to access the service menu, the seal and therefore the calibration need to be broken. Please take into consideration that a reverification will be the consequence, otherwise the product must not more be used where obligation to verify exists. In case of doubt please contact first your service partner or your local Bureau of Standards.

Memory module:

No values with definitive ID are stored or edited:
→ initialize memory in the service menu (see service instructions of your balance).

- The definitive ID is not counted upwards and no values are stored or edited:
  → initialize memory in the menu (see service instructions of your balance).

- Despite of initialization no definitive ID is stored:
  → defective memory module, contact your service partner.

Real time clock:

- Incorrect time and date are stored or edited:
  → check time and date in the menu (see balance service instructions)

- Time and date are reset after separation from power supply:
  → exchange the coin cell battery of the real time clock.

- Time and date are reset after separation from power supply despite new battery:
  → defective real time clock, contact your service partner.

7 I/O interface (Option)

(included amongst others in pilot lamp KIB-A06)

The I/O module has two inputs and 8 outputs.

It is possible to connect a pilot lamp that shows an upper and lower limit value.

To enable the pilot light, go to the menu and set the following items:

Menu item to enable the I/O module:

⇨ Press →0← to confirm menu item "**P0 CHK**" ⇨ "**rELAy**" ⇨"**on**"

Set upper limit value:

⇨ Press →0← to confirm menu item "**P0 CHK**" ⇨ "**nEt H**"

⇨ Use the arrow keys to enter the upper limit value and press to confirm

Set lower limit value:

⇨ Press →0← to confirm menu item "**P0 CHK**" ⇨ "**nEt L**"

⇨ Use the arrow keys to enter the lower limit value and press →0← to confirm

Manual switching of inputs and outputs (test mode):

⇨ Menu item „**P9 Prt**“ ⇨ „**io**“ ⇨ “**o_tSt**“ (test mode outputs)

⇨ Menu item „**P9 Prt**“ ⇨ „**io**“ ⇨ “**i_tSt**“ (test mode inputs)

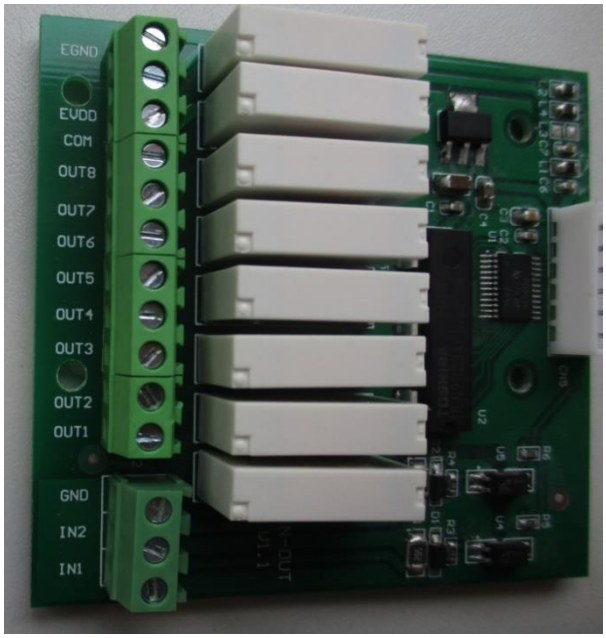
- The digit lefthand in the display shows the output number (connected to OUT1-OUT8 or IN1-IN2)
- The digit righthand in the display shows the current output status:
  - „0“ means disabled
  - „1“ means enabled (test voltage is 12V)

Use the arrow keys M+ CAL ← MR F → (→) to navigate to the desired output or input.

Use TARE ↑ (↑) to activate or deactivate the out-/or input (12 V constantly)

Pin assignment of the traffic lights KERN CFS-A03 or KERN KIB-A06:

EGND
EVDD
COM
OUT 8
OUT 7
OUT 6
OUT 5
OUT 4
OUT 3
OUT 2
OUT 1
GND
IN 2
IN 1



Connections		
Signal lamp		**KIB-TM - IN-OUT**
Function	Colour	J1
power (-)	black*	COM
power (+)	red*	EVDD
LOW	yellow	OUT 1
OK	green	OUT 2
HIGH	red	OUT 3
COM	black	GND

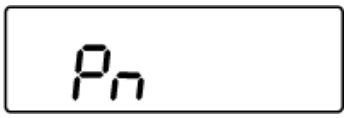
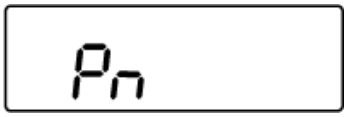
* power supply of traffic lights resumed in one cable

8 RS 485 interface (Option)

The RS 485 interface is only used for the large display KERN KIB-A07.

9 Menu

Navigation in the menu:

Call up menu	⇨ Switch-on balance and during the selftest press M+ CAL.  ⇨ Press M+ CAL, BG NET ESC, TARE subsequently, the first menu block „PO CHK“ will be displayed. 
	⇨ From weighing mode: press M+ CAL and keep it pressed until Pn appears  ⇨ Then enter the password (see above)
Select menu block	⇨ With help of TARE, the individual menu items can be selected one after the other.
Select setting	⇨ Confirm selected menu item by pressing →0←. The current setting will be displayed.
Change settings	⇨ The arrow keys can be used to change the available settings.
Acknowledge setting / exit the menu	⇨ Either save by pressing →0← or reject by BG NET ESC.
Return to weighing mode	⇨ Press BG NET ESC repeatedly to exit menu.

Menu overview

Menu block Main menu	**Menu item Submenu**	**Available settings / explanation**		
PO CHK **Weighing with tolerance range**	nEt H	Upper limit value "Tolerance Control Weighing", Entry		
	nEt L	Lower limit value "Tolerance Control Weighing", Entry		
	PCS H	Upper limit value "Tolerance Control Counting", Entry		
	PCS L	Lower limit value "Tolerance Control Counting", Entry		
	BEEP	no	Acoustic signal for weighing with tolerance range switched off	
		ok	Acoustic signal sounds when weighed load is within tolerance limits	
		nG	Acoustic signal sounds when weighed load is beyond tolerance limits	
	rELAY	on	Relay pilot light	
		oFF		
P1 r EF[1] **Zero point settings**	A2n0	Automatic zero point correction (Autozero) by changing the display, digits selectable (0, 0.5d, 1d, 2d, 4d)		
	0AUto	Zero setting range Load range where the display after switching-on the balance is set to zero. Selectable 0, 2, 5, 10, 20, 30, 50, 100 %		
	0rAGE	Zero setting range Load range where the display is set to zero by pressing →0← . Selectable 0, 2, 4, 10 , 20* , 50, 100%.		
	0tArE	Automatic taring „on / off“, taring range adjustable in menu item „0Auto“.		
P2 COM **Interface parameter**	MODE	CONT	S0 off	Continuous data output, selectable „sending 0“, yes / no
			S0 on	
		ST1	One output for stable weighing value	
		STC	Continuous data output of stable weighing values	
		PR1	• Output after pressing PRINT C • Precondition for alibi memory	
		PR2	Manual totalizing Press M+ CAL and the weighing value will be added to the summation memory and issued.	

		AUTO*	Automatic adding-up This function is used to issue and add individual weighing values automatically to the summation memory on unloading of weighing scale.
		ASK	Remote control instructions
		wirel	Not documented
	BAUD	Available Baudrate: 600, 1200, 2400, 4800, 9600*	
	Pr	7E1	7 bits, even parity
		7o1	7 bits, odd parity
		8n1*	8 bits, no parity
	PTYPE	tPUP*	Standard printer setting
		LP50	Not documented
		KCP	KERN Communication Protocol
	LAb	LAb x	For data output format, see table below. 1
	Prt	Prt x	
	LAnG	eng*	Standard settings English
		chn	Not documented
P3 CAL[1] **Configuration data**	COUNT	Display internal resolution	
	DECI	Position of the decimal dot	
	DUAL	Setting balance type, capacity (Max) and readability (d)	
		off	Single-range balance
			R1 inc: Readability
			R1 cap: Capacity
		on	Dual range balance
			R1 inc: Readability 1st weighing range
			R1 cap: Capacity 1st weighing range
			
			R2 inc: Readability 2nd weighing range
			R2 cap: Capacity 2nd weighing range
	CAL	noLin	Adjustment
		Liner	Linearization
	GrA	Gravitational constant at place of installation	
	GrB	Gravitational constant at place of manufacture	
P4 OTH	LOCK	on	Keyboard lock enabled
		off*	Keyboard lock disabled
	ANM[1]	on	Animal weighing enabled
		off*	Animal weighing disabled
	SCr	on	Time activated as screen saver
		off*	Time deactivated as screen saver

P5 Unt[1] **Change weighing unit,**	kg	on*		
		off		
	g	on		
		off*		
	lb	on		
		off*		
	oz	on		
		off*		
	tJ	on		
		off		
	HJ	on		
		off		
P6 xcl[1]		Not documented		
P7 rst[1] **Factory default**		Use →0← ↵ to reset balance settings to factory default.		
P8 ind	dAtE	Setting date: Format: TTMMJJ		
	tIME	Setting time: Format: HHMMSS		
	ALibi	Alibi memory		
		dAtA	Number of stored data records	
		rdAtA	Retrieve values of data record	
		ErASE	Erase all data	
		ExPT	Export data (USB stick)	
	PrEt	Enter pre-tare value		
P9 Prt	485	ModE	2disP, Count	Export mode (2nd display)
		bAUd	600, 1200, 2400, 4800, 9600	Baud rate
		Pr	7o1	7 Bit, odd Parity, 1 Stop bit
			7E1	7 Bit, equal Parity, 1 Stop bit
			8n1	8 Bit, no Parity, 1 Stop bit
	io	i_tSt		Test mode inputs
		o_tSt		Test mode outputs
	oPt	intF	USB, UdiSK, Bt, WiFi, EnEt	Select connections
		ModE (output)	no, CoUnt (USB, Bt, Wi-Fi, EnEt) no, Expt (UdiSK)	
		iP_1		IP addresses KIB-TM
		iP_2		
		iP_3		
		iP_4		
		MASK_1		Subnet mask
		MASK_2		
		MASK_3		
		MASK_4		
		GAtE_1		KIB-TM Gateway
		GAtE_2		
		GAtE_3		
		GAtE_4		

Continuation menu item P9 Prt

P9Prt	oPt	riP_1		remote (IP address PC)
		riP_2		
		riP_3		
		riP_4		
		rPort		Remote port (Port for communication between PC and KIB-TM
		SSid_1		SSID
		SSid_2		
		PSW_1		WLAN password
		PSW_2		

Factory settings are marked by *.

[1] function locked when adjustment switch in verifiable setting (adjustment switch position „LOCK“)