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Operating instructions
KERN PC-Software

page 2

Balance Connection SCD-3.3

Version 3.3 07/2007

SCD-BA-0633



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Only by the purchase in connection with the registration you do possess the authorisation to use the full version of this software. Veuillez renvoyer ou faxer cette carte à KERN. Vous serez informé des mises à jour et enregistré pour le support technique.

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KERN PC-Software
Balance Connection SCD-3.3
Version 3.3
Operating instructions

Balance Connection SCD-3.3

PC software for direct import of weighing data into Windows application

How does this data transfer work?

PC software for direct import of weighing data into Windows application
Graphic display of weighing sequences and data including interpolations
Includes date and time.

How is this data import carried out?

Weighing values are inserted by pushing a key, or time-controlled at the current cursor position. This prevents typing errors during the input of weighing values in table computations or data bases.

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1 General

1.1 Contractual agreements

The use of KERN PC software (balance connection) implies that the user recognises these contractual agreements.

The download of the software package contains software and operating instructions. In the following these may also be called "software".

By downloading the software the operator acquires the right to use the software for one or more modules on one or more PCs. At all times the software shall remain the property of Gottl. KERN & Sohn GmbH

1.2 Copyright note

Each program contains a copyright note. This note is imported into each copy and part of the program.

1.3 Warranty

We do not give guarantee, either explicit or implicit, for operability, absolute absence of errors and working order of the software or documentation. KERN does not accept liability resulting from the use of the software.

KERN specifically reserves the right to alter the software and / or documentation without having to give prior notice to third parties.

1.4 Licensing of full version

We recommend that you fill in the attached registration card (see page 2) and return it to KERN. Only registration gives you the right to use the software.

Additionally you will then also receive information about any further developments of the software.

The installation is being continued with NEXT. The software license agreement is being displayed now.

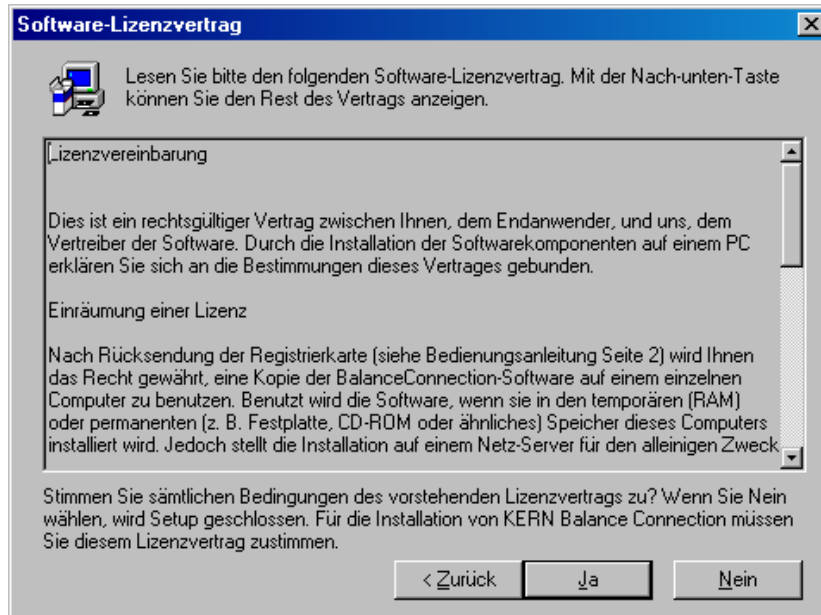


Illustration 7-3

By clicking on Yes you accept the license agreement. After that you will be asked to choose the destination location for the software.



Illustration 7-4

The software automatically proposes a destination directory. However, by clicking on BROWSE you can choose an individual directory. Proceed by clicking on NEXT.

The installation program now asks you to select the program folder for the software. It is possible to select one of the already existing folders or to create a new one. However, it is recommended to use the proposed program folder.

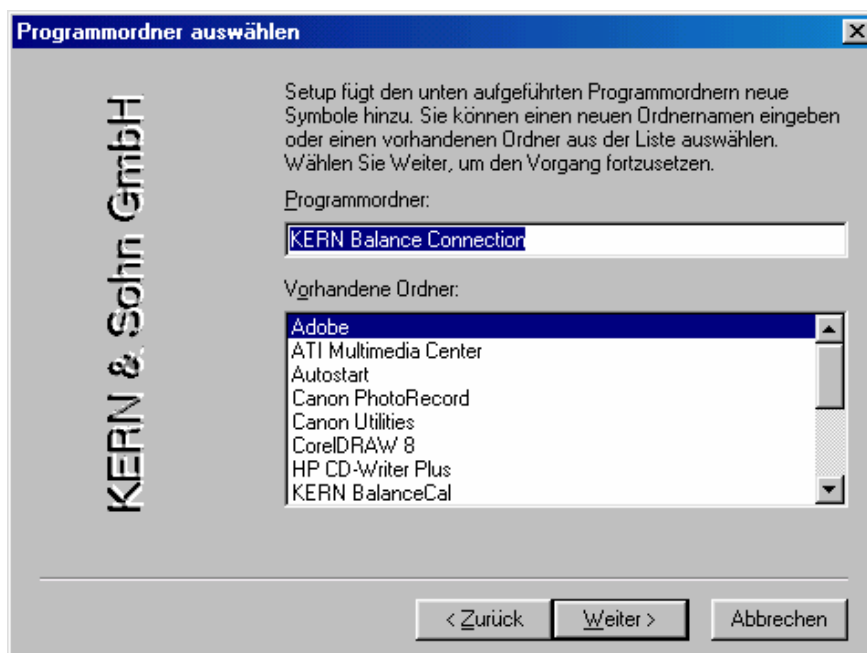


Illustration 7-5

The program and all files which go with it are copied from both installation disks to the installation directory. During the installation procedure you are asked by the program to insert the second disk. Confirm this by ENTER or by click on NEXT. The installation procedure can be terminated any time by clicking on CANCEL, but then the software is not completely installed and not ready to use.

After a successful installation procedure the following window appears:

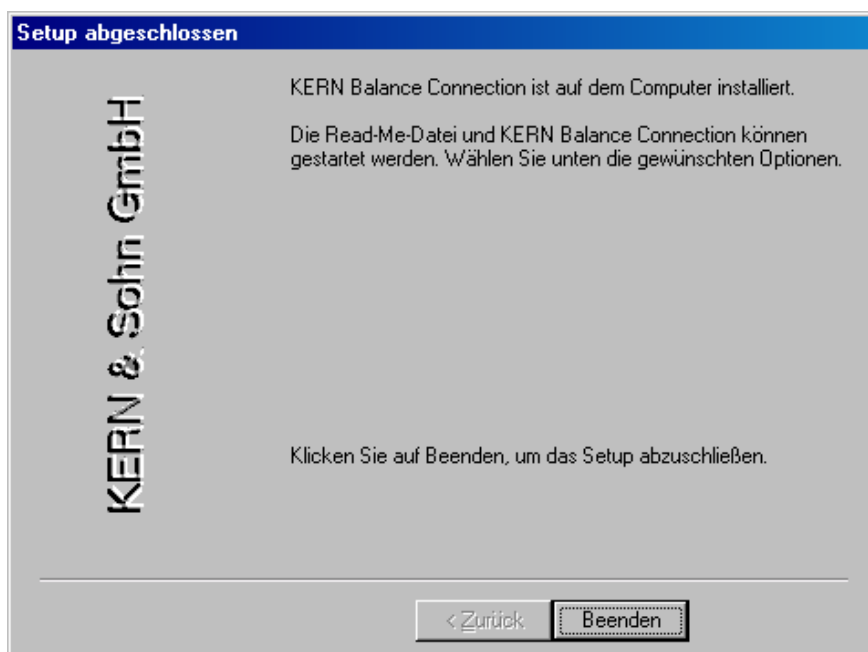


Illustration 7-6

The program folder that was created during the installation contains two icons – on the one hand the shortcut to execute the software, on the other hand the shortcut to the help file (see the following illustration).

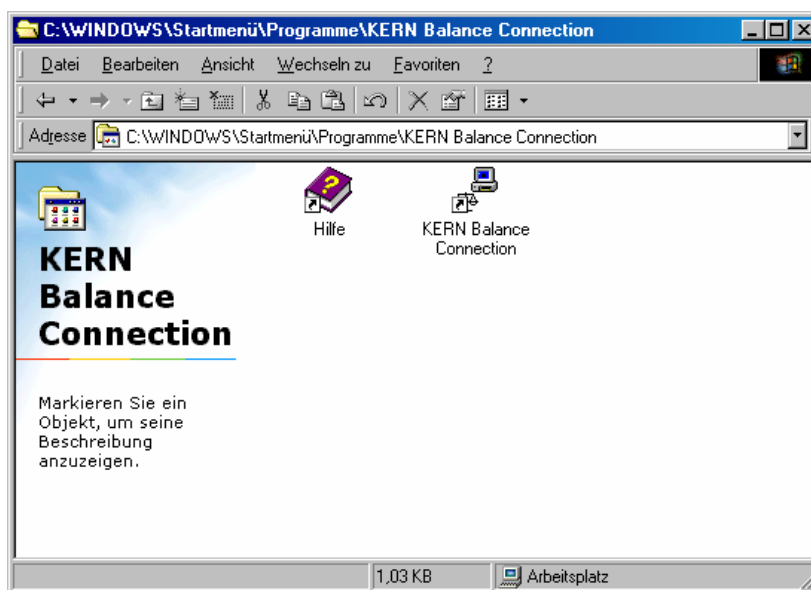


Illustration 7-7

4 Operation

4.1 Starting up the program

The program can be started up by double clicking on the Balance Connection icon in the Kern Balance Connection program folder using the left mouse button (illustration 0-1).

This will automatically take you to the Kern Balance Connection start user interface.



Illustration 8-1

There are two ways of using the software:

- Purely as transmission software for weighing data into user-defined applications (Excel; Word; etc.)

- As registration and display software for series of measurements incorporating use of the Kern Balance Connection statistical possibilities.

4.2 Setting the transmission software

- Operate the “divert measured values“ button (**Please note:** Press button above description)

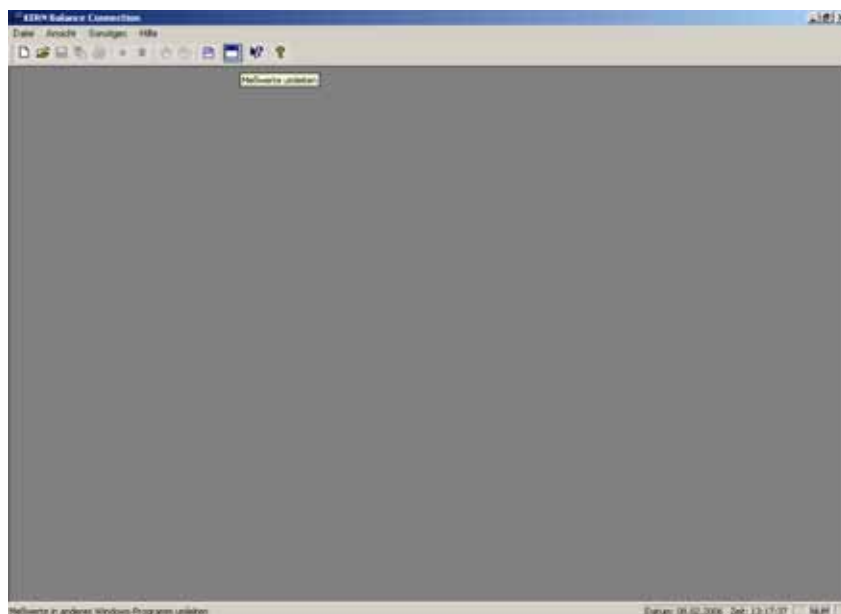


Illustration 8-2

4.3 Selection of an application program



Illustration 8-3

The software ask you to select an application which you want to transfer the data to. The selection of the application program is very simple. Start your application program, let it run in a window in the background and move the search tool with the left mouse button pressed in the windows of your application and then release the left mouse button. As a result in the field below **SELECTED APPLICATION:** appears the application program selected by you (in the following example Microsoft Excel).



Illustration 8-4

4.4 Configuration of the software

By clicking on **SETTINGS** you can configure the software to your requirements with regard to display of the measurement value, data transmission and interface.

4.4.1 Measuring Value Output

The first registration card of **SETTINGS** is the display of the measurement value.

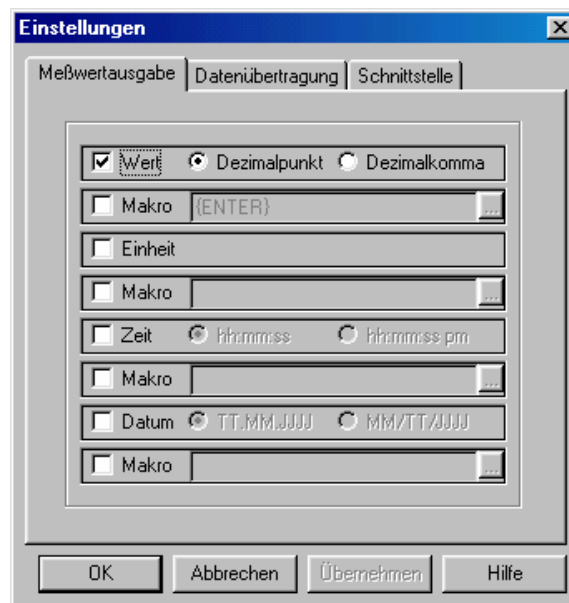


Illustration 8-5

The following settings are possible:

- **VALUE:** Selection if the transmitted value is displayed in the application program with **decimal point** or **decimal comma**. The determining of a **macro** is possible (in this example {ENTER}, i.e. after each data transmission the cursor jumps into the next table field below).
- **UNIT:** the values are transmitted to the application program with the **selected unit of the balance**. The determining of a **macro** is possible which is carried out directly after the transmission.
- **TIME:** Transmission of values additionally with **giving the time**, either in 12 or 24 hours format. The determining of a **macro** is also possible.
- **DATE:** If necessary the **transmission of date** can be selected, with or without **macro**.

If all settings have been made according to your requirements, click on **APPLY** (your settings will be saved). By clicking on the second registration card **DATA TRANSMISSION** you can now adjust the parameter of the data transmission.

4.4.2 Data Transfer

This is the second registration card of SETTINGS.



Illustration 8-6

With RESOLUTION BY you can determine whether a data transmission takes place when a pre-set key is pressed or whether this happens timer-controlled (the time interval is selectable exactly in seconds, minutes and hours). In this example we have selected key F12.

BALANCE TYPE helps to name the balance type used by you. When leaving the factory the balance contains several predefined type sets for KERN balances. In this connection please take into consideration that when selecting a predefined balance type, all settings for each balance type are entered in SETTINGS/INTERFACE. If need be, only the suitable COM port has to be changed.

4.4.2.1 How to add further balance types:

- Click on the ARROW BUTTON behind the display window for the balance type (this is shown as 822/824/870/880 in our example). A choice list will appear (see following window).

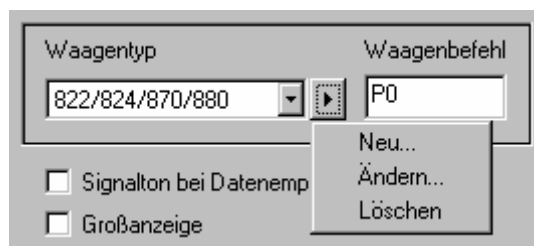


Illustration 8-7

- Select NEW.... in order to create a new balance type (if several balances are involved it is advisable to select explicit and distinguishable designations). Also enter the remote control command for data transmission to your balance in the BALANCE COMMAND field (you will find further information on this in the operating instructions provided with your balance). Complete balance application by pressing OK.

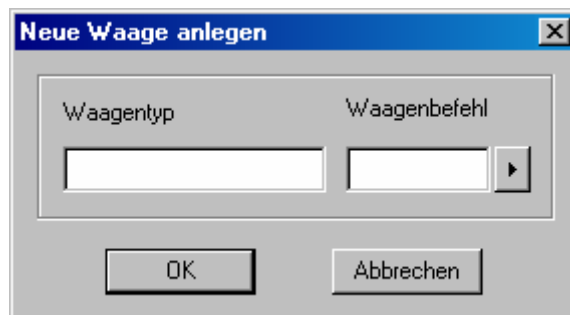


Illustration 8-8

- Select ALTER... in order to alter the balance command.

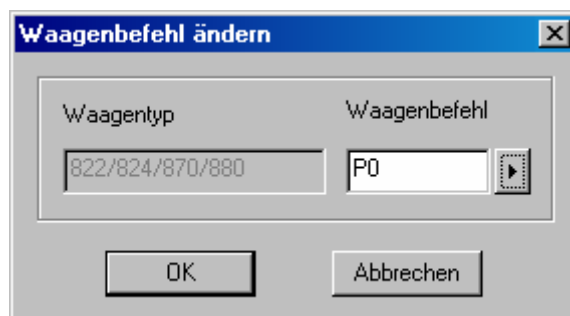


Illustration 8-9

- Select DELETE in order to delete a balance if this is no longer required. The program will make sure that you really want to delete the selected balance. If you do, confirm this by selecting YES.

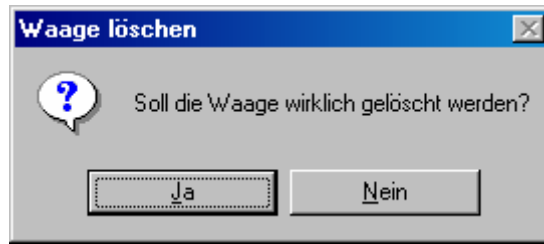


Illustration 8-10

In addition to this you can make the following adjustments in the data transmission field:

- **AUDIBLE SIGNAL UPON RECEIPT OF DATA:** This is where you can stipulate whether an audible signal is given every time data is transmitted successfully from the balance to the PC. You can thus also check acoustically whether the data from the balance has been accepted by your application.
- **LARGE DISPLAY:** if you select this option, a large display appears on your screen that resembles the one of your balance. Weighing values can be transmitted quite comfortably from the balance to the large display on the screen by pressing a key (defined key as per RESOLUTION BY).

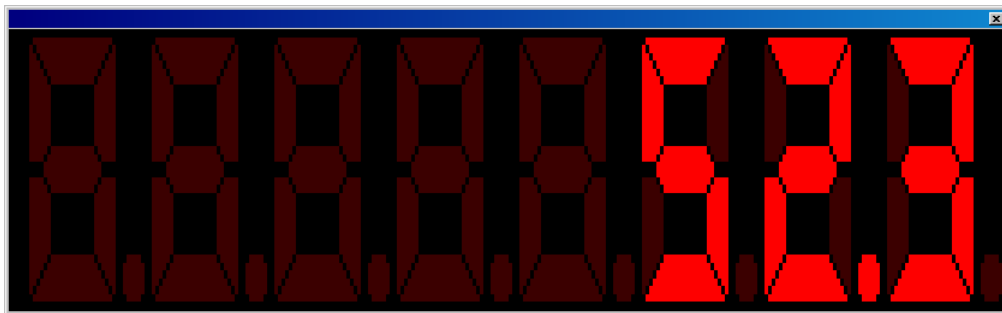


Illustration 8-11

After having set the data transmission parameters, click on APPLY to save the adjustments made. Switch hereafter to the last registration card by clicking on the tongue INTERFACE.

4.4.3 Interface

This is the third and last registration card of SETTINGS. Here you can make individual adjustments of the interface parameter in case no suitable balance type concerning your requirements has been found in DATA TRANSMISSION.

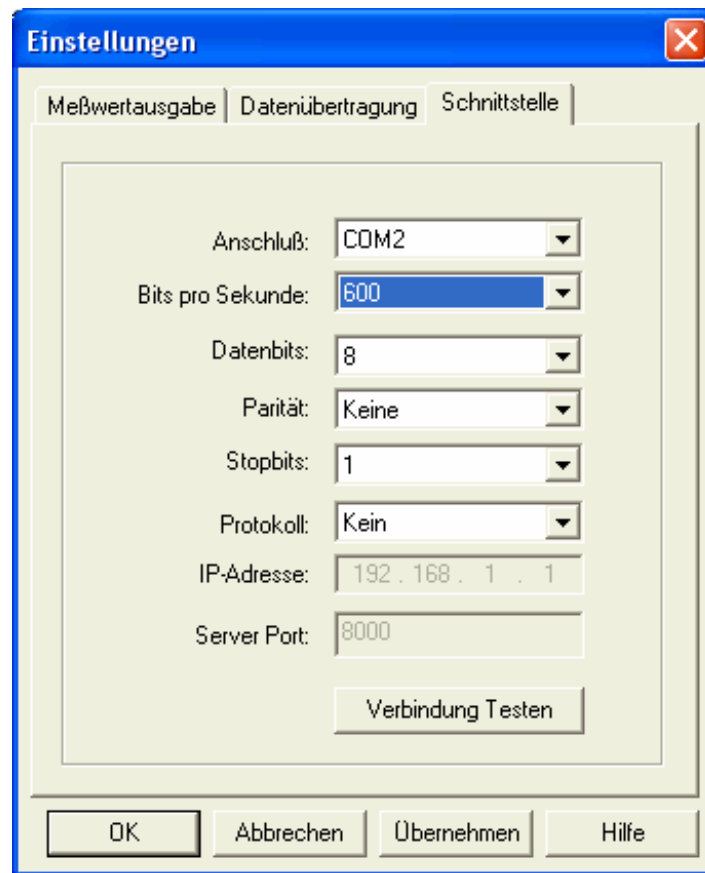
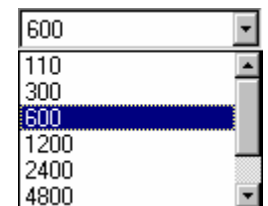
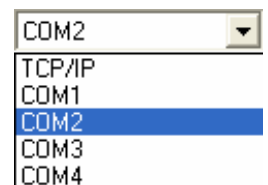


Illustration 8-12

The balance is connected via a serial cable to the PC; balances with network interface are connected to the respective network. Before data can be transferred, it must be ensured that the same interface parameters are set on the balance and on the PC. This is exactly what happens at this point in the program.

- **CONNECTION (SERIAL INTERFACE PC OR TCP/IP):** select here the interface which communicates with the balance.
- **BAUD RATE (VELOCITY):** select here the data transmission velocity (from 110 to 19200 Baud).



- **DATA BITS:** select here the amount of bits that are used to depict one character.
- **PARITY** this selection achieves that each character sent is supplied with a parity bit by the PC. Possible settings are *space* (Leerzeichen), *mark* (Markierung), *even* (gerade), *odd* (ungerade) and *none* (keine).
- **STOPBITS:** select here the amount of bits which are sent after each character.
- **PROTOCOL:** select here the control of the data stream by software handshake (Xon/Xoff) or hardware handshake (RTS/CTS). Possible settings are *none* (kein), Xon/Xoff, hardware and *both* (beide).
- **IP-ADDRESS:** Enter the IP-address here for balances which are connected to a network.
- **SERVER PORT:** Enter the Server-Port set on the balance here for balances which are connected to a network. The default setting for the balance is 8000.

- 4
- 5
- 6
- 7
- 8

- Keine
- Ungerade
- Gerade
- Markierung
- Leerzeichen

- 1
- 1.5
- 2

- Kein
- Xon / Xoff
- Hardware
- Beide

By clicking on CHECK THE CONNECTION and pressing then SEND BALANCE COMMAND you can see if a successful connection can be established with the settings made by you. A successful connection looks about as follows:

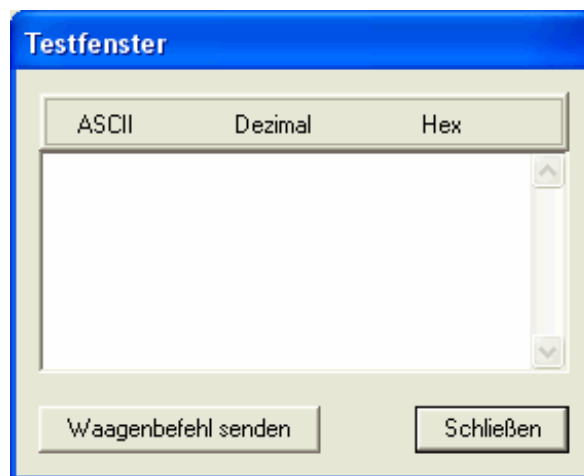


Illustration 8-13

Close the test windows by clicking on CLOSE. The software returns to the previous menu SETTINGS/INTERFACE). Click on APPLY to save the settings made by you.

Afterwards click **OK** to return to the first program interface.



Illustration 8-14

The software now is adjusted to your requirements, it is ready for the takeover of weighing data into the selected application program. Click **OK**. The program window closes and runs from now minimised in the background. This is visible by the small balance that appears in the right corner of the task bar.



Illustration 8-15

In case you want to modify the configuration of the program, two possibilities are available:

By a left **double-click** on the balance symbol in the task bar the program interface opens.



Illustration 8-16

A simple right-click on the balance symbol in the task bar makes a selection list appear whose entries can be called up by a simple left-click.

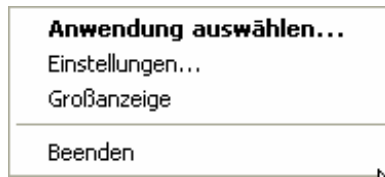


Illustration 8-17

- **SELECT APPLICATION:** The program window opens in which you can select your desired application. This is done as described in section 11.0, by means of the search tool. Afterwards confirm the new selection by clicking **OK**.
- **SETTINGS:** Select this option to reach directly the settings of the software (see 12.0).
- **LARGE DISPLAY:** Call up directly the large display which is displayed in a separate window.
- **EXIT:** Select this entry to exit the software.

5 Registration and evaluation software

5.1 Recording new series of measurements

(Please note: Operate the button above the “new” description)

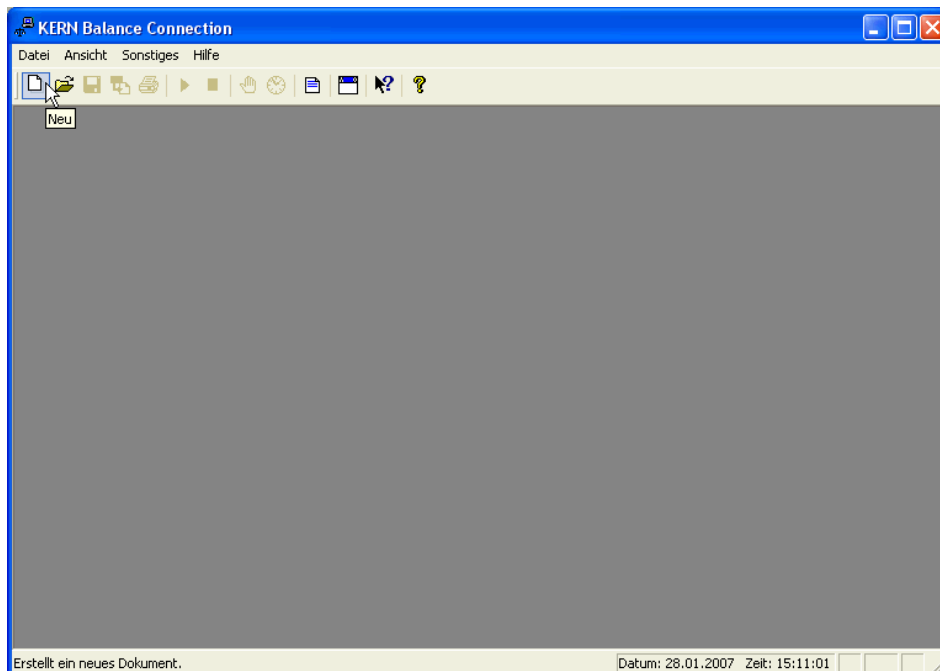


Fig 0-1

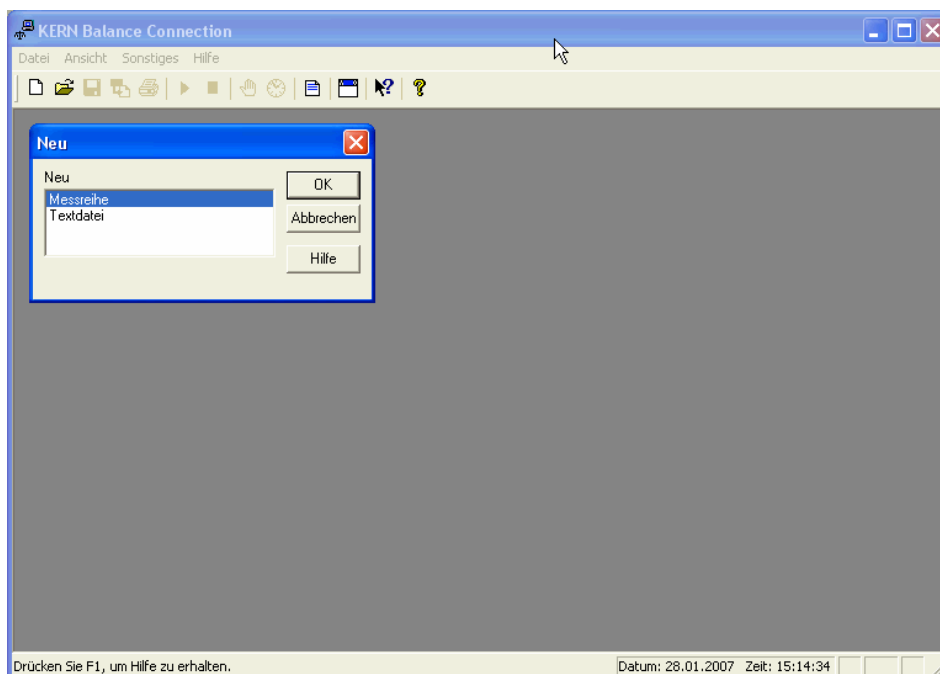


Fig 17-2

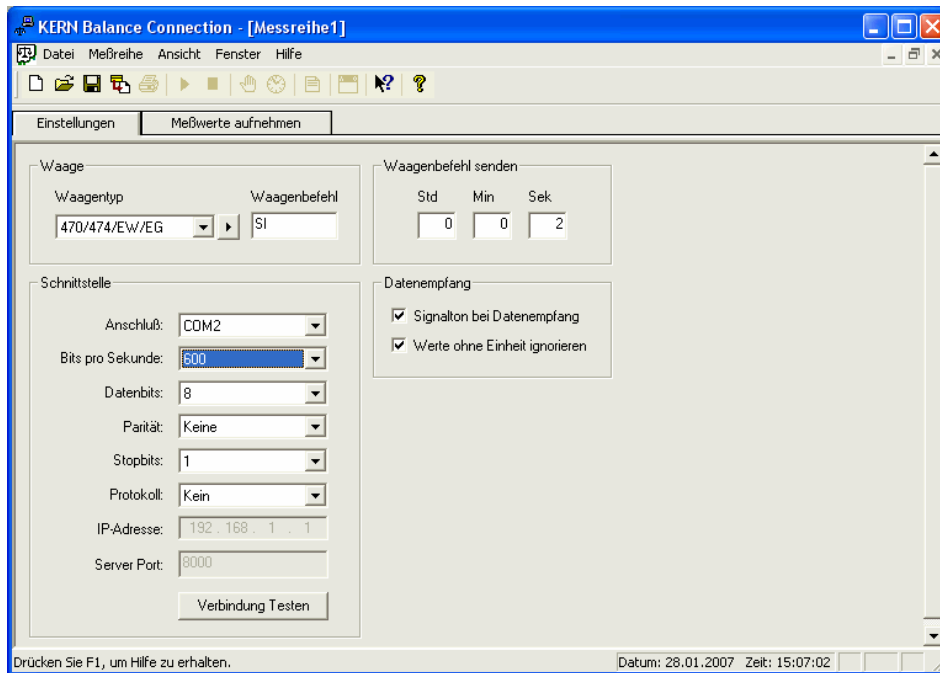
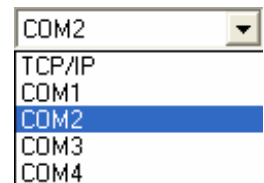


Fig 17-3

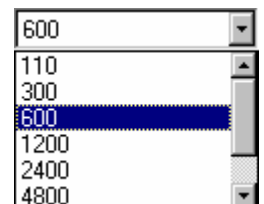
5.1.1 Interface setting

The balance is connected to the PC by means of a serial cable. Before data can be transferred, it must be ensured that the same interface parameters are set on the balance and on the PC. This is exactly what happens at this point in the program.

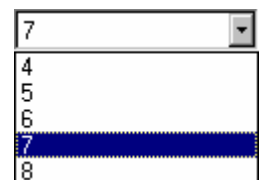
CONNECTION (SERIAL INTERFACE PC OR TCP/IP): select here the interface which communicates with the balance.



BAUD RATE (VELOCITY): select here the data transmission velocity (from 110 to 19200 Baud).



DATA BITS: select here the amount of bits that are used to depict one character.



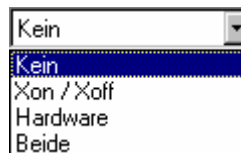
PARITY this selection achieves that each character sent is supplied with a parity bit by the PC. Possible settings are *space* (Leerzeichen), *mark* (Markierung), *even* (gerade), *odd* (ungerade) and *none* (keine).



STOPBITS: select here the amount of bits which are sent after each character.



PROTOCOL: select here the control of the data stream by software handshake (Xon/Xoff) or hardware handshake (RTS/CTS). Possible settings are *none* (kein), Xon/Xoff, hardware and *both* (beide).



- **IP-ADDRESS:** Enter the IP-address here for balances which are connected to a network.

- **SERVER PORT:** Enter the Server-Port set on the balance here for balances which are connected to a network. The default setting for the balance is 8000.

By clicking on **CHECK THE CONNECTION** and pressing then **SEND BALANCE COMMAND** you can see if a successful connection can be established with the settings made by you. A successful connection looks about as follows:

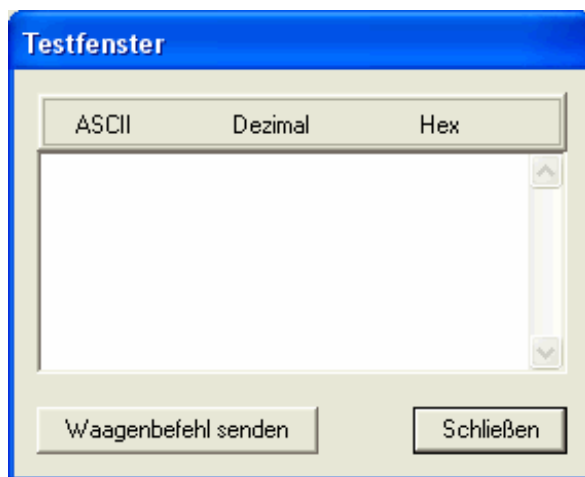


Fig 17-4

Close the test windows by clicking on **CLOSE**. The software returns to the previous menu **SETTINGS/INTERFACE**).

5.1.2 Applying balance types

- Click on the ARROW BUTTON behind the display window for the balance type (this is shown as 822/824/870/880 in our example). A choice list will appear (see following window).

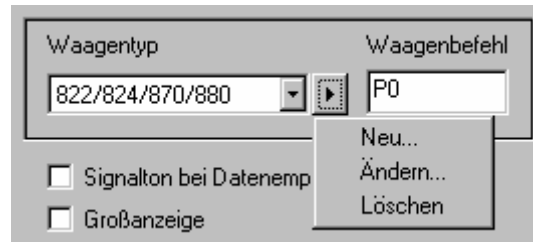


Illustration 17-5

- Select NEW... in order to create a new balance type (if several balances are involved it is advisable to select explicit and distinguishable designations). Also enter the remote control command for data transmission to your balance in the BALANCE COMMAND field (you will find further information on this in the operating instructions provided with your balance). Complete balance application by pressing OK.

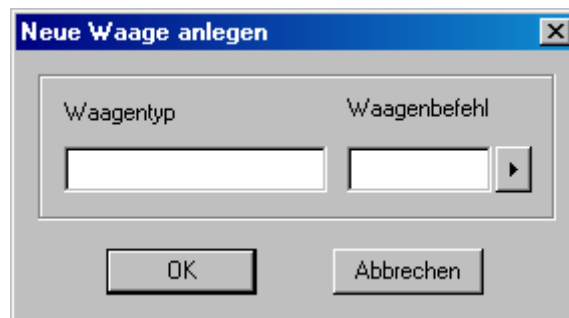


Illustration 17-6

- Select ALTER... in order to alter the balance command.

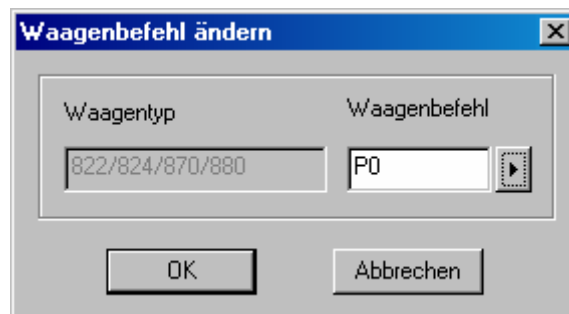


Illustration 17-7

- Select DELETE in order to delete a balance if this is no longer required. The program will make sure that you really want to delete the selected balance. If you do, confirm this by selecting YES.

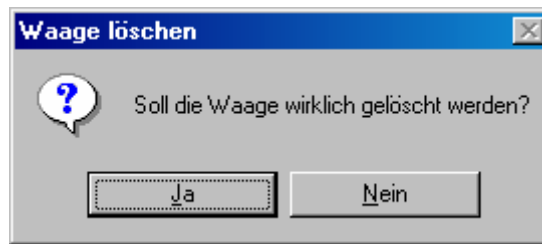


Illustration 17-8

In addition to this you can make the following adjustments in the data transmission field:

- **AUDIBLE SIGNAL UPON RECEIPT OF DATA:** This is where you can stipulate whether an audible signal is given every time data is transmitted successfully from the balance to the PC. You can thus also check acoustically whether the data from the balance has been accepted by your application.

5.2 Importing measuring values into text file

5.2.1 Example Humidity Meter

Measuring values delivered by a humidity meter may also be imported into the BalanceConnection.

The PC interface of the humidity meter should be set as described in chapter 9 - Supplement Balance Configurations.

For instructions on how to change the settings or to reset the default settings of the humidity meter please refer to its operating instructions.

Now start a new measuring sequence in BalanceConnection as described in chapter 5.1.. This time, however, in the dialogue box NEW select the Text File instead of the Measuring Sequence option.

This opens a window (without values):

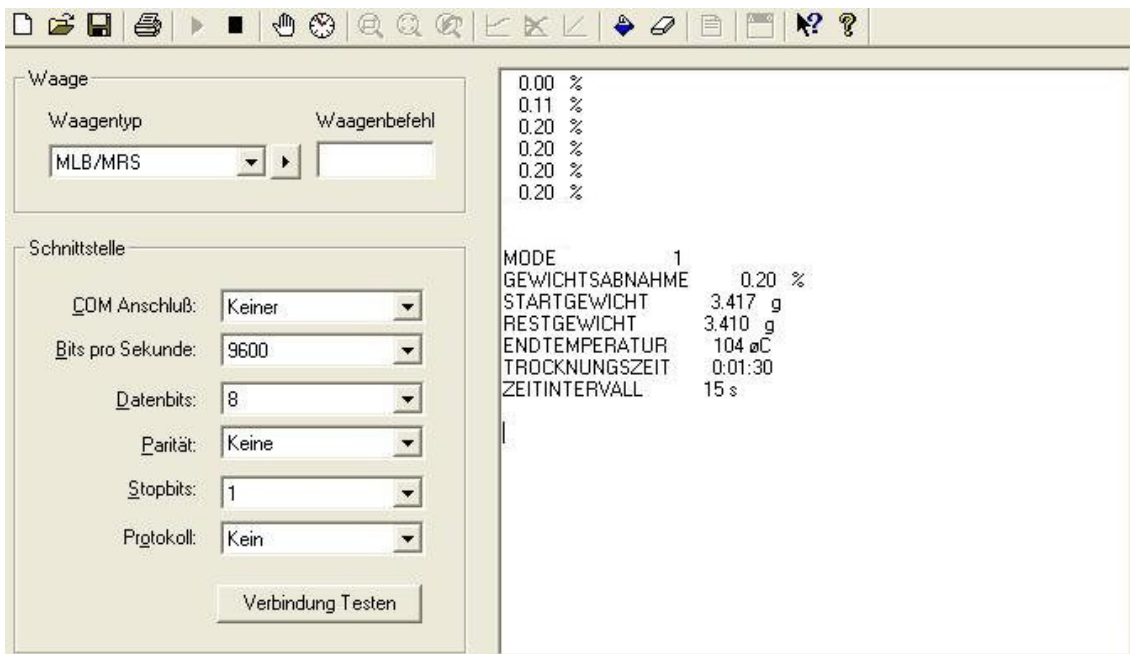


Fig 17-5

Set the balance type. Check, whether the interface parameters are set correctly, otherwise change the parameters to correspond with those of the humidity meter (as described in chapter 5.1.1).

To start measuring, click the start button on the tool bar:



Press the Print key on the balance and data will be shown in the window on the right.

When you have finished measuring, you can save the measurements by pressing the button



Finish

Store these results under FILE -> STORE or by pressing the key



and open it later by using FILE -> OPEN.

5.2.2 Example Counting System

Balances of the ITS or ITT type may be used as counting systems.

As you have to connect the PC and reference balance at the same time, the balance has to be connected to the optionally available Y-cable (ITB-A09) which turns the single interface into two interfaces for the PC and the reference balance.

The PC interface of the balance should be set to default settings (see chapter 9 – Supplement Balance Configurations), the communication settings of the reference balance for the counting balance are recognised automatically (see operating instructions for counting system).

For instructions on how to change the settings of the balance or to reset it to default settings please refer to its operating instructions.

Now start a new measuring sequence in BalanceConnection as described in chapter 5.1.. This time, however, in the dialogue box NEW select the Text File instead of the Measuring Sequence option.

This opens a window (without values):

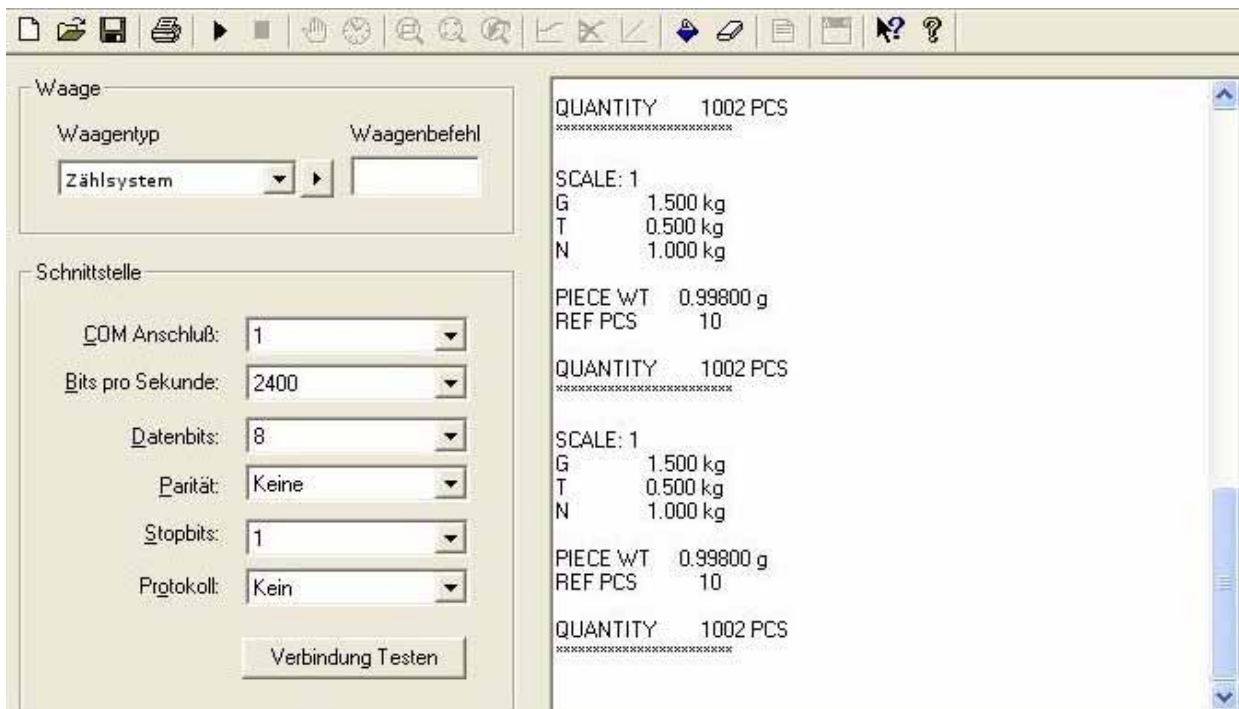


Fig 17-6

Set the balance type. Check, whether the interface parameters are correctly set , otherwise change the parameters so that they correspond to those of the balance (as described in chapter 5.1.1).

To start measuring, click the start button on the tool bar:



Press the Print key on the balance and data will be shown in the window on the right.

When you have finished measuring you can end measuring by pressing the button.



Store these results under FILE -> STORE or by pressing the key



and open it later by using FILE -> OPEN.

According to the operating manual, you have to set the balance to DIALOG MODE in order to prompt data from the PC. Now you can use the remote control command to request data either manually or time-controlled (see chapter 5.2).

6 Send Balance Command

The weighing data query intervals (h/min/s) can be adjusted.

6.1 Recording measured values

(Please note: Operate the button above the “start” description)

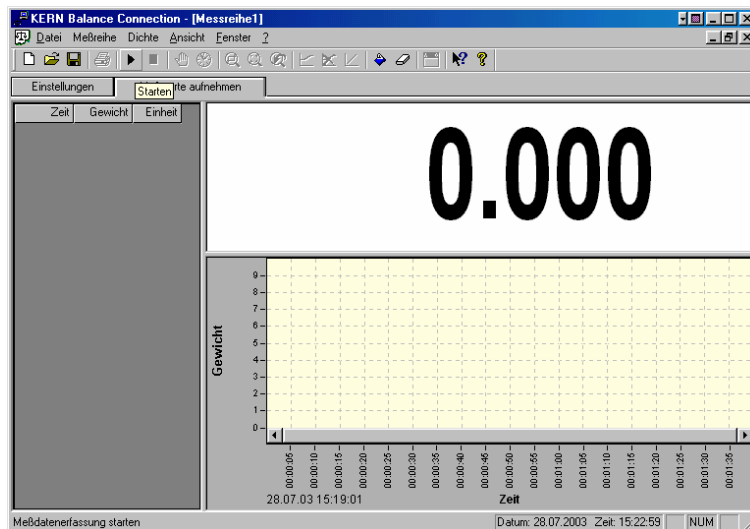


Fig 0-1

After operating the “start” button

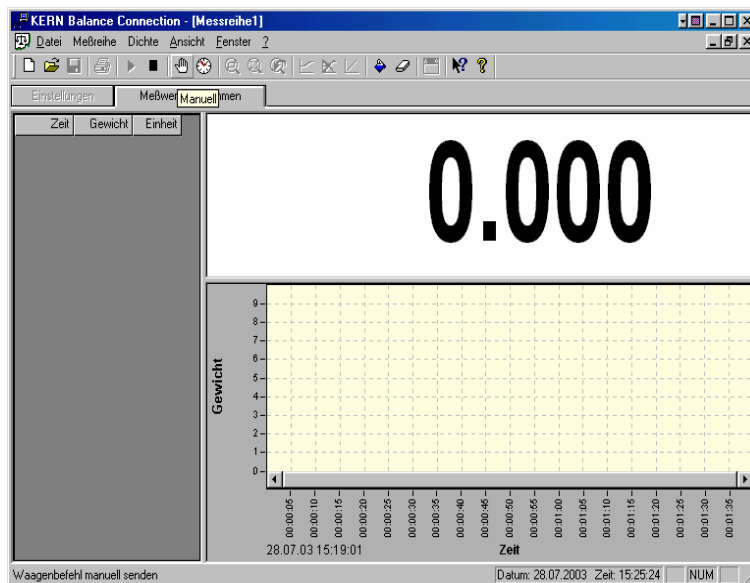


Fig 24-2

the measured values can be queried “manually”, (please note: Operate the button above the “manual” description)

or by using the “timer” function (see chapter 4.4.2).
(Please note: Operate the button above the “timer” description)

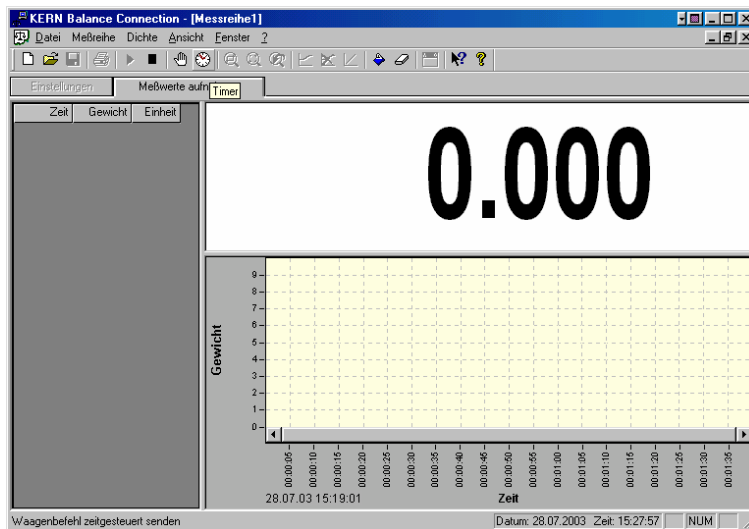


Fig 24-3

During the recording of series of measurements the current measured values can be read off on the display. The chart underneath the measured value display indicates the position of the individual measuring points.

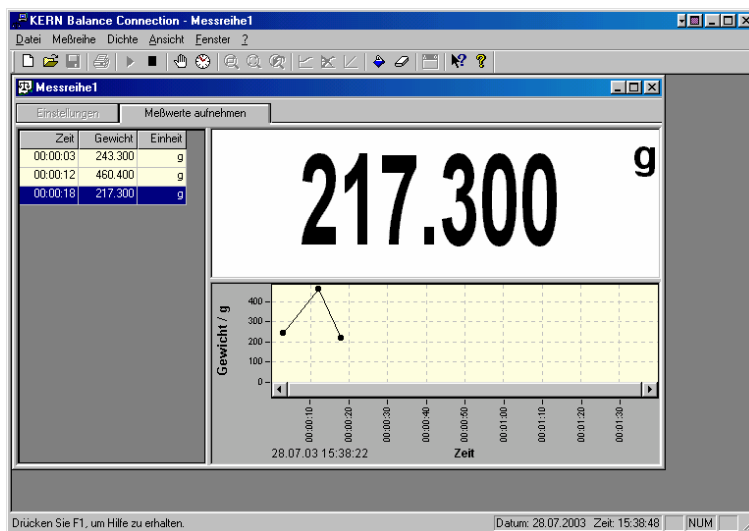


Fig 24-4

The “stop” key concludes data registration.

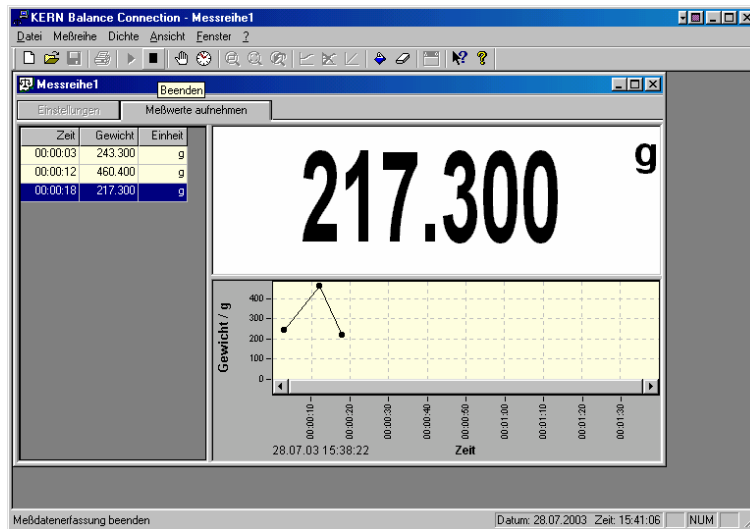


Fig 24-5

Observe: Operate the button above the “stop” description (convex button)

6.2 Exporting measuring values

If measuring sequences already recorded in the software are required by different applications these may be stored in any place with the help of the export function (see image).

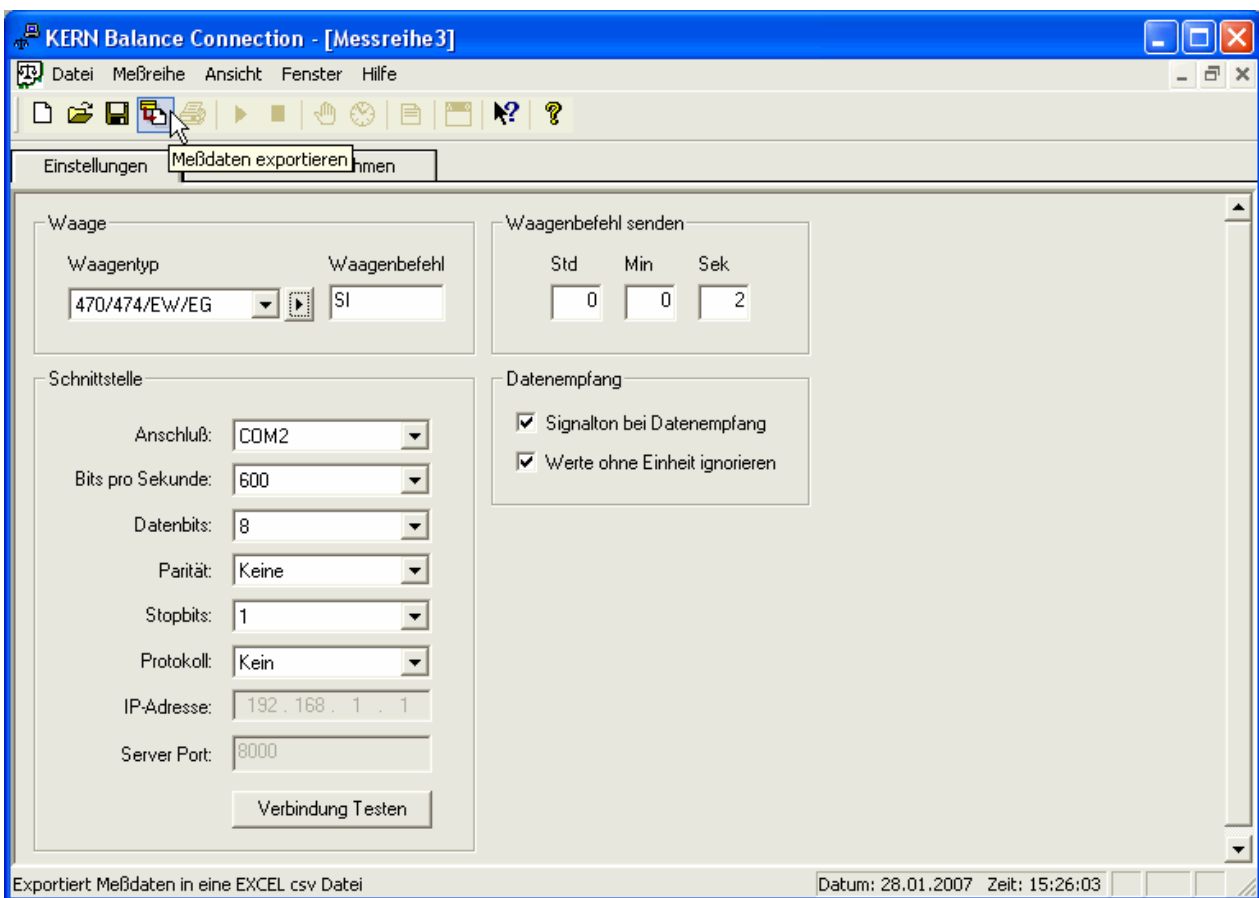
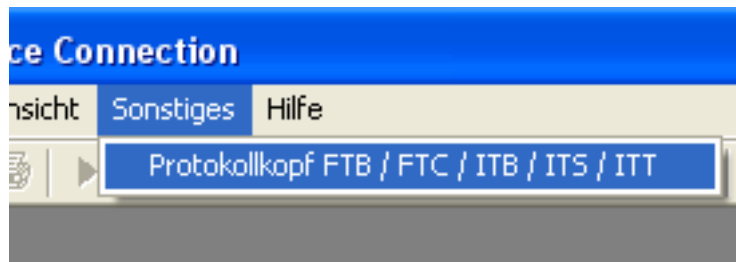


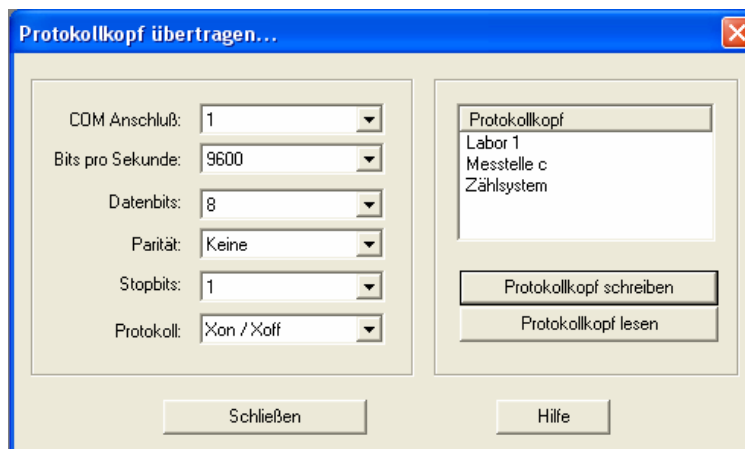
Fig 24-6

7 Read and write protocol head

(Models FTB / FTC / ITB / ITS / ITT only)



To store a protocol head on a balance (FTB / FTC / ITB / ITS / ITT), use this command. The following dialogue appears:

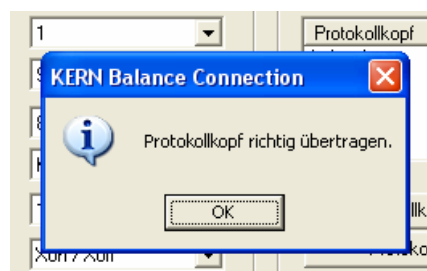


Preconditions

1. The balance must be connected with a suitable cable to the RS232C interface of a PC.
2. The interface of the balance must be set to operating mode **Dialogue**.
3. The communication parameters (protocol, data bits, parity and transfer speed) must be set to the same values in the dialogue and the balance (see supplement chapter 9).

Reading protocol head

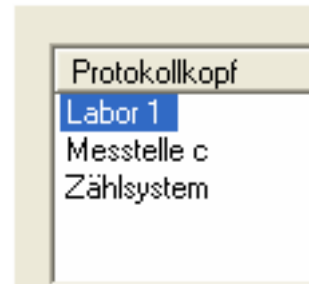
First read-in protocol head. Then press the "Read protocol head" button. When the protocol head transfer was successful the following message appears:



The currently set protocol head of the balance is displayed in the window on the right.

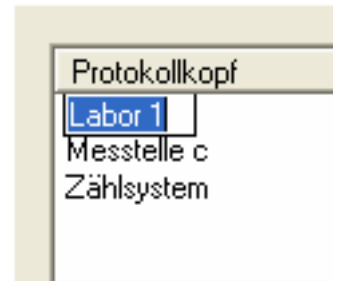
Changing the protocol head

It is now possible to change the protocol head. To do this, mark the line that is to be altered.



After a moment click the line again. A text cursor appears that can be used to change the text of the line.

This is the way to change all lines, as desired.



Writing protocol head

After the protocol head was changed as desired it needs to be written back to the balance. To do this, press the "Write protocol head" button. The protocol head will be written after a short moment and indicated in the print-out of the balance.

8 Help function

The program disposes of a context-sensitive help function. That means that at any given point of time helpful information for momentarily selected menu items can be called up and displayed by pressing the F1 key. If no menu item is activated, the contents page of the help function (see 8-1) is displayed.



Illustration 0-1

9 Application examples

The following example shows how easy it is to transfer data to a spreadsheet.

9.1 Data transfer from a KERN balance to Microsoft EXCEL¹

In the first column shall be displayed the weighing value, in the second one the respective unit and in the third the current time. Fig. 0-1 shows the required settings under MEASURING VALUE OUTPUT.

As already mentioned, the setting for decimal point or comma must correspond to that on the receiving program. Otherwise this can lead to faulty weight values.

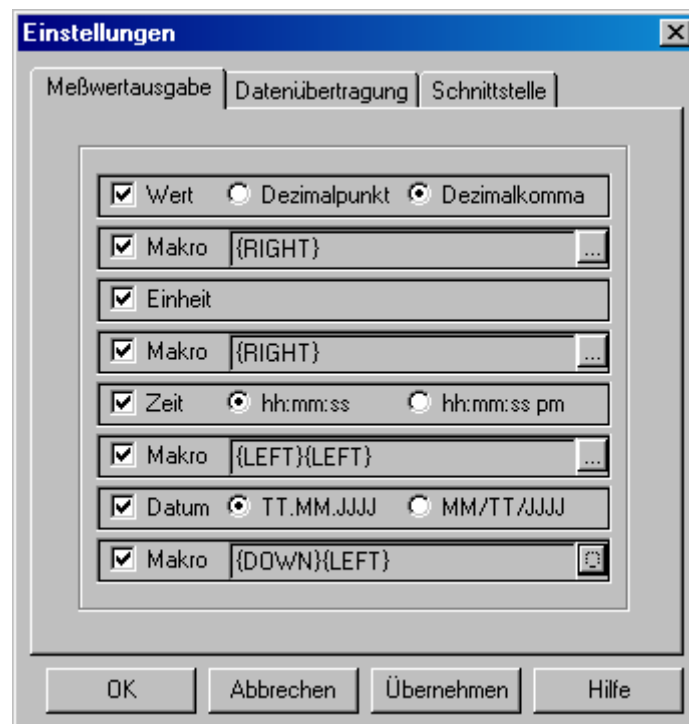


Illustration 29-1

¹ EXCEL is a registered trademark of Microsoft Corporation
SCD-BA-0633

Illustration 9-2 shows the relevant output in EXCEL.

The screenshot shows the Microsoft Excel interface with a table containing the following data:

	A	B	C	D	E	F
1	185,3 g		13:36:48			
2	133 g		13:36:53			
3	156,1 g		13:37:00			
4	57,3 g		13:37:04			
5	90,7 g		13:37:12			
6	111,8 g		13:37:20			
7						
8						
9						
10						

The status bar at the bottom indicates 'Bereit' and 'NF'.

Illustration 29-2

10 Addition – Balance configuration

This additional description contains information on the necessary settings that are indispensable to do to make a communication between balance and PC possible.

If a balance type is selected in SETTINGS/DATA TRANSMISSION, the software automatically takes over all the data linked to this balance type (baud rate, data bits, parity, stop bits and protocol) on the registration card INTERFACE. Concerning software is concerned, all settings for a successful data communication have been now carried out. The parameters of the balance software merely have to be brought into line.

The following settings are to be made (with the aid of the specific operating instruction):

For model KERN 470	for model KERN 474
<ul style="list-style-type: none"> • Baud rate : 2400 Balance settings: • Data bit: 7 bit • iF. 2 • Parity Even • 81 o.c. 3 • Stop bit: 1 • 82 b.L. 1 • Protocol: None • 83 PA 0 (not all units) 	<ul style="list-style-type: none"> • Baud rate : 2400 Balance settings: • Data bit: 7 bit • 6 IF 1 • Parity Even • 61 o.c. 3 • Stop bit: 1 • 62 b.L. 1 • Protocol: None • 7 un. 1
for model KERN 572/573/KB/DS/DE/440/CB NKE/QKE/CKE/FKB	for model KERN 770/GS/GJ/CGB/PGB/AGB
<ul style="list-style-type: none"> • Baudrate 9600 • Data bit: 7 bit • Parity Even • Stop bit: 1 • Protocol: None • Set „Autoprint“ and „Autoprint PC“ to OFF • Numerator must be switched off 	<ul style="list-style-type: none"> • Baud rate : 1200 Balance settings: • Data bit: 7 bit • 5 1 4 • Parity Odd • 5 2 3 • Stop bit: 1 • 5 3 1 • Protocol: None • 5 4 2 • • 6 1 2 • • 6 2 2 • • 6 4 1 • • 7 2 1
for model KERN 822/824/870/880	for model KERN EW/EG
<ul style="list-style-type: none"> • 600 brd (Baudrate) • Par E (parity) • Print St (single print of stable value) • Per-ALL off (print-out of weighing result only) • Prt-dEL off (no print delay) • GLP off 	<ul style="list-style-type: none"> • Baud rate : 2400 Balance settings: • Data bit: 7 bit • 6 0.c. 3 • Parity Even • 7 b.L. 1 • Stop bit: 1 • Protocol: None

for model KERN EC <ul style="list-style-type: none"> • Baud rate : 1200 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> • 4 IF 1 • 41 o.c. 3 • 42 b.L. 1 • 5 un. 1 	for model KERN CPB / RPB <ul style="list-style-type: none"> • Baud rate : 4800 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> Standard
for model KERN ARS/ARJ/PRS/PRJ <ul style="list-style-type: none"> • Baud rate : 9600 • Data bit: 7 bit • Parity Even • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> Standard 	for model KERN ABS/ABJ <ul style="list-style-type: none"> • Baud rate : 9600 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> • Interface: ifUser • iob: 9600 • iod: Cr • iop: No • ios: S1 • iof: UF1 • ioh: off
for model KERN PB <ul style="list-style-type: none"> • Baud rate : 9600 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> Standard 	for model KERN ITS/ITT as counting system <ul style="list-style-type: none"> • Baud rate: 2400 • Data bit: 7 bit • Parity Even • Stop bit: 1 • Protocol: XON/XOFF Balance settings: <ul style="list-style-type: none"> Counting system default settings Activate all outputs on balance.
for model EW-N/EG-N/ <ul style="list-style-type: none"> • Baud rate : 1200 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> • 7 IF 1 • 71 oc 3 • 72 bl 1 • 73 Pa 0 • APrF 2 	for model MLB/MLS <ul style="list-style-type: none"> • Baud rate: 4800 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> Standard
for model KERN PLS/PLJ/PLT/ALT/ILT <ul style="list-style-type: none"> • Baud rate : 9600 • Data bit: 8 bit • Parity none • Stop bit: 1 • Protocol: None Balance settings: <ul style="list-style-type: none"> • Standard 	for model PES/PEJ/FEJ <ul style="list-style-type: none"> • Baud rate:1200 • Data bit: 8 bit • Parity none • Stop bit: 2 • Protocol: None Balance settings: <ul style="list-style-type: none"> • 61 oc 7 • 62 bl 1 • 63 Pa 0 • 64 dL 7 • 65 St 2

for model PLT/ALT/ILT additionally

- Baud rate : 9600
- Data bit: 8 bit
- Parity none
- Stop bit: 1
- Protocol: None
- P2.3: NO
- P2.4: NO
- P2.5: NO
- P2.6: NO
- P2.7: NO
- P2.8: NO

for model FIS

- Baud rate : 9600
- Data bit: 8 bit
- Parity Even
- Stop bit: 2
- Protocol: None
- Balance settings:**
 - 70 23
 - 71 96
 - 72 o8
 - ... all 0 till
 - 77 51 1
 - ... all 0 till
 - 78 55 1
 - ... all 0
 - 60 1
 - 61 96
 - 62 o8
 - ... all 0 till
 - 63 51 1
 - ... all 0 till
 - 65 55 1
 - ... all 0

for model FTC/FTB

- | PRINT MODE | Balance settings: | DIALOGUE MODE | Balance settings: |
|---|---|---|--|
| <ul style="list-style-type: none">• Baud rate : 2400• Data bit: 7 bit• Parity Even• Stop bit: 1• Protocol: XON/XOFF | <ul style="list-style-type: none">Node: PrintdefStr:<ul style="list-style-type: none">• header: off• gross: off• net: on• tare: off• pcs: off• aph: off• ref: off• 4LineF: off• F Feed: off• LnFor: multi | <ul style="list-style-type: none">• Baud rate : 9600• Data bit: 8 bit• Parity none• Stop bit: 2• Protocol: XON/XOFF | <ul style="list-style-type: none">Node: DialoguedefStr:<ul style="list-style-type: none">• header: off• gross: off• net: on• tare: off• pcs: off• aph: off• ref: off• 4LineF: off• F Feed: off• LnFor: multi |

for model ITB/ITS/ITT

PRINT MODE

- Baud rate : 2400
- Data bit: 7 bit
- Parity Even
- Stop bit: 1
- Protocol:
XON/XOFF

Balance settings:**Node:** Print**defStr:**

- line fmt: single
- format: custom
- Line 1: Net
- Line 2-20: Not used

DIALOGUE MODE

- Baud rate :
9600
- Data bit: 8 bit
- Parity none
- Stop bit: 2
- Protocol:
XON/XOFF

Balance settings:**Node:** Dialogue**defStr:**

- line fmt: single
- format: custom
- Line 1: Net
- Line 2-20: Not used

for model KERN ABT

- Baud rate : 1200
- Data bit: 8 bit
- Parity none
- Stop bit: 1
- Protocol: None

Balance settings:

- Interface: ifUser
- iob: 1200
- iod: Cr
- iop: No
- ios: S1
- iof: DF1
- ioh: oFF