FÜR MESSBAREN ERFOLG

SOEHNLE PROFESSIONAL

3030

Operating Manual

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Content

Thank you for choosing this Soehnle Professional product. All the features of this product were designed to the state of the art and are optimised for simple and straightforward use. If you have any queries or experience any problems with the device that are not addressed in the operating instructions please contact your Soehnle Professional service partner or visit us on the Internet at www.soehnle-professional.com.

1.1 Notes on the Operating Manual

This Operating Manual is an extract from the reference manual for the 3030 Programming Terminal. Its purpose is to help you carry out your first steps and simple operations with the scale. This detailed manual is available to you on the CD supplied so that you can obtain maximum performance from your new appliance.
It contains complete information on the application programs and the Setting mode, which helps you to set the scales to meet your specific requirements exactly.
All information refers to the standard version of the 3030 Programming Terminal. Differences may occur with special versions.

1.2 Description of the appliance

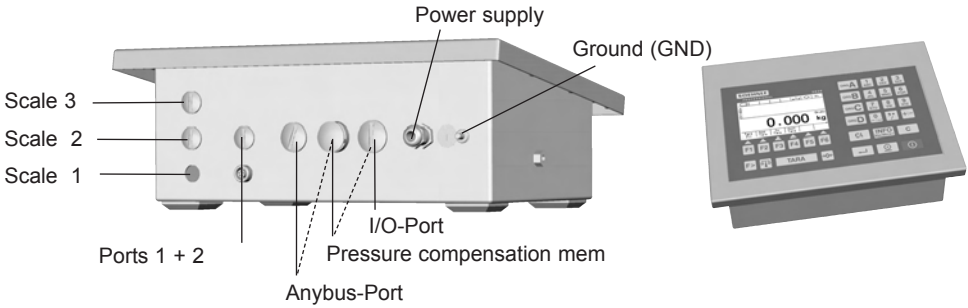
Technical data

- Housing made of stainless steel, protection type IP 67, integrated power supply 230 VAC, optional DC/DC converter, 12/24/48 V.
- 3 measuring points connectable internally; total of up to 30 measuring points.
- Membrane keyboard with a total of 32 keys, 6 function keys, 4 organisation data keys, alphanumeric keys.
- Display: dot matrix 240 x 128 pixels, backlit and dimmable.
- Memory space: fixed value memory for a total of 400 fixed values, valid for all programs, failsafe, alibi memory for 2 million inputs optional.
- Ports: 1 x RS 232, additional ports optional, including bus, analogue output 0 - 20 mA.
- Operating temperature: -10 to +40 degrees C
- Calibratable to Precision Class III for n = 6000 e for multirange and multidivision scales.
- Calibratable weighing range 0.1 kg ...120 t.
- Smallest permissible input signal per calibration value = 0.25 µV.
- Load cell power supply, either 5 VDC or 5 VAC, 33 Hz.

1.3 Installation and commissioning

Before connecting up the appliance, make sure that the power supply complies with the specifications on the appliance's nameplate and the power plug version conforms to local regulations.
Place the connected scales on a level and stable surface. Select an installation site where the appliance is protected from shocks, vibrations, intense heat or cold, draughts, chemicals and moisture.
The appliance may only be opened by trained service technicians. Before working on the appliance, unplug the power supply. After power-on, the measured values stabilise after a warm-up period of 30 minutes.
Further information on power-on is provided in the 3030 Operating Manual on the CD.

Connections



1.4 Operating concept, keys and display symbols

The setting options are divided into two function ranges:

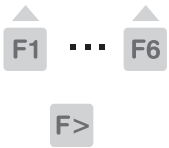
Setting mode
Here you can enter user-definable settings on the appliance to adapt the weighing system to your requirements. For a description, refer to Chapter 2 Setting Mode in the manual.

Program settings	Terminal	Scale	IT	Service
Weighing + taring Totalising + batching Counting Checking Classifying Recipes Weight conversion Weighing vehicles I/O port programming Percentage weighing	Version Display Keypad Date/time Organisation data User password Reset terminal	Scale parameter	Data transfer Alibi memory Port 1 Port 2 Print view I/O port settings Fieldbus Barcode	Only for service engineers.

Programming mode

Here, select the required weighing application program. After selecting and activating the application program, the scale is ready to operate.

Function keys



Call specific functions by pressing function keys F1 to F6.
The keys are preprogrammed to various functions depending on the program or situation. The function name appears above the key in the function bar in the display.Depending on the program, the function keys are programmed to a maximum of 4 levels.
Roll through the levels by pressing the function change key.

Navigation with the function keys

↑	Moves the marking arrow up the list.
↓	Moves the marking arrow down the list.
Exit	Exits Setting mode.
Continue	Calls the marked menu option.
Back	Returns to the next higher level.
Cancel	Returns without saving a change.
Clear	Clears an input and returns.
Accept	Accepts an input or change.
→	Moves the cursor one step to the right.
←	Moves the cursor one step to the left.

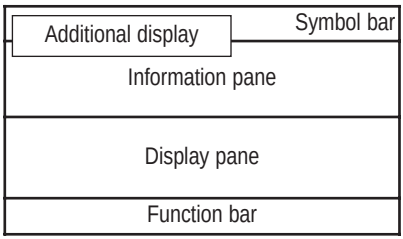
Input and control keys

Numeric keys to type in numerical values.

1 ABC ... 9 XYZ	Multiple programming of numeric keys to type in alphabetic characters
ORG A ... ORG D	Calls organisation data
Cl	Clears complete input
C	Clears last number
INFO Max|Min|e=	Info key, electronic nameplate with calibration data. Calls saved information for application programs
F>	Function change key
	Scale change key
TARA	Tare key
→0←	Zeroing key
	Enter key
	Print key
	On / Off

Display

The display shows a number of different views depending on the situation. It is divided into display panes.



Additional display: Displays second units, weight values for counting, differences with setpoint, etc. Press F3 Unit to activate as required.
Symbol bar: Displays information on the status of the activated measuring point.
nformation pane: Displays situation-dependent organisation data, totals for totalising, check special characters, classes for classifications, operator prompts, switching points.
Display pane: Displays weight values, quantities, unit characters.
Function bar: Displays function descriptions of the 6 program med situation-dependent function keys.

Symbols in the display symbol bar


Alibi memory capacity 100%


Alibi memory capacity 80%


Alibi memory capacity empty


Keylock


Second unit


Multirange/Multidivision 1


Multirange/Multidivision 2


Multirange/Multidivision 3


Resolution X10 (times 10)


Zero


Hold function active


Unit character

Symbols in the display information pane


Setpoint reached precisely


Over tolerance


Under tolerance


Within tolerance


Under minimum load


Over upper limit Class 5

Symbol for standstill

After placing the weighing product on the scale, the scale requires some time to settle.
Until the scale reaches standstill, the unit character (kg, g) is not displayed.
The unit character appears when the scale reaches standstill and a stable value is obtained.

2. Basic functions

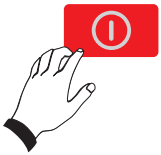
The basic functions are similar or identical for all application programs.

2.1 Power on/off

Power-on
After power-on and during the run-up phase, the Soehnle Professional logo is displayed.
The measuring points are briefly listed as they are detected.
The scale is zeroed after the power-on routine
(this may differ with non calibratable calibration).
After power-on, the last application program activated is reopened.

Zero range limits at power-on
Calibratable: Zero range at power-on 20% of the weighing range.
The default value is -5% to +15% of the weighing range.
Non calibratable: Zero range at power-on -99% to +99% of the weighing range.
If power-on is outside the zero range at power-on, the scale displays error message Error 50 / 51 Value outside zero range limit.
When the cause for overload or underload is rectified, the scale is zeroed without having to switch the appliance on and off and is ready to operate.

Response to power failure
The scale returns to the previous settings when power is restored.



Power-off
Press the On/Off key.
If the activated measuring point is loaded or a menu is open, the scale switches off only 3 seconds after the On/Off key is pressed.

2.2 Selecting a program

Select one of the application programs from the list.
Press the function change key (F>) to switch to the Setting Functions level.

Gross	X 10	Unit		Program	Setting mode
F1	F2	F3	F4	F5	F6

Press F5 Program.
You can now choose from 10 different application programs.
Selecting a program: Press arrow key F3 Up or F4 Down. Accept by pressing F6.

2.3 Zeroing

Press the zeroing key to correct minor deviations from zero, e.g. caused by soiling on the scale.
Zero range calibratable and non calibratable:
-1 to +3% of the weighing range.
If zeroing is not possible, the error message "Above zero range limit" or "Below zero range limit" appears for two seconds in the display.

Zero tracking
Zero tracking automatically corrects minor deviations in the zero display.

2.4 x10 display

Shows the weight value with an additional decimal point at ten times the resolution.
Press the function change key (F>) to switch to the Setting Functions level.

Gross	X 10	Unit		Program	Setting mode
F1	F2	F3	F4	F5	F6

Press F2 (x10).

Calibratable scale
If the scale is calibrated as calibratable, the ten times resolution is displayed as long as you hold down the x10 key.
When you release the key, the x10 display is disabled after 5 seconds.

Non calibratable scale
If the scale is calibrated as non calibratable, the ten times resolution appears constantly in the display. Press the key once to enable the ten times resolution function. Press the key again to disable the ten times resolution function.

2.5 Gross display

Displays the gross weight when the scale is tared.
Press the function change key (F>) to switch to the Setting Functions level.

Gross	X 10	Unit		Program	Setting mode
F1	F2	F3	F4	F5	F6

Press F1 Gross.
The display indicates the gross weight and the message "Gross" as long as you hold down the key.

2.6 Organisation data (identifiers)

Organisation data help to assign identifiers to document weighing operations, e.g. article number, supplier, machine operator.

They are available in all application programs.

ORG A

The 3030 Programming Terminal has 4 organisation data memories.

ORG B

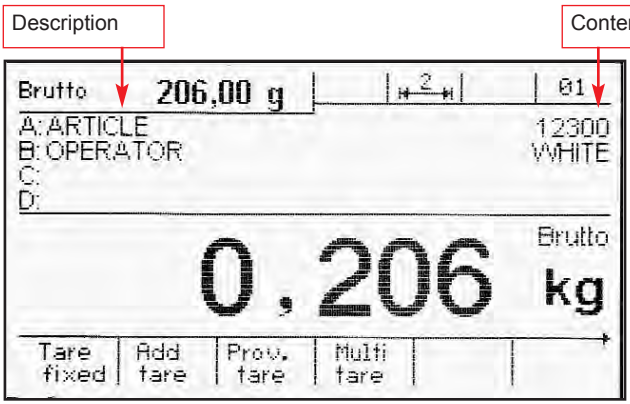
Each memory has:
- one user-definable description, e.g. "Article no." (up to 12 characters)
- one user-definable content, e.g. "1234" (up to 28 characters)

ORG C

The description is entered in Setting mode; the content is entered during a weighing operation. Type the description and content alphanumerically into the numerical keypad.

ORG D

Four keys "ORG A" to "ORG D" are provided to call the organisation data memories.



Description input
Must be entered in Setting mode. For more information, see the detailed CD manual.

Content input
In Weighing mode, press the associated Org key to type in the content for the organisation data memories. Type the content data alphanumerically into the numerical keypad (max. 28 characters).
Confirm by pressing F6 Accept.
The description and content are then added to the weighing result as identification.
The content of the organisation data memory is retained until it is overwritten or cleared.

Printout: Press the "Org A", "Org B", "Org C" and "Org D" keys together with F6 Accept to print out (only possible if a print view is saved). Only the organisation data contained in an entry are printed out.
Show content: Press the associated ORG key.
Clear content: Press the associated ORG key. Press the CL key followed by F6 Accept.
Info: When a barcode function is used, the organisation data display is disabled.

2.7 Switching between scales

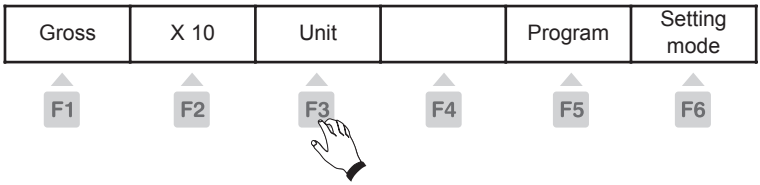
Switch between several connected scales.
The 3030 Programming Terminal has up to three measuring points integrated and can connect up to a maximum of 30 measuring points. Switchover between the measuring points is either manual or automatic.

Manual switchover
Press the key with the scale symbol briefly.
The activated measuring points are switched one after the other.
Press the key with the scale symbol and hold down. An input box opens for you to enter the measuring point number directly and accept it.

Automatic switchover
For a description, see the "Count" function. The display shows the number of the activated measuring point on the right of the symbol bar. Press the Info keys to display the calibration and scale data of the activated measuring point.

2.8 Unit

Display the weighing result in a second unit. The unit in the display pane is defined in Setting mode during calibration.
You can activate or deactivate the display of the second unit in the additional display.
Press the function change key (F>) to switch to the following level.



Press function key F3 Unit.
Define the second unit in Setting mode for each connected scale. For information on the Setting mode, see the detailed CD manual.

2.9 Alphanumeric input

Use the combined numerical/alphanumeric keypad to type in numerical and alphanumeric inputs (similar to a mobile phone keypad).

Types of input box
- Display boxes with no type-in option
- Display/type-in boxes with numerical input option
- Display/type-in boxes with alphanumeric input option

Activating input boxes
- Situation-dependent by means of function keys or direct numerical input.
  The Input view appears in the display. Existing values are displayed.
  The name of the input box is displayed in the symbol bar. A unit character is displayed if the input refers to a dimension.

Input procedure
1. Numerical boxes
You can type in digits 0 to 9 using the numerical keypad. Input is right-flush. A cursor flashes under the last digit entered.
Press the C key to clear the digit marked by the cursor. Press the CL key or Cancel function key to clear the complete input. The Cancel function key ends the input without saving new input values. Existing values are retained.
The Accept function key accepts the input value and returns to the application program.
In Setting mode, Display/Decimal Separator, you can define whether to have a dot, comma or blank as default decimal separator. Only the default number of characters can be typed into an input box. Any other inputs are neither displayed nor accepted.

2. Alphanumeric boxes
You can type in digits 0 to 9 using the numerical keypad. Input is left-flush.
The numeric keys have multiple programming and are assigned letters (upper case) or special characters.
In addition, there are special character keys (,./ and +-). If you press a numeric key twice within one second, this activates a rolling function to access a character assigned to this key.
If you do not press the key a second time within one second, the character pressed is accepted and the cursor moves on to the next position.
Numerical inputs can be made in direct succession without any waiting period, as long as the same number key is not pressed several times in succession. A cursor flashes under the last position entered.
You can move the cursor by using the arrow keys.
The C key cancels the last character to the left of the cursor or the character under the flashing cursor.
The CL key clears the complete input.
The Cancel function key terminates the input without saving the new input values. Existing values are retained.
The Accept function key accepts the input value and returns to the application program.
Only the default number of characters can be typed into an input box.
Any other inputs overwrite the last character.

3.0 Application programs

The various application programs on the Soehnle 3030 Programming Terminal offer you a wide range of solutions for weighing operations.

You can adapt the application programs to your specific needs in Setting mode. For information on this, please refer to the subject of Setting mode in the detailed CD manual.

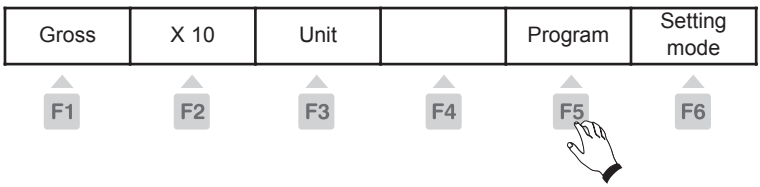
Below is a list of the application programs available to you:

1. . . . . .Weighing and taring
2. . . . . .Totalising and batching
3. . . . . .Counting
4. . . . . .Checking
5. . . . . .Classifying
6. . . . . .Recipes
7. . . . . .Weight conversion
8. . . . . .Vehicle weighing bridge
9. . . . . .I/O port programming
10. . . . . .Percentage weighing

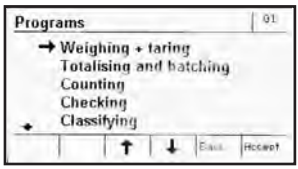
You will find a description of programs 5 to 10 in the detailed CD manual.

3.0.1 Selecting an application program

Switch the appliance on. After the power-on routine, the appliance starts the last activated application program automatically.
Press the function change key (F>) to switch to the Setting Functions level to select an application program.



Press F5 Program. You are now in the Program selection menu.



Selecting a program:
Press arrow key F3 Up or F4 Down.
Press F6 Accept to activate the marked program.

3.1. Weighing and taring

Basic functions: Weighing and measuring gross and net weights.
Warning: This description applies to the options Autotare and Totalising tare in the factory setting. When you activate these options in Setting mode, it affects the procedures described.

3.1.1 Function keys

The F1 to F6 function keys help you control the functions.
They are programmed in 2 levels.
Switch between the levels by pressing the function change key (F>).

1st level: taring functions

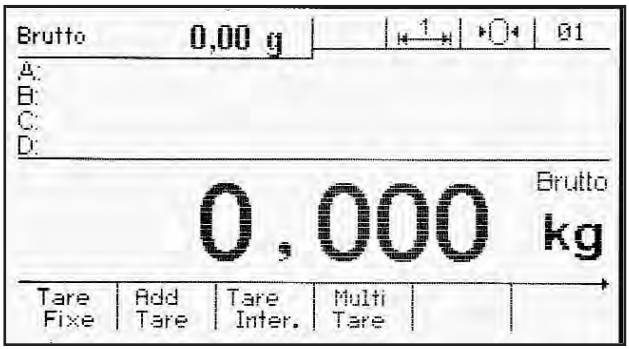
F1	F2	F3	F4	F5	F6
Tare fix	Add Tare	Zw Tare	Multi Tare		

2st level: setting functions

F1	F2	F3	F4	F5	F6
Gross	X 10	Unit		Program	Setting mode

3.1.2 Display view

Basic weighting view

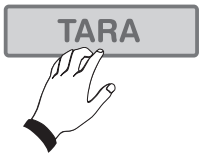


3.1.3. Weighing without taring

Place weighing product on the scale. The weight is indicated with the message "Gross".

3.1.4 Manual taring

Measure and tare with a container of unknown weight. Place the empty container on the scale.

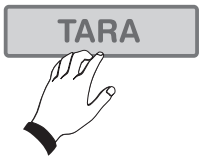


Press the Tare key.

The tare value is saved. The weight display is zeroed. The weight is displayed with the message "Net".
When the scale is clipped off, the tare weight is displayed with a negative sign.
If you press the Tare key again, the existing value is overwritten, i.e. a new tare weight placed on the scale is accepted.
The scale can be tared an unlimited number of times until the maximum load is reached. The tared weight reduces the maximum weighing range accordingly.
Clear tare: By overwriting with a new tare or by pressing the Zeroing key.
Display tare memory: Press Info key, then press the Tare key.
You can clear the tare memory by pressing F2. Press F5 to terminate the display of the tare memory without saving any changes.
If you want to change the tare memory value, type in the new value into the numerical keypad and press F6 to accept the manual tare input into the tare memory.

3.1.5 Taring by manual tare input

Tare a known container weight, e.g. with filled container on the scale.
Type the known tare weight into the numerical keypad.
The input appears in the display. The input is displayed in the activated weight unit.



Press the Tare key.

The input is accepted in the tare memory and the tare weight is subtracted from the weight displayed. The weight is displayed with the message "Net".
When the scale is clipped off, the tare weight is displayed with a negative sign.
Clear tare:
By overwriting with a new manual tare input or by pressing the Zeroing key.
To display the tare memory, press the Info key, then the Tare key.
Here, you can clear the tare memory by pressing F2. Press F5 to terminate the display of the tare memory without saving any changes.
If you want to change the tare memory value, type in the new value into the numerical keypad and press F6 to accept the manual tare input in the tare memory.

3.1.6 Multiplicative tare

Tare several containers of the same weight. See the description of the function in the CD manual.

3.1.7 Additive tare

Tare several, even different containers of known weight. See the description of the function in the CD manual.

3.1.8 Provisional tare

Unknown tare weights are added to the existing tare memory. See the description of the function in the CD manual.

3.1.9 Automatic taring

Tare the first weight value on the scale automatically. See the description of the function in the CD manual.

3.1.10 Fixed tare value memory

Known tare weights can be saved to a failsafe memory or called when required. You can save up to 400 reference weight in a failsafe memory.

Each memory location has:
- 3-digit consecutive numbers
- description (plaintext 18 characters)
- tare weight

a) Calling the list of fixed tare values for editing

Press the Info key and then F1 Tare Fixed.

Select from the list.
Browse using the F3 and F4 arrow keys. Call the required fixed value by pressing F6 Edit.

Edit an existing fixed value
Call the marked fixed value for editing by pressing F6.
The Description parameter is marked. Call by pressing F6 Edit. Type the value into the numerical/alphanumeric keypad. Accept the input by pressing F6. (Clear the input without saving by pressing F5 Cancel). The Tare Weight parameter is marked. Call by pressing F6 Edit. Type the value into the numerical/alphanumeric keypad. Accept the input by pressing F6. (Clear the input without saving by pressing F5 Cancel).

Clearing an existing fixed value
Browse using the F3 and F4 arrow keys. Clear the marked fixed value by pressing F2 Clear.
The resulting gap in the consecutive numbering scheme is closed.

Saving the new fixed value
Press F1 New.
The memory location number is assigned by the appliance. The first figure in brackets indicates the number of free memory locations; the second figure shows the memory locations occupied by fixed tare values. The Description parameter is marked. Call by pressing F6 Edit.
Type the value into the numerical/alphanumeric keypad. Accept the input by pressing F6.
(Clear the input without saving by pressing F5 Cancel). The Tare Weight parameter is marked.
Call by pressing F6 Edit. Type the value into the numerical/alphanumeric keypad.
Accept the input by pressing F6. (Clear the input without saving by pressing F5 Cancel).

Exiting the Fixed Value list
Press F5 Back to exit the list.

b) Calling the list of fixed tare values for taring

In the Taring Functions level, press F1 Tare Fixed. The display shows the last fixed value called.

Selecting from the list
- Browse using the arrow keys. Call the required fixed value by pressing F6 Accept.
- Call directly by typing in the memory location number. Type the article number or the memory location number into the numerical keypad.

The choice of article number or memory location number is defined in Setting mode.

3.1.11 Error message when taring

Error 06:
Taring not possible.

Possible causes
- Scale empty
- Scale in overload or underload
- Manual tare input with tare value above maximum load.

3.1.12 Display options with the Info key

When you press the Info key, you have the following options:
- F1 Tare Fixed: Display stored fixed tare values.
- Tare key: Display current tare weight.

3.2 Totalising and batching

Totalising means that the individual pieces are weighed one after the other. The weight is added in the total memory and the scale is clipped off after each weighing operation.

Batching means that the weighed pieces remain on the scale.
The weight is added in the total memory and the scale is zeroed without being clipped off.
A change in measuring point during batching is not possible.

The choice between totalising and batching is defined in Setting mode.
This selection applies to all connected weighing platforms.
As an example, we will only describe the totalising function here.

Total memory with several connected scales
A central total memory is managed for all connected scales.

Total memory capacity: The total memory holds a maximum of 999 entries.
The total memory must then be cleared.

3.2.1 Function keys

The F1 to F6 function keys help you control the functions.
They are programmed in 3 levels. Switch between the levels by pressing the function change key (F>).

1st level: totalising functions

		Sum	Cancel	Manual	Plus
F1	F2	F3	F4	F5	F6

2nd level: taring functions

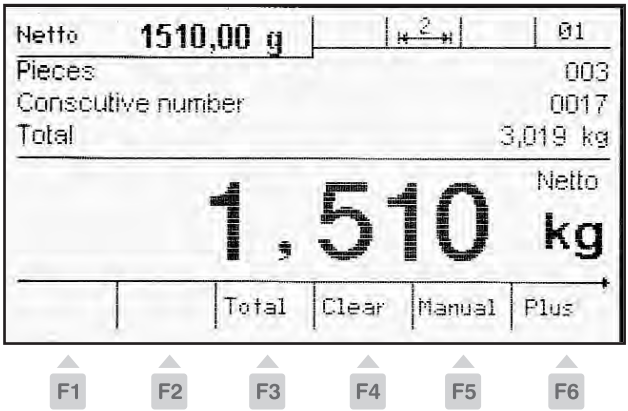
Tare fix	Add Tare	Zw Tare	Multi Tare		
F1	F2	F3	F4	F5	F6

3rd level: setting functions

Gross	X 10	Unit		Program	Setting mode
F1	F2	F3	F4	F5	F6

3.2.2 Display view

After the first totalising function, the display changes from basic view to the total view.



3.2.3 Taring

Taring functions same as for 3.1 Weighing and taring.

3.2.4 Operating the totalising functions

Call the totalising functions level by pressing the function change key.

F6 Plus:
Press the Plus key to transfer the weight on the weighing platform to the total memory. The piece counter and the consecutive number are incremented by 1. Before requesting the next total, the scale must be clipped off at least to the clip off factor defined in Setting mode.
A weight value of 0 or a total without clip off results in "Error 55 Place weight on scale".
If the clip off factor = 0, only a short weight change is required.

F5 Manual:
Press the Manual key to type in weight values and quantities manually.
Type your input into the numerical keypad and confirm by pressing F6 Accept.
When the input window opens, press the function change key (F>) to switch between calibrated unit, second unit and quantity. Manual inputs are identified on the printout by the description "Manual".
The piece counter and the consecutive number are incremented by 1.
Weight values are added to the total weight. Quantities are added to the piece total separately.

F4 Cancel
Press the Cancel key to cancel or reweigh individual pieces. After pressing the Cancel key, you are requested to load the scale either with the weight you want to cancel or to type in the consecutive number of the weight you want to cancel.
For information about the consecutive number, press the key combination Info and F5 Plus.
Type in the consecutive number of the piece you want to cancel into the numerical keypad and confirm by pressing F6 Accept.
If you do not type in a consecutive number, the scale accepts the weight value when you press F6.
An error message appears if the scale is not loaded.
Cancelling or reweighing are identified on the printout by the description Cancel.
For a cancellation, the consecutive number in incremented by one; the piece counter is decremented by one. If the piece counter is at 0, no further cancellation is possible and error message Error 48 is displayed.

F3 Total
Press the Total key to complete the totalising operation.
The display then shows the gross, tare, net and piece totals, and the piece counter and consecutive number of the last operation.

3.2.5 Selection options for total display

Setting mode function of Total key, description of function in the manual.
- Display, print and clear total.
- Only display totals.

3.2.6 Clip off factor when totalising

(no function when batching)
In Setting mode, you can define (see manual) whether the scale must be clipped off each time you place an individual piece by 1 to 30 increments.
If the scale is not clipped off, the weight unit is not accepted in the total memory. This prevents operations such as double counting of a piece.

3.2.7 Automatic totalising

See the description of the function in the CD manual.

3.2.8 Assigning and clearing the consecutive number

Every input (Plus, Manual, Cancel) in the total memory is assigned a 4-digit consecutive number.
The consecutive number is reset to the factory setting when the total memory is cleared.
Optionally, you can default resetting the consecutive number in Setting mode:
- deactivated (no reset = factory setting).
- when the Clear Total key is pressed.
- When the appliance is switched off.
- Function key "Clear consec. no."

3.2.9 Piece counter

The piece counter only counts operations that are actually totalised. With every new operation that uses Plus, Manual or Automatic Totalising, the piece counter is incremented by 1. The piece counter runs up to 999; then an error message appears. When a cancellation is made, the piece counter is decremented by 1. The piece counter is automatically zeroed when the total is cleared.

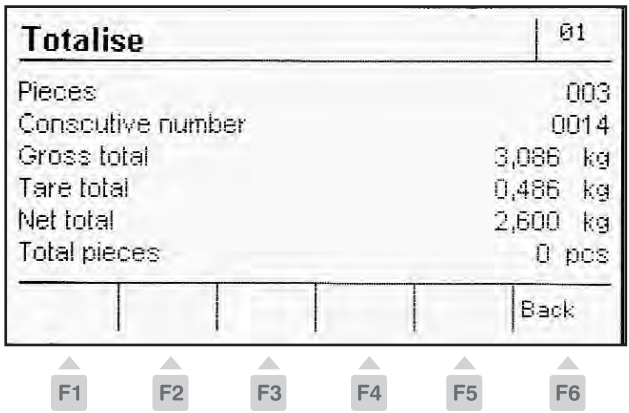
3.2.10 Print keys

The Plus, Manual, Cancel and Total keys can initiate a print operation.
This is dependent on whether a print view was assigned to each of the keys. For the Total key, the option "Print and clear" must be selected for the total key function in Setting mode. If you select the "Display only" option, you only obtain a printout when you press the Print key.

3.2.11 Displaying the current totals

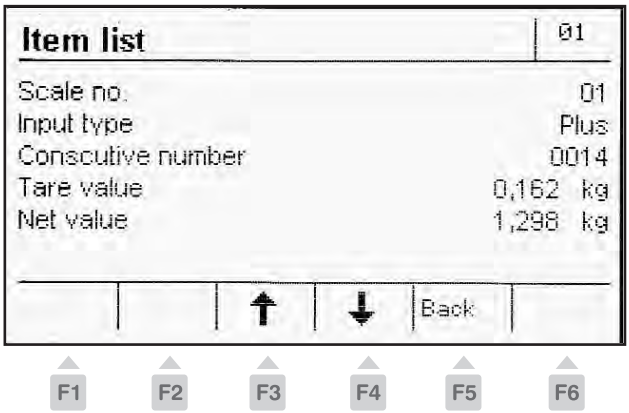
During a totalising operation, you can display the totals reached by pressing the Info key then the F4 Total key immediately after.

You can clear the totals by pressing F2 and the consecutive number (if activated in Setting mode) or return to the totalising operation by pressing F6. When you return, the last totalising operation appears in the information pane of the display.



3.2.12 Displaying individual pieces

During a totalising operation, you can call individual pieces from the total memory by pressing the Info key then the F5 Plus key immediately after.
The piece list starts with the most recent entry.
Browse through the list by pressing the arrow keys F3 (older entries) or F4 (more recent entries). You can call the last 50 entries.
Press F5 Back to exit the display of individual pieces and return to the previous view.



3.2.13 Display options with the Info key

When you press the Info key, you have the following options:

F1 Tare Fixed = Displays stored fixed tare values.
F4 Total = Displays the current contents of the total memory.
F5 Plus = Displays all the current pieces in the total memory.
Tare key = Displays the current tare weight.

3.3 Counting

Count parts with the same weight.

The individual part weight (reference weight) is calculated from a small known quantity of countable parts. The reference weight is then used as the divisor to calculate the quantity of countable parts from the weight of an unknown quantity.

3.3.1 Function keys

The F1 to F6 function keys help you control the functions.
They are programmed in 4 levels. Switch between the levels by pressing the function change key (F>).

1st level: counting functions

F1	F2	F3	F4	F5	F6
Ref 10	Ref Variab	Ref Wght	Sum	Cancel	Plus

2nd level: checking functions

F1	F2	F3	F4	F5	F6
		Ref Stat	Ref Fix	Piece Contr.	Start

3rd level: taring functions

F1	F2	F3	F4	F5	F6
Tare fix	Add Tare	Zw Tare	Multi Tare		

4th level: setting functions

F1	F2	F3	F4	F5	F6
Gross	X 10	Unit		Program	Setting mode

3.3.2 Counting display view

Tip: Activate and deactivate the additional display showing the weight info by pressing F3 Unit in the Setting Functions level.

3.3.3 Taring

Taring functions same as for 3.1 Weighing and taring.

3.3.4 Counting function

The reference weight is measured by using the following keys in Level 1 Counting Functions:

Function key F1 Ref 10
Calculate the reference weight from a default reference quantity. Place 10 countable parts on the scale, then press F1 Ref 10. The scale calculates the reference weight and displays "10 pcs". Further parts placed on the scale are then counted.

Function key F2 Ref Variab
Calculate the reference weight from a freely selectable reference quantity. Place the reference parts on the scale. Press F2 Ref Variab and type in the quantity of parts into the numerical keypad (1 to 99). Press F6 Accept. The scale calculates the reference weight and displays the quantity on the scale. Further parts placed on the scale are then added to the total.

Function key F3 Ref Wght
Default of a known reference weight.
Press the Ref Wght key and type in the known reference weight in the default unit into the numerical keypad. An existing reference weight is displayed and can be overwritten.
Confirm your input by pressing F6 Accept.
The scale accepts the reference weight and displays the quantity on the scale. You can change the default unit for the reference weight between g and kg by pressing the F> key.

New reference weight
Previous reference weights are overwritten with the new reference weight calculated.

Displaying the reference weight
Press F3 Ref Wght in Level 1 Counting Functions.

Weight display during count operation
Press F3 Unit in Level 4 Setting Functions to activate the weight display at the top left of the display.

Terminating the count operation
Clears the saved reference weight to terminate the count operation and returns to the weight display:
Call the reference weight by pressing the Ref Wght key.
Clear by pressing the Clear key.
Accept by pressing the F6 key.

Fixed value memory for reference weights
You can save up to 400 reference weight in a failsafe memory.
Each memory location has:
- 3-digit consecutive numbers
- description (plaintext 18 characters)
- article number (18 digits)
- reference weight
- reference quantity
- tolerance plus
- tolerance minus

a) Calling the list of fixed reference weight values for editing
Press the Info key and then F2 Ref Fixed.

Selecting existing fixed values from the list.
Browse using the F3 and F4 arrow keys.
Call the required fixed value by pressing F6 Edit.

Editing an existing fixed value from the list
Call a marked fixed value for editing by pressing F6.
The Description parameter is marked. Call by pressing F6 Edit. Type in the value using the numerical/alphanumeric keypad. Accept the input by pressing F6.
(Clear the input without accepting by pressing F5 Cancel).
You can edit other parameters in the same way.

Clearing an existing fixed value.
Browse using the F3 and F4 arrow keys.
Clear the marked fixed value by pressing F6 Cancel.
The gap in the consecutive number scheme is closed.

Saving the new fixed value
Press F1 New.
The memory location number is assigned by the appliance. The first figure in brackets indicates the number of free memory locations; the second figure shows the memory locations occupied by fixed tare values.
The Description parameter is marked. Call it by pressing F6 Edit. Type in the value using the numerical/alphanumeric keypad. Accept the input by pressing F6. (Clear the input without accepting by pressing F5 Cancel).You can edit other parameters in the same way.

Exiting the fixed value list
Press F5 Back to exit the list.

b) Calling the list of reference weights for counting
Press F4 Ref Fixed in Level 2 Checking Functions. The display shows the last fixed value called.

Selecting from the list.
- Use the F3 or F4 arrow key to browse through the list until you reach the required memory location. Confirm the required fixed value by pressing F6 Accept.
- Calling directly by typing in the article number or memory location number.
  Type the article number or the memory location number into the numerical keypad (Define whether the article number or the memory location number is called in Setting mode (see manual). Type in the article number as search term left-flush; type in the memory location number as search term right-flush).
  Confirm the required fixed value by pressing F6 Accept.
  When a fixed value is called, the reference quantity and tolerances for quantity checking are also accepted, provided these two parameters are also saved.

3.3.5 Totalising and batching

Totalising functions as in 3.2 Totalising and batching.

Totalising different countable parts
Totalising different countable parts can be prevented by enabling the measurement of a new reference weight only after clearing the total memory using the option "Clear total" in Setting mode.

3.3.6 Quantity check

The "Quantity check" function allows you to meter bulk goods pouring into a container or to check quantities.
Example: 1000 countable parts must be filled in a container at a max. tolerance of 3%.
Example: Several batches must be counted to check compliance with quantity.
To call the quantity check function, you must be in Count mode, i.e. you must have defined a reference weight.
Press the Quant. Check key in Level 2 Checking Functions.
Type the required quantity into the numerical keypad and confirm by pressing F6 Accept.
Type the required tolerance in parts or percent into the numerical keypad and confirm by pressing F6 Accept.

Switch between part and percent by pressing the function change key F>. If you wish to define the plus and minus tolerances separately, activate the "+/- tolerance separate" function in Setting mode.

The display switches to the Count display view. The special characters are activated.
The relevant special character is displayed next to the setpoint depending on the actual weight on the scale.

Quantity check special character

under tolerance point	
within tolerance	
Setpoint exactly reached	
over tolerance point	

You can also display the difference between actual values and setpoint weights at the top left of the additional display in figures with a + or - sign. Activate the additional display by pressing F3 Unit in Level 4 Setting Functions.

If you activated a memory location containing setpoints and tolerances in the Ref Fixed memory, the special characters are activated automatically.

A totalising/batching operation (accept in the total memory by pressing the Plus key) interrupts the display of the quantity check special character until the scale is clipped off. The quantity check special character is then reactivated.

Displaying the setpoint and tolerance
Press the Info key and then F3 "Quant. Check" or press the "Quant. Check" key in Level 2 Checking Functions. The current values then appear in the display box.

Switching points for quantity check
See the description of the function in the CD manual.

Data record/Printout within or outside the tolerance
You can inhibit or accept release of a data record if it is outside a specific tolerance band. If a data record is released outside a tolerance, it is marked by a special
character.
The function is released or inhibited in Setting mode (see manual).

Startmode
When Start mode is activated, the scale freezes the switching point after the switching point is reached. The scale can then be clipped off without deactivating the switching point, thus preventing the start of an undesired new operation. Only after you press F6 Start is the freeze state cancelled.
Activate Start mode in Setting mode (see manual).

3.3.7 Counting with several weighing platforms

If several scales are connected, the reference weight can be measured and counted on each scale. For best results, we advise you to measure the reference weight on the scale with the finest resolution.
Select a scale by pressing the Scale key.
After measuring the reference weight, you can switch to a bulk scale with a higher load capacity in order to count large quantities precisely with the reference weight determined using the reference scale.

Automatic switchover
You can define a default reference scale in Setting mode.
Switchover from bulk to reference scale and back is then automatic.
Place the reference quantity on the reference scale and press
Ref 10 or Ref Variable. The display switches to the reference scale.
The reference weight is measured and the bulk scale is switched to measuring bulk. Alternatively, if you want to carry out counting operations on the reference scale as well as measure the reference weight, then switch from the bulk scale to the reference scale before measuring the reference weight.

3.3.8 Display options with the Info key

When you press the Info key, you have the following options:

F1 Tare Fixed = Displays stored fixed tare values.
F2 Ref Fixed = Displays the stored reference weights.
F3 Quant. Check = Displays the current setpoint with tolerance.
F4 Total = Displays the current content of the total memory.
F5 Plus = Displays all the current pieces in the total memory.
Tare key = Displays the current tare weight.

3.4 Checking

Check whether the weighing product corresponds to a setpoint weight within a default tolerance band. Example: Several weighing products must be checked for compliance with the setpoint weight.

This function can also be used for weighing in a default setpoint.
Example: 50 kg must be filled in a container at a max. tolerance of 3%.

After placing the weighing product on the scale, the actual weight and a symbol appear in the display to visualise a deviation from the setpoint.

3.4.1 Function keys

The F1 to F6 function keys help you control the functions. They are programmed in three levels. Switch between the levels by pressing the function change key (F>).

1st level: checking functions

F1	F2	F3	F4	F5	F6
Set point	Contr. Fix		Cancel	Sum	Plus

2nd level: taring functions

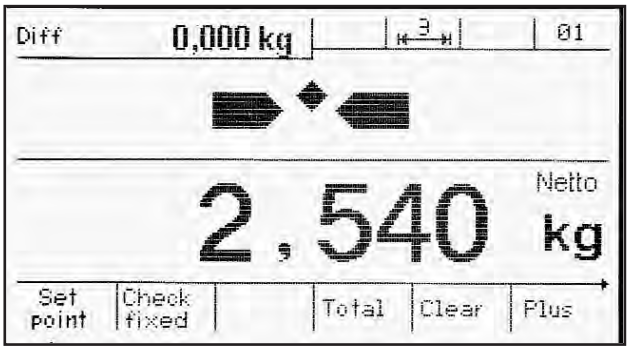
F1	F2	F3	F4	F5	F6
Tare fix	Add Tare	Zw Tare	Multi Tare		

3rd level: setting functions

F1	F2	F3	F4	F5	F6
Gross	X 10	Unit		Program	Setting mode

3.4.2 Check display view

Tip: An additional way to display the deviation from the setpoint on the calibrated unit is to activate the additional display by pressing F3 Unit in the Setting Functions level.



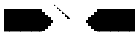
3.4.3 Taring

Taring functions same as for 3.1 Weighing and taring.

3.4.4 Checking functions

Type in setpoints.
Press F1 Setpoint in Level 1 Checking Functions. You can now place a sample part on the scale to accept the setpoint or type in the setpoint into the calibrated unit using the numerical keypad . Confirm by pressing F6 Accept. Type the required tolerance in parts or percent into the numerical keypad and confirm by pressing F6 Accept. Switch between part and percent by pressing the F> key. If you wish to define the plus and minus tolerances separately, activate the "+/- tolerance separate" function in Setting mode (see CD manual). The display switches to the Check display view. The special characters are activated. The associated special character is displayed next to the setpoint depending on the actual weight on the scale.

Check special characters

under tolerance point	
within tolerance	
Setpoint exactly reached	
over tolerance point	

You can also display the difference between actual values and setpoint weights at the top left of the additional display in figures with a + or - sign. Activate the additional display by pressing F3 Unit in the Setting Functions level.
If you activated a memory location containing setpoints and tolerances in the Fixed Check memory, the special characters are activated automatically.
A totalising/batching operation (accept in the total memory by pressing the Plus key) interrupts the display of the quantity check special character until the scale is clipped off. The check special character is then reactivated.

Displaying the setpoint and tolerance
You can request the current setpoint used by pressing the key combination Info and F3 Setpoint.

New setpoint
Previous setpoints are overwritten with the new setpoint entered.

Terminating the checking function
Clear the stored setpoint to terminate the check operation and return to the weight display.
Press F1 Setpoint in the Checking Functions level and then press the Clear key.
To change the program, press F5 Program in the Setting Functions level.

Fixed value memory for setpoints
You can store up to 400 setpoints in a failsafe memory.
Each memory location has:
- 3-digit consecutive numbers
- description (plaintext 18 characters)
- article number (18 digits)
- reference weight
- reference quantity
- tolerance plus
- tolerance minus

a) Calling the list of check weight fixed values for editing
Press the Info key and then F2 Check Fixed.

Selecting an existing fixed value from the list.
Browse using the arrow keys.
Call the required fixed value by pressing F6 Edit.

Editing an existing fixed value from the list
Call the marked fixed value for editing by pressing F6.
The Description parameter is marked. Call by pressing F6 Edit. Type in the value using the numerical/alphanumeric keypad. Accept the input by pressing F6.
(Clear the input without accepting by pressing F5 Cancel).
You can edit other parameters in the same way.

Clearing an existing fixed value.
Browse using the F3 and F4 arrow keys.
Clear the marked fixed value by pressing F6 Cancel.
The gap in the consecutive number scheme is closed.

Saving the new fixed value
Press F1 New.
The memory location number is assigned by the appliance. The first figure in brackets indicates the number of free memory locations; the second figure shows the memory locations occupied by fixed tare values. The Description parameter is marked. Call by pressing F6 Edit. Type in the value using the numerical/alphanumeric keypad. Confirm the input by pressing F6 (clear without accepting the input by pressing F5 Cancel). You can edit other parameters in the same way.

Exiting the Fixed Value list
Press F5 Back to exit the list.

b) Calling the list of fixed value check weights for checking
Press the F2 Check Fixed in Level 1 Checking Functions. The display shows the last fixed value called.

Selecting from the list.
- Browse using the arrow keys. Call the required fixed value by pressing F6 Accept.
- Call directly by typing in the article number or memory location number.
Type in the article number or memory location number into the numerical keypad.
The choice of article number or memory location number is defined in Setting mode (see manual).
When a fixed value is called, the reference quantity and tolerances for quantity checking are also accepted, provided these two parameters were also saved.

Switching points for checking
See the description of the function in the CD manual.

Data record/Printout within or outside the tolerance
You can inhibit or accept release of a data record if it is outside a specific tolerance band.
If a data record is released outside a tolerance, it is marked by a special character.
The function is released or inhibited in Setting mode (see CD manual).

3.4.5 Totalising and batching

Functions as in 3.2 Totalising and Batching.

3.4.6 Display options with the Info key

When you press the Info key, you have the following options:

F1 Tare Fixed = Displays saved fixed tare values.
F2 Ref Fixed = Displays the saved reference weights.
F3 Quant. Check = Displays the current setpoint with tolerance.
F4 Total = Displays the current content of the total memory.
F5 Plus = Displays all the current pieces in the total memory.
Tare key = Displays the current tare weight.

4. Further information

You will find further information on the following subjects in the detailed documentation, the 3030 Programming Terminal manual, on the supplied CD:

- Application programs 5 to 10
- Setting mode
- Error messages
- Print
- Barcode
- etc.

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