

Allocation of this Manual

Product: Automatic wheel loader and telescopic handler scale WK60 series

Language: English (US) - Translation of the original German manual

First edition: WK60-RAD-KBA-A-(2016.10)-EN(US)

Associated applicable document: WK60-RAD-BA-*(20**.**) -EN(US) Instruction manual as updated

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1. Use of this Manual

These brief instructions describe the first steps to take when operating the scale; they apply to scales of measurement type N1 and measurement type SWT.

Measurement type N1


Scales of measurement type N1 use proximity switches to perform the weighing procedure.

Measurement type SWT (Speed Weigh Technology)

Scales of measurement type SWT use digital inclination sensors to identify the position of the bucket, the lifting gantry and the vehicle.

Measuring type for telescopic handler scale

Telescopic handler scales use measurement type N1 exclusively. The Manual is part of the product. Please store it for easy access.

 **Danger symbols used in this Manual**

Danger point / hazardous situation


2. Safety notes

2.1 Designated use (for scales requiring calibration)

The use of this model is only permissible for weighing bulk goods when it has been determined that the bulk good does not have a tendency to stick.

The following mechanical variants may be realized:

- Bucket loader with a loading bucket
- Fork lift with lifting forks or a loading bucket as load carrier
- Telescopic handler with lifting forks or loading bucket

 **Structural changes to the scale and its components may result in a threat to life or damage to equipment.**

- Structural changes to the scale and its components are prohibited.
- Conversion of and repairs to the scale may only be carried out by persons trained and authorized by the manufacturer.
- Only original spare parts and accessories approved by the manufacturer may be used.

Please use only original PFREUNDT weighing tickets

- For optimal printing quality and maximum printer service life, please use only suitable Original PFREUNDT weighing tickets. You are welcome to phone us for advice.

- Damages resulting from the use of weighing tickets other than the original PFREUNDT tickets intended for the specific printer shall be excluded from our warranty.

 **Any use other than as designated shall be deemed incorrect.**

2.2 FCC and IC Certification (only for WK60)

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Contains transmitter module

WLAN/Bluetooth
FCC ID: XPYELLAW163
IC: 8595A-ELLA163

UMTS
FCC ID: RI7UE910GL
IC: 5131A-UE910GL

Radiofrequency radiation exposure Information:

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of **20 cm** between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2.3 FCC and IC Certification (only for WK60-XS)

NOTICE

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

NOTICE

Changes or modifications made to this equipment not expressly approved by PFREUNDT GmbH may void the FCC authorization to operate this equipment.

Contains transmitter module
FCC ID: PV7-WIBEAR11N-SF2
IC: 7738A-WB11NSF2

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If

this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.


Radiofrequency radiation exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 7,87"/20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.


This device IC: 21743-WK60XS has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna	Gain
Delock 88395	2 dBi
Delock 88985	0.7 dBi

2.4 Risks posed by incorrect use

 **Incorrect use of the scale may lead to life-threatening situations. The scale has not been approved for operation in:**

- potentially explosive environments
- aggressive environments (e. g. in rooms with acid / etching or galvanizing baths)
- in environments prone to stray currents or heat (e. g. due to welding)

 **Overloading transport vehicles is life-threatening.**

- Obtain information on the permissible loading of such vehicles and strictly comply with such limits.
- Avoid incorrect weighing, e.g. by ensuring correct positioning of wheel loaders during weighing.

2.5 Training and qualification of users

The wheel loader and telescopic handler scale WK60 series must be operated by trained personnel only. The company operating the scale must instruct the operating staff on safe handling of the scale.

3. Operating conditions suitable for correct weighing

Carry out regular calibrations

Scales of this type subject to mandatory calibration may only be used compliant with national statutory regulations of the country where they are used. The company operating the scale is responsible for regular calibration in accordance with national regulations.

Official calibration checks are required after changes

Official calibration checks are required immediately after changes to the lifting arms, lifting cylinders, switching points of proximity switches or the load carrier.

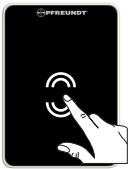
Only carry out weighing during smooth travel

Whenever possible, carry out weighing during smooth travel and with the position as horizontal as possible. A warning will be displayed and weighing will be blocked if the vehicle is not level enough.

Weighing should only be carried out within the permitted temperature range:

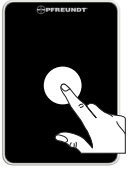
- Do not operate a scale outside its permissible temperature range, see the "Technical data" chapter in the Instruction Manual.
- When using external components (printer, etc.), observe the temperatures given in their specific data sheets.

4. Using the touch-screen



Tap – short tap with a finger:

- to open applications
- to operate controls (e.g. confirm entry)
- for entries via the on-screen keyboard



Pressing and holding the desired button

- to call up available options (e.g. to show context menus)

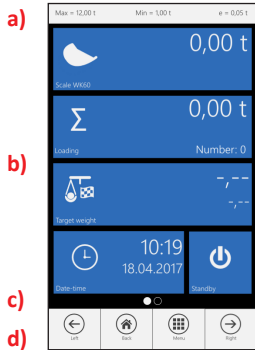


Swiping or stroking (scrolling)

- to scroll through a long list
- to call up the previous / next page

5. Software operation and navigation

The main pages



Page 1 (example)

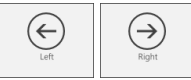
The first main page appears when the scale is switched on.

Structure of the main pages

a) Metrological information field
b) Field of application
c) Page display
d) Menu bar

The General Menu bar

The General Menu bar has four basic functions which are always shown in the same position in the first row.



Left / Right

continue to previous / next page



Back

- to Main page (of an App's first page)
- one step back (within an App)



Menu

Open / Close menu

6. Switching on the scale

1. Hold down the ON/OFF key for about 2 seconds.



WK60 / WK60-S



WK60-XS

2. The Starting screen will then appear. The following actions will be required after switching on, depending on scale configuration:
 - Logging on a user *
 - Performing warm-up strokes *
 - Zeroing the scale

* see the Instruction Manual

7. Zeroing the scale

Depending on configuration, scale zeroing will be required in the following situations:

- After switching on
- After completing the loading procedure

Various situations may require forced zeroing:

- If the current oil temperature differs by 10°C or more from the value measured last.
- No more than 30 minutes after the last zeroing.

Depending on configuration, you will then be requested to zero the scale.

Manually calling up zeroing

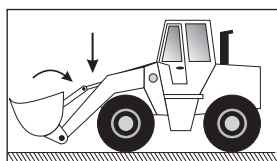
You may at any time call up zeroing in the weighing program menu.

7.1 Calling up zeroing in the menu

1. Open the menu and activate the function „Reset to zero“.
2. The scale zeroing prompt will then appear. The current total will not be deleted.
3. Reset the scale to zero, see next chapter.

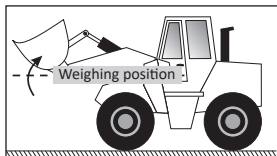
7.2 Zeroing the scale

1. Lower the lifting arms and tilt the empty loading bucket fully upward.



Zeroing a dynamic scale:

2. Raise the lifting arms through the weighing range.
3. Zeroing will be automatic.
4. The first main page of the weighing program will then show.



If the bucket's tare weight is outside the zeroing range of, a warning will be displayed.

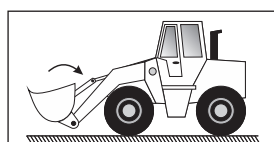
Proceed as follows in this case:

- Check the bucket and remove any load residues.
- Repeat zeroing.
- If the first two points above have no effect, switch the scale on/off to use the larger initial zero range.

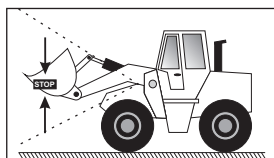
7.3 Static zeroing (only on wheel loader scales of measurement type SWT)

With scales of measurement type SWT, it is possible to realize a static zeroing when necessary, depending upon the configuration. Depending on the setting, static zeroing can occur after raising or lowering the lifting arms.

1. Tilt the empty bucket fully upwards.



2. Depending on the configuration, raise or lower the lifting arms through the weighing range to any point and halt there briefly.

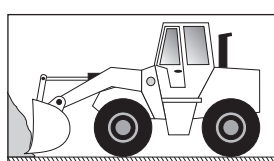


3. Zeroing will be automatic.

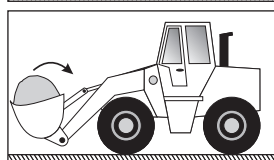
4. The first main page of the weighing program will then appear.

8. Carry out weighing

1. Lower the lifting arms and fill the bucket.

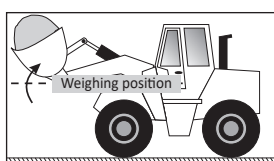


2. Tilt the loaded bucket fully upward.

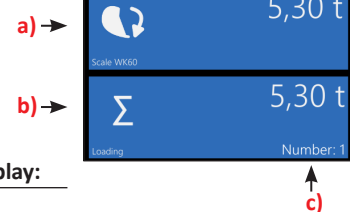


Weighing with a dynamic scale

3. Move the lifting arms through the weighing position from the bottom up.



4. The measured weight is then prominently displayed and added to the total.



Description of the display:

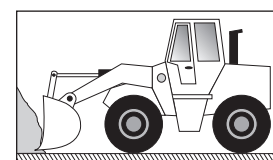
- a) Measured weight
- b) Total
- c) Number of weighings

5. Empty the loading bucket when you are prompted in the display.
6. Continue loading until the transport vehicle is full or the specified target weight has been reached.
7. Finish the loading procedure - see next chapter 8.2.

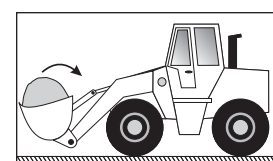
8.1 Static weighing (only on wheel loader scales of measurement type SWT)

Depending on the setting, static weighing can occur after moving the lifting gantry or lowering the lifting arm.

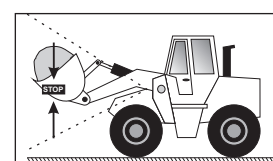
1. Lower the lifting gantry and load the bucket.



2. Tilt the loaded bucket fully upwards.



3. Depending on the configuration, raise or lower the lifting arms through the weighing range to any point and halt there briefly.



4. The fixed weight is then displayed prominently and added to the total.

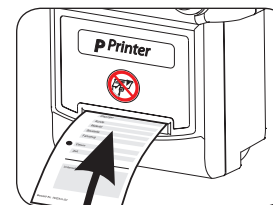
5. Empty the loading bucket when prompted in the display.

6. Continue weighing until the transport vehicle is full or the specified target weight has been reached.

7. Finish the loading procedure – see next chapter.

8.2 Finish loading

1. Push the weighing slip into the printer * as soon as the vehicle has been loaded. * if a printer is connected.
2. If the master data are deactivated, select "Print weighing slip" to print the weighing data and finish the loading procedure.



The page "LOADING - Master data" will automatically open with the most recently selected master data if the master data are activated.

Terminate loading without printer and master data

1. After the last weighing, tap on the „Loading“ application.
2. The „LOADING - Master data“ page will open.
3. Tap on „Finish loading“.
4. The weighing data will be automatically saved.
5. The main page of the scale will then be shown again.



Brief operating instructions

Wheel loader and telescopic handler scale WK60 series

Valid from program version:
1.1.60 (Measurement type N1) / 1.3.62 (Measurement type SWT)
Document no.: WK60-RAD-KBA-D-(2018.12)-EN(US)

