Ideen aus der Praxis!

MEIER-BRAKENBERG

Einweichanlagen Hochdruckreiniger Tierwaagen

Mobile Scales

Type:

- WA21 WAK
- WAS WAKF
- WAF WASA
- WA WAPM

Instruction Manual



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Pressure Cleaner • Animal Scales • Soaking - Disinfection - Cooling • Drinking - Dosing-Systems • Carcass Trolley • Animal welfare

Instruction for mobile and stationary weighing machines

The mobile and stationary animal weighing machines from MEIER-BRAKENBERG are exclusive suitable for weighing hog and sheep. The mobile weighing machines can be loaded with up to 300 kg. Calibratable weighing machines feature labels quoting the maximum range of weight load. Only skilled professionals are allowed to use the animal weighing machines.

For transportation of the mobile weighing machine, reach for crossbar at entrance gate and lift. After changing hand position over to both handles, weighing machine is ready to push. Use weighing machine on safe and level surface, only. To open the exit gate of mobile weighing machine, use handle on right side. This handle can be switched to use the repulse door. After that process, lift the repulse door up to lose it from the fixing.

To open front gates of stationary scale, use pedals.

Electronic assemblies are pre-adjusted for weighing fatteners. Settings do not require any adjustment. The weighing machine is ready-to-operate. Settings may be adjusted on the basis of instruction manual, reasonable for determining exact weight of static goods. Before initial use, fully charge storage battery. The power status of the accumulator is shown in the display. If accumulator power is undercharge, an arrow will sign to the imprint "Akku".

Frequently charging, e.g. after each use, decreases service life of storage battery caused by so-called "memory effect" and shortens duration! Switch off display after use. Continuing operation in spite of unstable display and operation of display after weighing leads to total discharge and destruction of storage battery.

By using animal weighing mode, it's important that all base settings of operators manual will be retaining and not be switched. To reach zero, please press button ON/OFF.

TARE

Cleaning scale

Weighing box may be cleaned with water. For quality safety, display with connection cables and weighing bars should not be exposed to high-pressure cleaning. Clean display with dump cloth.

Direction

No welding at the device or in immediate vicinity. Welding may lead to disturbances in electronic assembly. If not avoidable, dismount display and weighing bars before welding. Operation of electronic assembly permitted only in compliance with provided instruction manual.

Note

Upon request, we manufacture any other mobile or stationary weighing machine in various sizes or design. Just call us!

Scope of delivery:mobile scales- Adapter power-supply, integrated batteryFixed scales- Adapter power-supply

MOUNTING INSTRUCTIONS FOR ACCESSORIES ON WA21



Parts list:

- 1. 4-slot spray-can holder with fixing material for fastening the spray-can holder
 - I. 2x Machine screw 8x16,
 - II. 2x Disc,
 - III. 2x Stop nut M8

To do this, use the outer fixing holes and place/mount the washers on top of the slotted holes in the spray-can holder.

- 2. Mount the M12 tapered handle on top of the remote control handle
- 3. Mount the small tapered handle at the gate bolt placed to the gate on the side of the push handles by using a 6x20 machine screw.
- 4. Mount the castor wheel on the top of the exit gate by using machine screw 8x60, 2x washer and stop nut M8.
- 5. Use 2x machine screw 8x25 and 2x stop nut M8 to fix the weighing display WA300.

ROUTE OUT FUNCTION ON WA21

Route out function - Repulse door

By switching the telescope-handle from front door to repulse door, the mobile scale can be used to weigh fatteners also on the corridor in front of the inlet.

To lose the locking device, move the head of the ball joint towards to front door and put the head off the ball. In the next step, put off the splint from the telescope-handle and shuffle up to the next drilling, where the splint must plug in. Now put ball joint on the ball of the repulse door.

The repulse door can now lift up, to put it out of the fixing. The route out function to force the pigs backwards in the inlet after weighing is now ready for use.





If you have any further question concerning weighing, don't hesitate to contact us! Tel.: +49(0)52 62/993 99-0

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Nameplate

The following nameplate is attached to the display:

Тур:	WA40	OMM	rr
S/N:	G2022	2001403	
Rating:	12 V 1	000 mA	
0-C-	€		
Meier-B	rakenbe	erg GmbH & Co.	ка 🕅
Brakenb	erg 29 ier-brak	32699 Extertal enberg.de	



The nameplate is a document and must not be removed from the display.

FOREWORD

These operating instructions provide you with detailed information about the Display WA400.

These instructions contain safety instructions to guarantee safe use of the volume and weight measurement system.

The manufacturer strives to improve their products on an ongoing basis. They reserve the right to carry out any and all modifications and improvements that they consider to be necessary. However, this means that there is no obligation to carry out retrospective modifications in this connection.



Danger

Before using the Display WA400, you must have read and understood the operating instructions and the safety regulations that they contain.



Note

Errors and omissions in the documentation reserved. If necessary, please inform Meier-Brakenberg GmbH & Co. KG of any errors in the documentation. We would also be grateful for any suggestions for improvements that you may have.

The manufacturer's contact data is listed on the reverse of the title page. If you have any queries or problems, please contact the manufacturer without delay.



Note

Have your serial number to hand when contacting Meier-Brakenberg GmbH & Co. KG.

CONTENTS

FOREWORD	1
1 Safety	4
1.1 For your safety	4
1.1.1 General	4
1.1.2 Safety symbols in this manual	5
1.2 Intended use	5
1.3 Obligations of the owner/user	5
1.4 Obligations of the operator	6
1.5 Description of the dangers	6
1.5.1 Danger of injury	6
1.5.2 Danger of damages	6
1.6 Liability and warranty	6
2 Description	8
2.1 Layout	8
2.2 Display	10
2.2.1 Display overview	10
2.2.2 Legend for the weighing value display	11
2.3 Keyboard overview	12
3 Transport, commissioning/start-up and tests/inspections	14
3.1 Control	14
3.2 Packaging and disposal	14
3.3 Regular inspections/checks	14
3.4 Testing equipment monitoring	14
3.5 Extraordinary inspections	15
3.6 Repair work	15
3.7 Use other than the intended	15
3.8 Commissioning / start-up	16
3.9 Charging the rechargeable battery	17
3.10 Safety information for handling rechargeable batteries and power cables .	18
4 Operation	20
4.1 Switching on and off	20
4.1.1 Switching on	20
4.1.2 Switching off	20
4.2 Weighing process	21
4.3 Control weighing	21
4.3.1 Switching on and off the signal light	21
4.3.2 Setting the limit	21
4.4 Factory-set limit values	24
4.4.1 Limit values for the mobile scales	. 24
4.4.2 Limit values for the animal group scales	. 24
5 Settings	26
5.1 Main menu	26
5.1.1 Adjustment with weight	26
5.1.2 Theoretical adjustment	30
5.1.3 Adjustment correction	34
5.1.4 Reset to factory-settings	34
5.1.5 Setting the time and date	36
5.2 Quick selection menu	38
5.2.1 Setting the background lighting	38

6 Troubleshooting	. 42
6.1 In the event of a malfunction	42
6.2 Error messages of the scales	. 42
6.3 Customer service contact data	. 42
6.4 Information for the contact to the customer service	. 43
7 Technical data	. 44
7.1 Type plate for a Stationary display	. 44
7.2 Type plate for a mobile display	. 44
7.3 Technical drawing	. 45
7.4 Technical data	. 46
7.5 Scope of delivery / Wiring diagram	. 46
8 Menu overview	. 48
8.1 Navigation in the menu	. 48
8.2 Function menu overview	. 48
8.3 Menu protected by a password	51
8.4 Quick selection menu (HLG menu)	. 55
9 Declaration of Conformity	. 58
9.1 Declaration of Conformity for scales not calibrated	. 58

1 SAFETY

This chapter warns against possible risks when handling the device. The information for detection of risks contained in this chapter is intended to allow the save and correct operation.



It is important to read and adhere to this operating manual and particularly this chapter prior to operating this device.

1.1 FOR YOUR SAFETY

1.1.1 GENERAL

In addition to safety information, the operating manual includes:

- A general product description
- Information about installation and connection of the device
- · Instructions to operate the device
- · Maintenance and care instructions
- Troubleshooting and remedy instructions
- Technical data

Always keep this operating manual and additional documents for your personnel at hand in the direct vicinity of the device.

Always adhere to all information, notes, instructions and explanations contained in this manual! Avoid accidents caused by incorrect operations! Also adhere strictly to the valid legal regulations in addition to the safety instructions specified in this manual.

Prior to commissioning/start-up read the safety information/instructions and familiarise yourself with dangerous areas.

The device is constructed according to the current state of art and the valid safety regulations. However, there are risks in the event of incorrect operation or non-observance of the safety regulations:

- Danger to limb and life of operators, third persons and animals staying in the vicinity of the device.
- · Danger to the device and other assets of the owner/user
- Danger to the efficient operation of the device.

1.1.2 SAFETY SYMBOLS IN THIS MANUAL

The following symbols are used on all important positions in this manual. Particularly observe these notes and treat very careful.



Danger

This note indicates danger of injuries and/or danger to life, if specific behaviour rules are not observed.

When this symbol appears in the operating manual, please take all required safety measures.



Attention

This note warns against damage to assets as well as financial disadvantages and responsibility under criminal law (e.g. loss of the warranty, cases of third party risks, etc.).



Note

Important notes and information about an efficient, economic and environmental friendly handling are specified here.

1.2 INTENDED USE

The Display WA400 exclusively serves to display the weight in combination with suitable weighing cells.

Any further use is considered as not in accordance with the intended use. The manufacturer does not assume any liability for resulting damage.

The intended use also includes:

- Observance of all notes, information, instructions contained in the documentation as well as in all supplied manuals issued by the manufacturer.
- Adherence of the maintenance and service conditions and intervals prescribed by the manufacturer and
- Observance of the technical data.

Adhere to the attendant accident prevention regulations as well as other generally approved technical safety rules.



Note

Always specify the serial number of your display for all questions, orders or jobs. This will facilitate the communication with the manufacturer and prevents error during editing your request.

1.3 OBLIGATIONS OF THE OWNER/USER

The owner/user obligates himself to only instruct persons to work on the device, who:

- Are familiar with the basic rules concerning safety and accident prevention and are trained in the operation of this device and
- have read and understood the operating manual, the safety chapter as well as the warning notes.

1.4 OBLIGATIONS OF THE OPERATOR

All persons instructed to operate the device obligate themselves:

- to always ensure the safety of other persons,
- to read the operating manual, the safety chapter and the warning notes and
- to only operate the device when they are familiarised with its functions.

1.5 DESCRIPTION OF THE DANGERS

1.5.1 DANGER OF INJURY

- Always switch off the device for care and maintenance work.
- Never insert any pointed objects into the electric contacts.
- Do not change the contacts.
- Stop device operation, if the device or the connection line is damaged of have a malfunction.

1.5.2 DANGER OF DAMAGES

- Only connect the device to suitable weighing cells (see chapter 3.6 "Interfaces").
- Never use pointed objects to actuate the device keys.

1.6 LIABILITY AND WARRANTY

Meier-Brakenberg offers a restricted warranty for components, which became faulty due to strain or material faults. The warranty starts with the date of delivery. Meier-Brakenberg retains the right to repair or replace components. Repair work executed during the warranty period will not extend the period of warranty. The warranty becomes null and void:

- In the event of incorrect use / use other than the intended use or incorrect installation
- Incorrect electric connection
- Use of an incorrect or non-licensed analogue / digital converter
- Non-observance of the specifications in the operating manual
- · Conversion, modification or opening of the device
- Unintentional or mechanical damage and damage caused by media, liquids, natural wear.

2 DESCRIPTION

2.1 LAYOUT

The Display WA400 is a control system and display used to operate an animal scales and to determine the weight of animals. The weighing results can be saved or transmitted.

An integrated signal light optically supports product weighing.



ltem	Designation			
1	Integrated signal light			
2	Housing			
3	Mounting screws (3 pieces)			
4	Cover for loading cable connection			
5	Cable fittings			
6	USB connection			



Item	Designation
1	USB connection
2	Screw plugs (4 pieces)

2.2 DISPLAY

The displays of the individual animal scales (ETW) series offers all advantages of quick and accurate weighing. The keyboard is water-proof and the LCD displays are equipped with background lighting as a standard. All displays have a zero function, a three-colour signal light and a sum memory, which allows saving of individual weighing processes and invoking them as a total sum.

2.2.1 DISPLAY OVERVIEW

The LCD display indicates a value (0,0) and a weighing unit (kg). Further labelling is G for gross and stable \square or \frown .



W1	Scales 1
→ 0←	Zero positioning, sets the zero point for all following weighing processes. Zero is displayed.
G	Gross weighing is displayed.
	Animal weighing function
	Stability display, lights up when the weight is placed stable.
kg	Active weight unit

2 | Description

2.2.2 LEGEND FOR THE WEIGHING VALUE DISPLAY

A	в	С	D	E	F	G	н		J	κ	L	М
H	Ъ	C	ď	E	⊱	Ŀ	h	1	ц	h	Ľ	

N	ο	Р	Q	R	S	Т	U	V	W	Χ	Υ	Ζ
	o	 	4	Г	þ	E	Ŀ	Ľ	8	H	Ч	Ľ

0	1	2	3	4	5	6	7	8	9
	ł	ď	Ľ	4	5	Ь	'}	B	Ë

2.3 KEYBOARD OVERVIEW



Key	User level	Function level
SAVE	The current weight on the scales is saved.	The activated number during parameter value setting or setting of other functions can be displaced to the left.
MR TRANSFER	When a USB stick is connected, the data are transmitted to the stick. For this purpose, press the "MR_TRANSFER" key for two seconds. The sum of the saved individual weighing processes and the resulting total weight are displayed. To delete individual weighing results simultaneously press the keys "M+" and "MR_ TRANSFER" (MC).	The activated number during parameter value setting or setting of other functions can be increased.
LIMIT	If the keys "LIMIT" and "ON/OFF_TARE" are actuated simultaneously, the saving process is cancelled.	Apply the input during parameter value setting or setting of other functions. ENTER
ON / OFF TARE	Used to switch on and off the display device. For switch off, press the key "ON/OFF_TARE" for two seconds, OFF appears in the display.	Leaving the function level. ESC

3 TRANSPORT, COMMISSIONING/START-UP AND TESTS/INSPECTIONS

3.1 CONTROL

When the display is delivered, check the packaging, the device and possible accessories for visible damages.

3.2 PACKAGING AND DISPOSAL

Keep all parts of the original packaging for a possible return.



Note

Only use the original packaging, if the display is returned. Prior to the transport, disconnect/fasten all loose/moving parts of the device. Secure the parts against slipping/damage.

Dispose of the packaging and the display according to the national and/or local regulations by law valid on the installation site. Separately dispose of a defective battery according to the national and local regulations on environmental protection and recycling.

Do not treat a battery as standard waste. Please dispose of via a waste management company.

3.3 **REGULAR INSPECTIONS/CHECKS**

Check the display for visible damage, prior to each use. Also check electric lines for damage, prior to each use. If defectives can be detected, immediately stop operating and any other work on the display or the electric lines and contact an authorised expert.

3.4 **TESTING EQUIPMENT MONITORING**

Quality assurance requires regular inspections of the technical measuring features of the display in connection with the scales and a possible available test weight. The owner/user can define a suitable interval as well as the scope of these inspections.

3.5 EXTRAORDINARY INSPECTIONS

After special incidents, the display must be additionally inspected visually by an authorised person (even if not within the regular inspection interval).

Inspection criteria

- Correct function of the display.
- Damages to the housing.
- · Damages to electric lines and connectors.

If defectives can be detected, immediately stop operating and any other work on the display or the electric lines and contact an authorised expert.

3.6 **REPAIR WORK**

Only the manufacturer or persons instructed by the manufacturer are allowed to carry out repair work on the display.

The electronic components are not completely water-proof and must not come into contact with splash water or being immersed. If the electronic components become wet or visible damages can be detected, stop operating the scales.

If spare parts or accessories are required, please contact your supplier.

3.7 Use other than the intended

- Protect the electronic display unit against humidity. Particular protection is required during cleaning work.
- If small amounts of the goods to be weighed are removed or added, incorrect weighing results might appear caused by the "Stability compensation" integrated in the scales!
- Never modify the design of the display. This can lead to incorrect weighing results, technical safety defects as well as the destruction of the display.
- Only use the display in accordance with the described specifications



Danger

Never operate the display in potentially explosive atmosphere. The display is not explosion protected.

· Only use original spare parts.



Attention

The design/construction of the product as well as all regulations (standards, etc.) specified in the operating manual refer to the directives valid in Germany. Only use the product in other countries in accordance with the directives, regulations and laws valid in the country of use.

Only use original spare parts!

3.8 COMMISSIONING / START-UP

Keep the device clean and do not expose to an environment influencing the display accuracy.



Protect against draught!



Protect against heat, sun frost!



Protect against tilting vibration!



Avoid astable voltage sources!



Avoid humidity!

Observe the following, prior to commissioning/starting up:

Ensure that the weight on the scales does not exceed the maximum load!



Note

Allow a short heat-up time to stabilise the display (approx. 15 minutes).



Note

Ensure that a 230 V AC voltage supply is available on the installation site (unless operation with rechargeable batteries is intended).

3.9 CHARGING THE RECHARGEABLE BATTERY



- Connect the mains cable to the loading cable connection (1) and insert the connector in the socket.
 - The charging process automatically starts.
 - The battery symbol lights up on the display as long as the battery is charging.

Complete charging of a completely discharged battery takes approx. 4 hours at 23°C. The charging period depends on the ambient temperature and the charging status of the battery. The charging might take longer, if the temperature is lower.

Charge the battery on the day of use or the day before. Batteries are also discharged during storage, even if not used.

The power pack can also be used in other countries. It can be connected to voltage sources with 100 to 240 V alternating current and 50/60 Hz. If necessary, use a common socket adapter for the respective country. Never connect any mobile voltage converters, otherwise, the power pack and the display could be damaged.



Note

The battery is worn, if the voltage decreases quickly after charging. Contact the responsible expert.

3.10 SAFETY INFORMATION FOR HANDLING RECHARGEABLE BATTERIES AND POWER CABLES

Only use batteries, power sources or accessories intended for this use by the manufacturer.

Never use batteries designed or modified by yourself.

Never short-circuit rechargeable batteries, disassemble them or modify them in any manner.

Ensure that the battery does not in contact with heat, soldering material, fire or water.

Ensure that the battery is not inserted opposite to the specified polarity direction (+/-). Do not simultaneously use new and old batteries or different battery types.

Only charge the rechargeable battery within the admissible ambient temperature range. Do not exceed the charging time.

Do not insert any foreign objects made of metal into the electric contacts of the display, accessory parts, connection cables, etc..

Never store batteries in the vicinity of children. Immediately contact a doctor when your child has swallowed up the battery.

Prior to disposing of the rechargeable battery, insulate the contacts with tape to avoid direct contact to objects made of metal. In this manner, you can prevent a fire.

If the battery or the power pack heat up excessively during charging, immediately interrupt the process by disconnecting the connector of the battery charging unit.

Immediately remove the battery when liquid or gel emerges. If the battery changes its colour or shape, disconnect it from the scales or the power pack. Be particularly careful to avoid burning injuries.

Contact with the battery fluid can lead to skin irritations and/or blindness. If emerged fluid comes into contact with eyes, skin or clothing, immediately rinse the area in question thoroughly with water. Subsequently see a doctor.

Never store cables in the vicinity of heat sources. This can deform cables and damage their insulation leading to the danger of electrocution or fire.

Never use the display and the charging unit in the vicinity of highly flammable gas.

Do not disassemble or modify the display.

Do not store the display in moist or dusty environment.

If the scales drops into water or water ingresses the housing, immediately remove the battery.

Never cover the power packs or charging units with cloths or wrap cloths around them. This might result in heat accumulation.

Ensure that the connector is completely inserted in the socket.

Never touch charging and mains cable with wet hands.

Pull the mains cable on the connector out of the socket (not on the cable).

Ensure that power cables are not damaged, cut, kinked or loaded with heavy objects. Never twist or interlace cables. Prior to using cable drums, unwind the cable completely. Do not connect too many connectors to one socket. Do not use any cables with damaged insulation.

Regularly disconnect the connector from the socket and remove any soiling and dust from the connector and the socket environment.

Close the charging socket of the display with the protective cap when no charging unit is connected.

4 **OPERATION**

- 4.1 SWITCHING ON AND OFF
- 4.1.1 SWITCHING ON



- Press the key (4) "ON/OFF_TARE".
 - The display is switched on.
 - The software version is displayed.
 - Then a display self test is made and the scales automatically sets to "0.0".
- The display has an automatic function to reset the scales to zero. If the scales displays small numbers, press the key (4) "ON/OFF_TARE". Weighing starts at zero.

4.1.2 SWITCHING OFF

- Press the key (4) "ON/OFF_TARE" for two seconds.
 - "oFF" appears briefly in the display.
 - The display is switched off.

4.2 WEIGHING PROCESS

- Place the goods to be weighed on the weighing plate. For animals wrangle the animals into the scales.
 - The stability display appears with stable values



- If the goods to be weighed are heavier than the set weighing range, "E.OLP" (= overload) appears on the display.



4.3 CONTROL WEIGHING

The control weighing can be used to check the weight of individual animals. The three-colour signal light additionally indicates whether or not the weighed animals are too light or too heavy.

4.3.1 SWITCHING ON AND OFF THE SIGNAL LIGHT

- Press the key (3) "LIMIT" for two seconds.
 - The status of the signal light briefly appears on the display. Status "ON": The signal light is activated.
 Status "OFF": The signal light is deactivated.

4.3.2 SETTING THE LIMIT

- Briefly press the key (3) "LIMIT".
 - The following message appears in the display:

- Activation of the setting for the limit values of the yellow LEDs.
- Briefly press the key (3) "LIMIT" again.

• The display changes over to the value input:



- The RH display flashes.
- Press the key (2) "MR_TRANSFER" to change the value.
- Press the key (1) "SAVE" to go on by one digit to the left and change the value.
- Press the key (3) "LIMIT" to confirm the value for the yellow LEDs.
 - This message briefly appears in the display:



- Activation of the setting for the limit values of the red LEDs.
- The following message appears in the display:

- Briefly press the key (3) "LIMIT".
 - The display changes over to the value input:

- The RH display flashes.
- Press the key (2) "MR_TRANSFER" to change the value.
- Press the key (1) "SAVE" to go on by one digit to the left and change the value.
- Press the key (3) "LIMIT" to confirm the value for the red LEDs
 - This message briefly appears in the display:



- Activation of the setting for the limit values of the blue LEDs.
- The following message appears in the display:



- Briefly press the key (3) "LIMIT".
 - The display changes over to the value input:



- The RH display flashes.
- Press the key (2) "MR_TRANSFER" to change the value.
- Press the key (1) "SAVE" to go on by one digit to the left and change the value.
- Press the key (3) "LIMIT" to confirm the value for the blue LEDs
 - This message briefly appears in the display:



- Activation of the setting for the limit values of the green LEDs.
- The following message appears in the display:



- Briefly press the key (3) "LIMIT".
 - The display changes over to the value input:



- The RH display flashes.
- Press the key (2) "MR_TRANSFER" to change the value.

- Press the key (1) "SAVE" to go on by one digit to the left and change the value.
- Press the key (3) "LIMIT" to confirm the value for the green LEDs
 - This message briefly appears in the display:



- The display automatically switches to weighing mode.

4.4 FACTORY-SET LIMIT VALUES

4.4.1 LIMIT VALUES FOR THE MOBILE SCALES

0 kg - 106.4 kg: no LEDs are light up (the weight is smaller than LIN-y)

106.5 kg - 112.4 kg: The yellow LEDs lights up (LIN-y <= Weight value < LIN-r)

112.5 kg - 118.4 kg: The red LEDs lights up (LIN-r <= Weight value < LIN-B)

118.5 kg - 124.4 kg: The blue LEDs lights up (LIN-B <= Weight value < LIN-G)

> = 125.5 kg: The green LEDs lights up (LIN-G <= Weight value)

4.4.2 LIMIT VALUES FOR THE ANIMAL GROUP SCALES

< 107 kg: no LEDs lights up (the weight is smaller than LIN-y)

- 107 kg 112 kg: The yellow LEDs lights up (LIN-y <= Weight value < LIN-r)
- 113 kg 118 kg: The red LEDs lights up (LIN-r <= Weight value < LIN-B)
- 119 kg 124 kg: The blue LEDs lights up (LIN-B <= Weight value < LIN-G)

>= 125.5 kg: The green LEDs lights up (LIN-G <= Weight value)

5 SETTINGS

5.1 MAIN MENU

5.1.1 ADJUSTMENT WITH WEIGHT

According to the basic physical weighing principle at the installation site, each scales must be adjusted to the conditions on site such as gravity acceleration, temperature, location, etc.

- Ensure that no load is on the scales.
- Switch on the scales using the key "ON/OFF_TARE".
- Press the key <ENTER> while the scales counts down.
 - The following message appears in the display:



- Press the key <LEFT>.
 - The following message appears in the display:



- Press the key < ENTER>.
 - The message "- - " appears on the display.
- Enter the code "0000" using the keys <UP> and <LEFT>.
 - The <UP> key is used to change a value.
 - The <LEFT> key is used to change between the individual numbers.
- Confirm the code using the key <ENTER>.
 - The message (setting) appears on the display:



• Press the key <UP>.

- The message (CAL/calibration) appears on the display:



- Press the key < ENTER>.
 - The message (SPAN/two-point calibration) appears on the display:



- Press the key < ENTER>.
 - The message (Raw/raw measured value) appears on the display:



- Press the key < ENTER>.
 - The current raw measured value of the A/D converter appears on the display:



- Press the key <ENTER> or <ESC>.
 - The message (Raw/raw measured value) appears again on the display:



- Press the key <UP>.
 - The message (Zero) appears on the display:



• Press the key < ENTER>.

The current raw measured value of the A/D converter appears on the display.



- Ensure that not load is on the scales.
- Briefly wait (until the displayed value hardly changes) and then confirm the value with the key <ENTER>.
 - The message "donE" briefly appears on the display.
 - The message (Zero) appears again on the display:



- Press the key <UP>.
 - The message (Load/load weight) appears again on the display:



• Press the key < ENTER>.

:

- The currently set value of the load appears flashing on the display.
- · Enter a value for the loadusing the keys <UP> and <LEFT>



- Confirm the value using the key <ENTER>.
 - The current raw measured value of the A/D converter appears on the display.



- Ensure that the set load is on the scales.
- Press the key < ENTER>.

- The message "donE" briefly appears on the display.
- The message (Load/load weight) appears again on the display:



- Press the key <ESC> repeatedly to leave the menu.
 - The message (Save ?) appears on the display:



- Press the key <ENTER>, if the value is to be saved.
 - The messages "donE" and "off" briefly appear on the display.
 - The scales is switched off.
- Press the key <ESC>, if the value is not to be saved..
 - The message "off" briefly appears on the display.
 - The scales is switched off.

5.1.2 THEORETICAL ADJUSTMENT

- Switch on the scales using the key "ON/OFF_TARE".
- Press the key <ENTER> while the scales counts down.
 - The following message appears in the display:



- Press the key <LEFT>.
- The following message appears in the display:



- Press the key <ENTER>.
 - The message "- - " appears on the display.
- Enter the code "0000" using the keys <UP> and <LEFT>.
- Confirm the code using the key <ENTER>.
 - The message (setting) appears on the display:



- Press the key <UP>.
 - The message (CAL/calibration) appears on the display:



- Press the key < ENTER>.
 - The message (SPAN/two-point calibration) appears on the display:



• Press the key <UP>.

- The message (theoretical calibration) appears on the display:



- Press the key < ENTER>.
 - The message (field calibration/calibration with known weighing cells) appears on the display:



- Press the key < ENTER>.
 - The message (sensitivity) appears on the display:



- Press the key < ENTER>.
- Enter a value using the keys <UP> and <LEFT> for the weighing cell sensitivity.



- Press the key <ENTER>.
 - The message "donE" and the following message briefly appear on the display again:



- Press the key <UP>.
 - The message (maximum load) appears on the display:



• Press the key < ENTER>.

• Enter a value using the keys <UP> and <LEFT> for the maximum capacity of the weighing cell.



• Press the key < ENTER>.

- The message "donE" and the following message briefly appear on the display again:



- Press the key <UP>.
 - The message (Zero) appears on the display:



If necessary, a new zero point of the scales can be adjusted here.

• Press the key < ENTER>.

- The current raw measured value of the A/D converter appears on the display:



- Press the key < ENTER>.
 - The message "Wait" (Wait) briefly appears on the display and the message(Zero) again:

- Press the key <ESC> twice to leave the menu.
 - The message (gravity/gravity factor) appears on the display:

If necessary, the gravity factor (gravity acceleration) can be adapted here.

- Press the key < ENTER>.
 - The value for the gravity acceleration appears on the display.



- Enter the value for the gravity acceleration of the respective installation location here.
- Press the key < ENTER>.
 - The message "donE" and the following message briefly appear on the display again:



- Press the key <UP>.
 - The message (calibration method) appears on the display:



- Press the key < ENTER>.
 - The calibration method (field) activated last appears on the display:

- Press the key <UP>.
 - The message (Factory) appears on the display:

Г	П	1	11
F	ロビ	E	

• Press the key <UP>.

- The message (SPAN) appears on the display:



- Actuate the key <ENTER> to activate the desired calibration method.
 - The message "donE" briefly appears on the display.
 - The message (calibration method) appears again on the display:



• Press the key <ESC> repeatedly to leave the menu.

5.1.3 ADJUSTMENT CORRECTION

If the displayed value of the theoretical adjustment (factory-set default value) deviates from the value of the real weight, this value can be corrected.

- Simultaneously actuate the keys <UP> and <LEFT> for approx. three seconds.
 - The RH digit of the displayed weight starts flashing.
- Correct the value using the keys <UP> and <LEFT>.
 - The <UP> key is used to change a value.
 - The <LEFT> key is used to change between the individual numbers.
- · Confirm the value using the key <ENTER>.
 - The message "donE" briefly appears on the display.

This correction can be repeated as often as required.

5.1.4 RESET TO FACTORY-SETTINGS

- Switch on the scales using the key "ON/OFF_TARE".
- Press the key <ENTER> while the scales counts down.
 - The following message appears in the display:



• Press the key <LEFT>.

- The following message appears in the display:



- Press the key < ENTER>.
 - The message "- - " appears on the display.
- Enter the code "0000" using the keys <UP> and <LEFT>.
 - The <UP> key is used to change a value.
 - The <LEFT> key is used to change between the individual numbers.
- Confirm the code using the key <ENTER>.
 - The message (setting) appears on the display:



- Press the key <UP> four times.
 - The message (reset) appears on the display:



- Press the key < ENTER>.
- Use the <UP> key to navigate.
 - The messages "ON" or "OFF" appear on the display.
- Actuate the "ON" message using the <ENTER> key.
 - The display is reset to factory-settings.



When the system is reset to factory-settings all settings made after delivery will be lost!

5.1.5 SETTING THE TIME AND DATE

The scales is equipped with an internal clock.

- Switch on the scales using the key "ON/OFF_TARE".
- Press the key <ENTER> while the scales counts down.
 - The following message appears in the display:



- Press the key <UP> three times.
 - The message (Time) appears on the display:



- Press the key < ENTER>.
 - The message (hour) appears on the display:



- Press the key < ENTER>.
 - The value currently set appears on the display and starts flashing.
- Correct the hours using the keys <UP> and <LEFT>.
 - The <UP> key is used to change a value.
 - The <LEFT> key is used to change between the individual numbers.
- Confirm the value using the key <ENTER>.
 - The display automatically changes over to the input of the "Min." value.
- Correct the minutes using the keys <UP> and <LEFT>.
- Confirm the value using the key <ENTER>.
 - The display automatically changes over to the input of the "Sec." value.
- Correct the seconds using the keys <UP> and <LEFT>.
- Confirm the value using the key <ENTER>.

- The display automatically changes over to the input of the "Day" value.
- Correct the days using the keys <UP> and <LEFT>.
- Confirm the value using the key <ENTER>.
 - The display automatically changes over to the input of the "Month" value.
- Correct the months using the keys <UP> and <LEFT>.
- Confirm the value using the key <ENTER>.
 - The display automatically changes over to the input of the "Year" value.
- Correct the year using the keys <UP> and <LEFT>.
- Confirm the value using the key <ENTER>.
 - The message "donE" briefly appears on the display.
 - The message (Time) appears again on the display:



- Press the key <ESC>.
 - The message (Save ?) appears on the display:



- Press the key <ENTER>, if the value is to be saved.
 - The messages "donE" and "off" briefly appear on the display.
 - The scales is switched off.
- Press the key <ESC>, if the value is not to be saved.
 - The message "off" briefly appears on the display.
 - The scales is switched off.

5.2 QUICK SELECTION MENU

5.2.1 SETTING THE BACKGROUND LIGHTING

- Ensure that no load is on the scales.
- Switch on the scales using the key "ON/OFF_TARE".
- Press the key <LEFT> for two seconds.
 - The message (High-Low-Go-Mode) appears on the display:



- Press the key <UP> five times.
 - The message (Display) appears on the display:



- Press the key < ENTER>.
 - The message (Background lighting) appears on the display:



- Press the key < ENTER>.
- Use the <UP> key to navigate.
 - The message (Background lighting: Automatic/On/Off) appears on the display:



• Press the key <ENTER> when "bL AU" is displayed.

- The time (seconds) for background lighting can be entered here.
- The message (Background lighting) appears on the display:



- Press the key <UP> several times.
 - The displayed value is changed (10 120). The time value "120" displays the seconds, for which the display (inactivity of weight) remains active.
- Press <ENTER>.
 - The message "donE" briefly appears on the display.
 - The following message appears again in the display:



- Press the key < ENTER>.
- Use the <UP> key to navigate.
 - Following messages appear on the display:



- Press the key <ENTER> when "bL On" is displayed.
 - The background lighting is always ON.
- Press the key <ENTER> when "bL Off" is displayed.
 - The background lighting is always OFF.
 - The message "donE" briefly appears on the display.

- The following message appears again in the display:



• Press the key <ESC> repeatedly to leave the menu.

6 **TROUBLESHOOTING**

6.1 IN THE EVENT OF A MALFUNCTION

We recommend switching off the scales briefly and disconnecting it from the mains, if a malfunction occurs in the program sequence. Then restart the weighing process.

6.2 ERROR MESSAGES OF THE SCALES

Error message	Description	Possible cause
E.016	No USB stick connected.	No USB stick available.
E.040	No data for transmission available.	No values saved in the long-term memory.
OL	Overload	The maximum set weighing range is exceeded.
Err.Lin	Error Limit Hi and LOW values incor- rectly defined.	The set HI value is smaller than the set LOW value.
ErrScL	After switching on and the display self test no digitali- sation unit is detected. The scales do not switch to weighing mode.	The scales is not con- nected.
Er2Ero	The weight is not added to the sum memory during weighing.	The scales is not zeroed prior to the weighing pro- cess →0 ← .

If any other malfunctions or error messages occur, please switch off the scales and after a short while on again.

If error messages occur again, please contact the customer service.

6.3 CUSTOMER SERVICE CONTACT DATA

Meier-Brakenberg GmbH & Co. KG Brakenberg 29 D-32699 Extertal

Phone	+49 5262993990
Fax	+49 5262993948
Email	info@meier-brakenberg.de

6.4 INFORMATION FOR THE CONTACT TO THE CUSTOMER SERVICE

Owner/user	Specifications
Name of your company	
Name of a contact person	
Contact data	
Telephone	
Fax	
Email	

Tabelle 6.1: Your company

Product	Specifications
Model name	
Serial number	
Туре кеу	
Date of purchase	
Name and location of the sup- plier	



Note

Fill in the table shown above when the display is delivered to be able to use all information without any problems at any time.

Information about the problem:

Examples for required specifications to support troubleshooting:

- Does the display operate fault-free since its delivery?
- Has the display any contact to water?
- Was there any damage due to a fire?
- Was there a thunderstorm before / during the malfunction?



Note

Please inform us about the entire history of the display.

7 TECHNICAL DATA

7.1 TYPE PLATE FOR A STATIONARY DISPLAY



7.2 TYPE PLATE FOR A MOBILE DISPLAY



7.3 TECHNICAL DRAWING







SA Links2



Drfsicht2



Rckans2

7.4 TECHNICAL DATA

Feature	Value / Unit
Туре	Rechargeable lithium-ion battery
Dimensions (W x H x D)	182,5 x 156 x 75 mm
Weight	
Aluminium housing	Approx. 1.5 kg
Power supply (external)	12 VDC / 230 VAC, 1000 mA via
	external mains adapter
Service life of rechargeable battery	Up to 12 hour in permanent opera- tion
Charging time of rechargeable battery	Approx. 4 hours
Adjustment	Automatic, external
Max. resolution (depending on the	External 1/30,000
weighing cells used)	Internal 1/1,000,000
Display	6 digits, LCD illuminated, Digit height 30 mm
Keyboard	4 pressure point keys
Interface(s) (2 as an option)	RS485, Lan, RS232
Functions	Weighing value display, sum mem- ory, presettable weighing with alarm, control signal lights
Weighing cell sensitivity	1mV/V~3mV/V
Number of weighing cells	Up to 4 with 350 Ohm each
AD converter	24 bits, 1 channel
Zero input range	0mV~5mV
Signal input range	0mV~15mV
Settling time	2 seconds typical
Operating temperature	+5°C to +40°C
Relative air humidity	max. 80%, non-condensing

7.5 SCOPE OF DELIVERY / WIRING DIAGRAM

Component	Note
Display / Weighing terminal	
Mains adapter	
Operating manual	
Table/wall holder	Not included for the version with stand

	E+	E-	L .	S+	S-
Mobile Scales: (WA400MM) WA18, WA08, WAS, WAF, WASA, WAF, WAKF, etc.	red	black	Shield (blue)	white	green
Stationary Scales: (WA400MS) WASTN	green	black	Shield (blue)	white	red



Connecting terminal



Mobile Scales



Stationary Scales

8 MENU OVERVIEW

8.1 NAVIGATION IN THE MENU

- A menu or subroutine is left by pressing the key <ESC>.
- The <UP> key is used to navigate between the individual menu points and modify editable numbers.
- The key <LEFT> serves to move the input cursor to the left by one digit.

8.2 FUNCTION MENU OVERVIEW

Actuate the <ENTER> key (or <LIMIT>) after the display has been switched on and while the countdown on the display counts down.

Menu	Subroutine	Options	Function
COM1	Mode 1	Off, CONT, ST1,ST2, STC, PR1, PR2, PR3, ASK	
		Cont (continuously transmits data)	
	Outp	PC // data string Print 1// Print 2 // HPP-250 Print 3 // LP-50 Print 4 // HPP-250 for HLS lifting carriages Print 5 // HP083 Remote display "rntdSP"// exter- nal large display (RD50, RD100, RD150, RD195) Lights // external three-colour light (PC0, PCL, PCG, PCH) (Status lamp SL3)	Protocol setting (Printer type)
	Baud 1	1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200,	Data transmission speed (Baud rate)
	Part 1	8n1 //8 Data bytes, No Parity, 1 Stop Bit 7E1 // 7 Data bytes, Even Parity, 1 Stop Bit 701 //7 Data bytes, Odd Parity, 1 Stop Bit	Parity settings (for data transmission)
	Ntw.Rst	Network reset No Yes	The WLAN settings can be reset.

Menu	Subroutine	Options	Function
COM 2	As COM 1	As COM 1	As COM 1
USB	Multpl	// Alibi data blocks: the data blocks of all days are written in one file during saving on the USB stick.	Setting of the saving method of measured data on the USB stick.
	Single	// Alibi data blocks: an individual file is created for each measuring day during saving on the USB stick.	-
Time	Hour, Min, Sec, Day, Month, Year		Setting of time and date.
FUNC	Units	SEL 0: no weight unit SEL 1: g (gram) SEL 2: kg (kilogram) SEL 3: t (ton) SEL 4: lb (pound)	Weight unit selection.
	Ext.Dev:	Off Gyro	"External Device" selec- tion (is not used!).
SPEED	SMPLNG	6, 12, 25, 50, 100, 200	ADC sampling rate Sampling rate of the external ADC (Attention: The setting does usually not require any changes! Effect on the weight cal- culation!).

Menu	Subroutine	Options	Function
LEGAL	ALB.SW (Alibi Switch)	Al.On Al.Off	Saving weight data in the internal memory (sum memory or alibi memory).
	ALB.SHW (Alibi Show)	EDIT.AB (Edit Alibi Number) "000000" // 0 flashing> Selec- tion of the alibi entry.	Show alibi entry (show a specific weight value saved in the sum memory).
	GET.LST (Get Last Alibi Number) (Number of Entries)	"0" // the number of values saved in the sum memory	
	TAC (Tac counter)	"0" // Number of the executed calibration processes (or number of the storage processes in the menu protected by a password).	
CODE		"" flashing> CODE = 0000	Change-over to the "Menu protected by a password".

8.3 MENU PROTECTED BY A PASSWORD

- Activation of the main menu
- Navigation to "CODE"
- Enter CODE = 0000 using the keys <UP> and <LEFT> and confirm with <ENTER>

Menu	Subroutine	Options	Function
SETTING	DEC 1	0, <u>0.0</u> , 0.00, 0.000, 0.0000,	Setting of the desired number of digits after the decimal point.
	INC	1, 2, <u>5</u> , 10, 20, 50, 100, 200	Increments for the dis- played weight (resolu- tion).
	CAP	" <u>01000.0</u> " flashing> Enter the value using the keys <up> and <left></left></up>	Setting of the maximum capacity.
	OLP	<u>On</u>	"—OVL—" appears when the max. capacity is exceeded.
		Off	Output of the current weight, even if the max. capacity has been exceeded.
	ULP	<u>On</u>	"—OVL—" appears when the min. capacity is gone below.
		Off	Output of the current weight, even if the min. capacity has been gone below.
	RnIn	<u>Off</u> / Rng / Int	Multi-range / Multi-range scales (is not used!).

Menu	Subroutine	Options	Function
CAL	SPAN		Two-point calibration (zero point, load point)
		Raw "000000"	The current ADC value appears.
		Zero "00000" with <enter></enter>	Set zero point
		Load "001000" with <up> and <left> "000000" set the load point with <enter></enter></left></up>	Display / setting of load weight

Menu	Subroutine	Options	Function
CAL	mV - V	FIELD	Theoretical calibration.
		Sens "001000" flashing> Enter the value using the keys <up> and <left></left></up>	Setting the sensitivity of the weighing cells used. Stationary: 2.0000 MVV value of the cells (Mobile: <u>1.7200</u> for V1.n; 2.0000 for V5.n)
		T.CAP flashing> Enter the value with <up> and <left></left></up>	Setting the maximum load of the weighing cells used. (Mobile: <u>1496.0</u> for stationary: 04535)
		Zero "001000" set the zero point with <enter></enter>	The current ADC value appears.
		FCTORY (Factory-calbration)	Theoretical calibration using the weighing cell simulator.
		SENS "001000" flashing> Enter the	Setting the sensitivity.
		<left></left>	Setting the maximum load.
		I.CAP flashing> Enter the value with <up> and <left></left></up>	The current ADC value appears.
		<pre>2ero "001000" set the zero point with <enter></enter></pre>	The current ADC value appears.
		Load "000000" set the load point with <enter></enter>	

Menu	Subroutine	Options	Function
CAL	GrAvtY	" <u>981276</u> " flashing> Set the gravity value with <up> and <left></left></up>	Adaptation of the gravity factor to correct the weight value on the site of scales use. (Default: 9.8130)
	CAL.SEL	SPAN Calibration method = "Span" FIELD Calibration method = " <u>Field</u> " FACTRY Calibration method = "Factory"	Selection of the active calibration method.
Zero - M			Zero menu
		Au.ZERO (Auto Zero) Off / 0.25d / 0.5d / 1d / 2d / 3d / 4d	Set the range for "Zero_Tracking". (Zero tracing function).
		Rn.ZERO (Zero Range) 0, 2, 4, 10, 20, 50, 100	Range, within which the zeroing function can always be carried out (referred in percent to the maximum admissible total weight of the scales).
		On.ZERO (On Zero) 0, 2, 4, 10, 20, 50, 100	Range, within which the zeroing function can be carried out when the scales is switched on (referred in percent to the maximum admissible total weight of the scales)
Filters	FLT.ACT	On / Off	Filter Active is not used!
RESET		On / Off	Reset to factory-settings

8.4 QUICK SELECTION MENU (HLG MENU)



Note

The quick selection menu serves for a facilitated input or reading out parameters and for display parameterisation. The quick selection menu can be used to set parameters for the function of control weighing cycles, for the alibi memory, the printer, the background lighting and automatic switch-off.

The quick selection menu (while the scales is in weighing mode) can be opened by pressing the key <LEFT> (or <SAVE>) for approx. two seconds.

Menu	Subroutine	Options	Function
HILOGO	HLG.MOD (High-Low-Go - Mode)	Off = three-colour light is deacti- vated 3-colour = 3-colour mode for the sorting lights 4-colour = 4-colour mode for the sorting lights	Settings for the sorting lights.
	BEEP	Off = acoustic signal deactivated Be OK = acoustic signal in the "Green area" Be Lo = acoustic signal in the "Yellow area" Be Hi = acoustic signal in the "Red area" Be HiLo = acoustic signal in the "Yellow area" and the "Red area" Be OVL = acoustic signal for overload or underload.	Additional acoustic func- tion for the sorting lights (referred to the HLG mode = 3rd colour
	STORE	On = The HLG limit values are saved. Off = HLG limit values must be set again after a power reset.	Saving the HLG limit val- ues.
	BRIGHT (Brightness)		Settings for the bright- ness of the sorting lights LEDs.
		"Brl.000" flashing> Enter the value using the keys <up> and <left> Brightness 0 - 100 %</left></up>	The brightness is subdi- vided in 32 stages and a change is visible each 3-4 %.

Menu	Subroutine	Options	Function
MEMORY (Sum mem- ory)	Clr.Alb (Clear Alibi Memory)	Clr.No = Do not delete the sum memory Clr.Yes = Delete the sum mem- ory	Deleting the sum mem- ory.
ALIBI	EDIT.AB (Edit Alibi Number)	"000000" flashing> Enter the value using the keys <up> and <left></left></up>	Display of a specific entry from the sum memory.
	GET.LST (Get Last Alibi Number)	"0" the number of values saved in the sum memory.	
PR1	Info	Number / Alibi / Date / Time / Gross / Net / Tare /T.Gross/ T.Net / T.Tare	Setting of the individual elements for the print ticket (e.g. whether or not the consecutive number, the date, etc. are to be printed onto the print ticket).
		Confirm On or Off with <enter>.</enter>	
	Сору	Value 0 - 4	Number of the print tick- ets to be printed.
FUNC	APPS (selec- tion of the active applica- tion)	Weight = Standard weight meas- uring	Function selection
		Count = Count application	
		PER (Percentage) = Special HLG function (modulation of the sorting lights LEDs depending on only one limit value = 100%)	
		ANIMAL = special animal filtering function is used.	
		PEAK = Peak function is acti- vated.	The menu protected by a
		HOLD = Hold function is acti- vated.	vated while the hold or peak functions are active.

Menu	Subroutine	Options	Function
DISPL	B.Light (Back- light)		Settings for the display (background lighting)
		BI AU (Backlight Auto) 10 / 20 / 30 / 40 / 50 / 60 / 70 /80 / 90 /100 / 110 / 120> Set the value with <up></up>	Automatic activation / switch-off of the back- ground lighting after N seconds. The back- ground lighting is auto- matically activated when the weight changes or a key is pressed.
		BI On = Background lighting always ON. BI Off = Background lighting always OFF.	
	AU OFF	"AU 00" flashing> Enter the time (minutes) using <up> and <left> and confirm with <enter>.</enter></left></up>	Automatic switch-off of the scales, if no key is actuated and the weight does not change.
		Value "00" = no switch-off	
	LNG (Lan- guage)	ENG = "G" GEr = "B"	The symbol for gross appears as "G" or "B" on the display.

9 DECLARATION OF CONFORMITY

9.1 DECLARATION OF CONFORMITY FOR SCALES NOT CALIBRATED



Unterzeichnet für und im Namen von:

Signed for and on behalf of: - Signé pour et au nom de: - Ondertekend voor en namens: - Firmado por y en nombre de: Meier-Brakenberg GmbH & Co. KG

Extertal, 20. April 2022

Extertal, 20 April 2022 - Extertal 20 Avril 2022 - Extertal, 20 April 2022 - Extertal, 20 de Abril el año 2022 Walfany Merin Ware Bre And

Meier, Wolfgang, Piechnik, Marc Geschäftsführer - managing director - manager - gerente