

OPERATING MANUAL

ADE

Electronic, price-computing retail scales



LW100 series

Calibrated retail scale - LW100 series

LW100-210408-Rev002-UM-en



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2. About this operating manual



This symbol means: "Consult operating instructions". To achieve accurate results, read the instructions for use carefully before use and follow all instructions provided therein. Keep the instructions for use for future reference.

General information

- This operating manual describes the safe operation as well as the operation, care and maintenance of the scale.
- Only compliance with the operating manual is considered intended use.
- Please read this operating manual carefully before connecting and using the scale. Failure to observe this operating manual may result in injuries or damage to your product.
- Our products are constantly being developed and improved. For this reason, design and technical modifications are possible at any time. However, this has no influence on the content of this manual.

This operating manual provides you with the information you need to start up the scale quickly.

To obtain accurate results, please read the installation and operating manual carefully and comply with the instructions contained therein. The scale may only be operated and maintained by trained personnel.

Storage

The operating manual is part of the scale. It must be kept in the immediate vicinity of the scale and must be easily accessible for everyone.

When reselling the scale, the operating manual must also be supplied.

Target group

This operating manual is intended for personnel who are responsible for setting up, operating, care and maintenance of the scale. Personnel who operate the scale must have read and understood this operating manual before using it for the first time.

3. Safety instructions

It is essential that you read, understand and follow all instructions in these instructions for use as well as the country-specific installation standards, the applicable safety regulations and accident prevention regulations.

- Handle the scale with care and always keep in mind that it is a precision measuring instrument.
- Protect the weighing platform from impacts and vibrations and do not overload the scale.
- The scale may only be operated and maintained by trained and authorised skilled personnel. Handling errors can lead to injuries or damage the scale.
- Before first use, make sure that the mains voltage and current type stated on the name plate match the mains voltage and current type at the place of use.
- Lay the cables so that they cannot lead to a trip hazard.
- Lay the cables so that they cannot pose a risk of strangulation.
- Operate the device only within the permissible ambient conditions.
- Do not expose the scale to high temperatures, whether from neighbouring devices or direct sunlight.
- Use the scale at constant ambient temperatures and avoid using in draughts, otherwise the measurement results could be falsified.

- Place the scale as far as possible from other devices or sources that generate electromagnetic field or other interferences (e.g. strong motors and portable and mobile HF communication devices) as these can falsify the measurement results.
- Use only approved accessories and peripherals.
- Before cleaning the device, pull the mains adapter/plug out of the socket.
- Never clean the scale with abrasive or aggressive cleaning agents.
- Do not immerse the device in water or other liquids.
- If you have problems with this device, e.g. when setting up, maintaining or using, please contact the authorised customer service. Do not open or repair the device yourself.
- Please notify the authorised customer service if unexpected operations or events occur.
- If the weighing system is not used for a longer period of time, it should be cleaned and stored in a protective film. The addition of a drying agent is desirable.

DO NOT use the scale:

- If the mains adapter is damaged;
- If the mains adapter is not working;
- If the battery compartment has an unnatural bulge;
- After long storage in a humid environment.

In such cases, please contact authorised customer support.

4. Intended use

Your ADE scale is a quality product and was manufactured for use as a non-automatic scale. The scale is used to determine the weight and price of goods to be weighed and is intended for use in supermarkets, grocery stores, retail stores, markets and similar areas of application.

To determine the weight and price, carefully place the item to be weighed as centrally as possible on the scale. The scale may be loaded with the maximum load (Max) specified on the device and on the nameplate. After a stable measurement result has been determined, it can be read off.

The scale must not be used for dynamic weighing. If small quantities are slowly added or removed (e.g. filling liquids), this can lead to incorrect measurement results.

The device may only be used as intended. All applications of the device that are not mentioned in the chapter "Intended use", as well as non-observance of the safety instructions, are considered improper use. It is the user of the device, but not the manufacturer, who assumes liability for any resulting damage to property or personal injury resulting from misuse.

The use of accessories other than the original accessories supplied by the manufacturer may void this warranty.



The weighing system may only be used for legal-for-trade weighing if it is verified. The verification is invalid without a seal.

This device may not be modified without the manufacturer's permission.

5. Scope of delivery

Check the delivery contents for completeness as soon as you receive the scale. Carefully unpack the scale and accessories and remove all packaging materials.

Included in the delivery are:

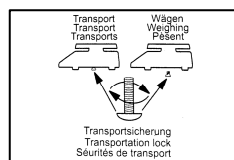
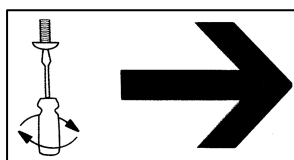
- Price computing scale
- Weighing platform
- Power supply unit
- Operating manual
- Declaration of Conformity
- Optional: Rechargeable battery 6V 4Ah (installed in the scale)



On verified scales: Check the identity of the scale serial numbers and the declaration of conformity. This is a mandatory requirement to use the scale in legal metrology!

6. Start-Up the scale

1. Carefully unpack the scale and accessories and remove all packaging materials.
2. Remove the transportation lock on the bottom of the scale, if present on your model. The transportation locking device is identified by the labels below:



Not removing the transportation lock can lead to incorrect weighing results!

3. Place the scale on a level, stable surface. Do not place the scale on a shaky or vibrating table as this will cause distortion of measurement results.
4. Connect one end of the power supply to the power connector on the bottom of the scale and the other end to the local power supply.



In this case, before connecting the supplied mains adapter to the scale, make sure that the voltage on the nameplate matches the local power supply.



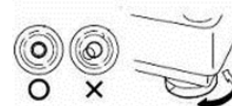
After the warm-up time (15 minutes), the scale is ready for use.

The warm-up time applies to every disconnection from the mains (except battery mode).

5. Align the scale using the support feet. Make sure that the air bubble of the spirit level is centred in the black frame.



Check the horizontal position of the scale after every change of location!



6. Switch on the scale. When switching on the scale, the weighing platform must be unloaded. The scale runs through a test programme and acknowledges the end of the power-on sequence with a sound signal.



If the weighing platform is loaded during the power-on sequence, the scale is not properly ready for operation. Switch off the scale and turn it on again.

7. For precise measurement results, the goods to be weighed must be placed in the centre of the weighing platform. The goods to be weighed should not protrude beyond the weighing platform.

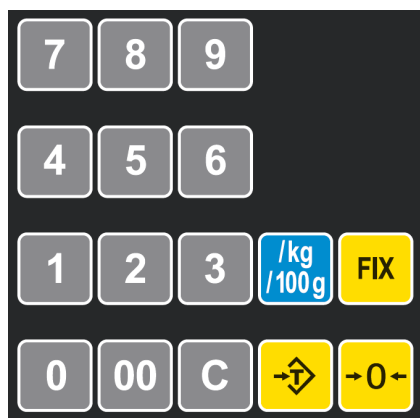
7. Operating and display elements

Overview



1	Weighing platform	4	Level indicator	7	Power supply connection
2	Keypad	5	Battery indicator	8	Battery compartment cover
3	Main display	6	On/off switch	9	Levelling feet





Operating controls



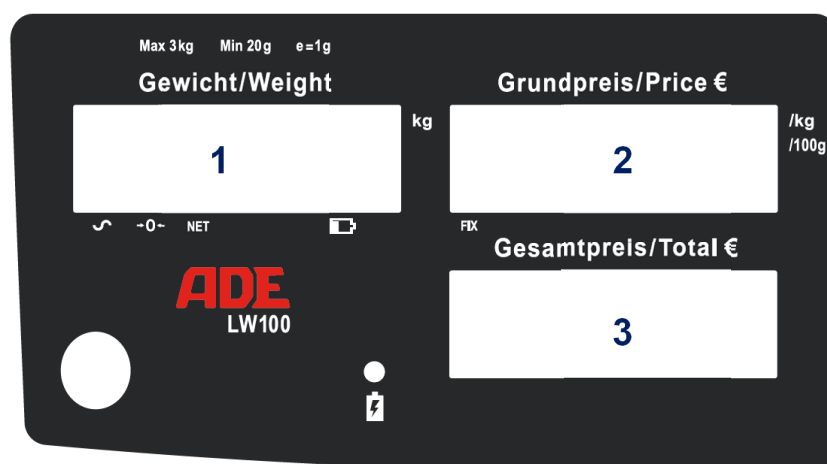
Button terms and functions

Symbol	Description	Function
	Keypad with 10 keys	Keypad with 10 keys: 0 to 9 for price and PLU input. Menu: To change parameters.
	.	Double zero multifunction key: To enter a "double zero". To adjust the backlight.
	C	Delete key Pressing this key deletes the last digit of basic price.
	ZERO	Zeroing key If this key is pressed, the scale is returned to the zero position.
	TARE	Tare key The object (e.g. a container) is tared by pressing it once and the scale switches from gross to net mode. Tare mode is indicated by "▼" above the NET imprint.
	FIX	To activate or deactivate the price and automatic tare value deletion. The activated function is shown by "▼" above to the FIX imprint.
	Unit	Basic price unit Switching between the price units per kg and per 100 g. "►" appears on the display in front of the selected unit (/kg or /100 g).

Menu guidance keys

Symbol	Description	Function
	TARE	For calling and confirming function and parameter settings
 / 	LEFT / RIGHT Navigation keys	To switch between the different functions and parameters.
	ZERO	To return to the higher-level function and the normal weighing mode.

Display



1	Display of the (net) weight of the item to be weighed
2	Display of the basic price (per kg)
3	Display of the total price determined from (net) weight and basic price


Display symbols

Symbol	Meaning
~	Display for stable weight measurement.
>0<	Display for zeroing.
NET	Display for activated tare function.
kg	Display the weight in kilogramme.
/kg /100g	Display of the basic price unit per kilogramme resp. per 100g.
FIX	Display for activated fixed price function.

The indications of the various functions are shown by arrows (▼) and (►) in the display.


Battery status indicator

Display indication

	<p>Low battery indicator (only in battery mode). The indication of the function is shown by an arrow (▼) in the display.</p> <p>In order to protect the scale, it switches off automatically 30 minutes after the battery symbol lights up if the charging voltage is too low. The battery must be fully charged before operating the scale again.</p>
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Caution: The indicator symbol on the display shows the battery charge level when the scale is not connected to the mains. When connecting the scale to the power supply, note the LED display.

LED display

	Green	Mains operation. Battery is charging. To ensure that the battery is fully charged, keep the scale connected to AC power for at least one hour.
	Yellow	Battery is charging.
	red	Battery almost discharged. Please charge immediately. Charging can take up to twelve hours.

Caution: Please charge the battery fully before using it for the first time.

8. Using the scale

Preliminary Note

Do not load the scale with weights that exceed the maximum capacity. As soon as you perceive the signal for an overload - this is shown by "--oL--" on the display - immediately remove the load from the scale so as not to irreparably damage the load cell.

Switching the scale on and off

Switching on the scale

Remove all weights from the weighing surface.

To turn on the scale, press the on/off switch (on the right side below the housing).

The scale performs a test program. All symbols and characters are briefly displayed. End of routine is confirmed with an acoustic signal and "0.00 / 0.000" is shown on all three displays.

The scale is now ready for use.

Upon relocation and especially in case of temperature changes, wait for a warm-up phase of 15 minutes after switching on the instrument to stabilize the measurement results.


Switching off the scale

To turn off the scale, press the on/off switch (on the right side below the housing).




Automatic deactivation of the scale


The scale is equipped with a power saving function. As a result, the scale switches off after a period of time that can be set by the user (see section 9).

Zero-Setting

Press the  key when the scale shows a weight, even though the weighing surface is completely empty. The display "Weight" of the scale shows 0.000 again.

Price-computing


Place the sample on the weighing surface. The display "Weight" shows the weighing result. To determine the price, use the numeric keys  to  or the  key to enter the price per kilogram, which is shown in the display "Price". The scale now automatically determines the total price, which is shown in the display "Total".

You can use the  key to delete incorrect entries and then immediately enter the correct price. After removing the sample, the basic price display automatically returns to zero.


Taring

With this function, the user can weigh objects together with other items (such as container, film or paper towel), without the weight of those items affecting the weighing result.

Turn on the scale.

Place the objects to be tared on the platform (e.g. container, foil or paper towel) and press the  key. On "Weight" display the scale shows 0.000. At the same time the arrow (▼) above the NET symbol indicates the net weight mode. As soon as you place the product to be weighed in the container, only the net weight of the product to be weighed is displayed.

Carry out as many weighing operations as required. As long as the tared container remains on the weighing platform, only the net weighing results and the prices determined for them will be displayed.

If no further input is made, the tare weight is shown as a negative value in the "Weight" display when the tared container and the weighed goods are removed. To delete the tare weight in this case, press the  key again when the weighing platform is unloaded.




If a weighing operation (with or without price determination) is carried out, the values are automatically deleted and the displays for the tare weight and the basic price show zero after the product to be weighed and the tare weight are removed.


Fixed function


The fix function offers the possibility to use a always same basic price and/or tare weight for repetitive weighing operations.

When the scale is restarted, the Fix function is always switched off.

Fixed price function

Enter the desired basic price using the number keys  to . To fix this basic price, press the  key. The display "price" shows the entered basic price and ▼ at the FIX symbol shows the activated FIX function.


If necessary, you can now place your empty container on the weighing platform and tare it by pressing the  key. Carry out as many weighing operations as you like to determine the price with this basic price.

If you want to enter a new fixed price as basic price, press the  key to delete the stored value. It is also possible to enter a new basic price value after the display has shown the entered fixed price (basic price) for at least four seconds.

To exit the fixed price function, press the  key.



Fixed tare function

Place the container to be tared on the weighing surface. Then press the  key.

To tare, press the  key. The display "Weight" now shows by the arrows ▼ at the symbol ~ a stable measuring result, at the symbol >0< the zero position and the NET symbol the net weight mode. The display "Price" shows the FIX function activated by ▼ at the FIX symbol.





To determine the total price, enter the basic price and the display will show the total net price for the load on the scale. If the tared container and the product to be weighed are removed from the weighing surface, the arrow ▼ at the symbol >0< disappears, the tare weight is displayed as a negative value and the total price is deleted.

Now you can carry out further weighing operations with the same tared vessel.

If you wish to store a new fixed tare weight, press the  key when the weighing platform is unloaded to delete the stored tare weight. Place the new container to be tared on the weighing platform and press the  key again.

To end the fixed tare function, press the  key.



Combined fixed price and tare function


To simultaneously store a fixed price as the basic price and fixed tare weight, enter the desired basic price using the numeric keys  to . Place the container to be tared on the weighing surface and press the  key. Then fix both values by pushing the  key.


The display "Weight" now shows by the arrows ▼ at the symbol ~ a stable measuring result, at the symbol >0< the zero position and at the symbol NET the net weight mode. In the display "Price", the entered fixed price is shown as the basic price and ▼ for the FIX symbol indicates the activated FIX function.

Now perform as many weighing operations as you wish with the same tared container and at the same basic price.

If the tared container and the sample is removed from the load plate, the arrow ▼ at the symbol >0< disappears and the tare weight is displayed as a negative value. The fixed basic price remains on the display.

If you wish to store a new fixed tare weight, press the  key to delete the stored tare weight. Place the new container to be tared on the weighing surface and press the  key again.

If you wish to store a new fixed price as the base price, press the  key to delete the stored base price and enter a new base price.

To end the combined fixed price and fixed tare function, press the  key.

9. Backlight and parameter settings

Backlight setting

Users can choose to enable or disable the backlighting of the scale display. Activating the backlighting makes it easier to read the weighing results, but at the same time leads to increased power consumption.



The scale offers three different backlight setting options:



oFF:	The backlight is switched off permanently.
on:	The backlight is switched on permanently.
AUto:	The backlight switches on automatically when the weighing surface is loaded or after pressing a key, or off again after a short period without weight movement or pressing a key.

To set the backlight, follow the instructions below:

In the weighing mode, press and hold the  key for approximately 2 seconds.

The displays "Weight" and " Price" show bLSET MODE. The display "Total" shows the selected option.

You can change the setting by pressing the direct PLU keys  or .

Confirm your setting by pressing the  key or cancel the procedure by pressing the  key.

When the scale is turned off, the last settings you made will remain stored.

10. Care and maintenance

Cleaning

Disconnect the mains plug before cleaning the scale. Use only a damp cloth or an ordinary disinfectant for cleaning. Do not use aggressive liquid cleaning agents, abrasive or acidic detergents or white spirit.

Make sure that no liquid cleaning agent or water penetrates the scale and always follow the manufacturer's instructions for use.

Faults and error messages

Below you will find a list of possible errors and faults. If necessary, these can be eliminated with simple means. If the fault or error cannot be eliminated or other error messages occur, please contact your service partner.

Faults

Fault	Cause	Measure
The display shows nothing.	The scale has switched off automatically.	Switch on the scale
	The scale is not connected to the mains.	Use the optional mains adapter to connect the scale to the mains.
Weight display is unstable.	Draughts or air movements	Close the window. Choose a different location.
	Vibrations	Avoid vibrations. Choose a different location.
	Electromagnetic fields / static charging	Choose a different location. If possible, switch off the interfering device.
The weighing result is obviously wrong.	The scale is not levelled properly.	Adjust the support feet. Use the spirit level to check the horizontal position.
	The scale is not operating in the specified temperature range.	Operate the scale only in the permissible temperature ranges.
	Electromagnetic fields / static charging	Choose a different location. If possible, switch off the interfering device.
Zeroing is not possible.	Zeroing is not possible if the displayed weight exceeds +/- 2% of the capacity of the scale.	In this case, switch the scale off and on again.

Error messages

Failure	Cause	Measure
ERR 4	Current weight exceeds the zero range of the scale	Unload the weighing surface and try again. If necessary, restart the scale.
ERR 5	Keypad fault	Please contact your service partner.
ERR 6	Load cell is defective or not connected.	Please contact your service partner.
Err 9	Weighing result unstable due to draughts, air movement or vibrations.	Avoid draughts, air movement and vibrations.
	Load cell is defective.	Please contact your service partner.
Err 19	Current weight exceeds the permissible range for automatic zeroing when switched on.	Unload the weighing surface and then restart the scale if necessary.
--oL--	Zero range or weighing capacity exceeded	Unload the scale.
-- UL --	Underload (-20d)	Switch the scale off and on again.

Storage and Transport Conditions

Keep all original packaging materials for a possible return of the scale to avoid damage in transit. Disconnect all cables before transport and switch off the scale to avoid damage.

Disposal



Waste electrical equipment do not belong in household waste. Devices with this marking may not be disposed of as residual waste, but must be recycled.



Remove (if possible) all batteries and rechargeable batteries from the devices and send them to the battery disposal.



Make sure that only depleted batteries or batteries with insulated poles are disposed of so that there is no short circuit!

Warranty

ADE will repair or replace this product if evidence is provided that it has failed within 1 year from the date of sale (proof of purchase is required) due to lack of workmanship or defective material. All moving parts, such as batteries, cables, etc. are excluded.

The use of accessories other than those approved by ADE, especially batteries, will void the warranty.

This warranty does not cover external normal wear and tear or damage caused by accident or misuse. The warranty will not apply for devices that have been opened by unauthorised persons. The statutory rights of the customer are not affected by this agreement in any way.

The dealer from whom the scale was purchased is responsible for complaints, customer service and spare parts.

Recalibration

According to the national regulations of the legislature, only authorised companies or authorised personnel can perform recalibration. On the CE mark, you can find the year of initial calibration next to the notified body (0122).

Recalibration must be carried out when:

- one or more security marks were damaged,
- after the scale has been repaired,
- after expiry of the period, set by the national regulations for recalibration.

11. Technical data

Model: LW100-3

Maximum load: 3 kg

Digit display: 1g

Minimum load: 20g

Weighing surface: 265 x 205 mm stainless steel

Dimensions: 285 x 375 x 115 mm

Net weight: 2.8 kg / 3.4 kg (without / with accu)

Operating temperature: -10°C bis +40°C

Display: Easy to read LCD display with 15 mm high characters
white LED backlight, display backlight can be deactivated

Housing: Stable plastic housing

Keypad: Easy to clean 10-key membrane keyboard with 16 keys

Functions: Weighing, taring, price computing
Fix function (fixed price + fixed tare)
Automatic zero setting
Overload display
Battery level indicator (at low supply voltage)

Price entry/display: Min. price entry: Preiseingabe/-anzeige:

Max. price entry: 999,99 €

Min. price display: 1 Cent

Max. price display: 9.999,99 €

Power Supply: Mains and battery operation

Power supply: 100-240VAC, 50/60Hz 0.32A max., Output: 12VDC, 500mA

Battery: 6V 4Ah lead battery, in battery operation up to approx. 70 operating hours

Battery protection: Automatic switch-off after 30 minutes after the battery symbol lights up

Spare parts:

Battery H2323-001

Battery compartment cover H2323-015

Load plate H2317-012

Cover hood H2323-020

Power supply H2323-014

Levelling feet H2323-011

12. Declaration of Conformity



Declaration of conformity by the manufacturer

This product has been manufactured in accordance with the harmonised European standards.
They conform to the regulations of the EC-directives listed below:

- NAWI directive 2014/31/EU
 - EMC Directive 2014/30/EU
 - Low voltage directive 2014/35/EU
 - RoHS Directive 2011/65/EU
- in their respectively applicable versions.

This declaration will lose its validity if any modification is made to the scale without our consent.

Hamburg, April 2021

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