User Manual
AGRETO Animal Scale with WA01 Display

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1 Introduction

Thank you for choosing the AGRETO Animal Scale. You have purchased a robust weighing device for practical everyday use.

Please read this user manual carefully before installing the device and putting it into operation.

This manual reflects common parlance in the use of the term "weight" instead of "mass".

2 Scope of delivery

The AGRETO Animal Scale is supplied in three boxes. Final assembly is usually performed on-site by the customer. The standard package includes:

- all parts of the scale with built-in weighing technology
- 1 AGRETO WA01 weighing display
- this manual

3 Intended use

The AGRETO Animal Scale is designed for the weighing of pigs, sheep and other animals up to 300 kg, so long as the size of the scale is sufficient.

The scale is compliant with protection class IP68, and the AGRETO WA01 weighing display with protection class IP67. The scale can therefore also be used in stables, wet rooms and outdoors.

The AGRETO Animal Weighing Scale may only be used as a checkweigher for internal purposes. Use for legal transactions is not permitted.

4 Safety

4.1 Safety instructions for the buyer

IMPORTANT!

Ensure that anyone using the AGRETO Single Animal Weighing Scale for the first time has read and understood this manual.

4.2 Safety instructions for assembly personnel

Appropriate means must be used when transporting machine parts with load-bearing devices.

The wearing of safety shoes is mandatory for persons engaged in the assembly, disassembly or installation of the scale.

The wearing of safety gloves is mandatory for persons engaged in the assembly, disassembly or installation of the scale.

Be aware of the risk of crushing between moving parts of your appliance during assembly, disassembly and installation.

Do not store and use the scale in a potentially explosive atmosphere.

Risk of tripping on components/tools that may lie in the vicinity.

4.3 Safety instructions for machine operators

HAZARD!

The AGRETO Single Animal Weighing Scale may only be operated by persons who are familiar with the handling of the appliance.

CAUTION!

Keep the word area clean. Dirty workplaces promote accidents.

HAZARD!

Risk of injury from tripping/falling and carelessness when working with the scale.

5 Technical specifications

5.1 Loadcells

- high-resolution shearbeam loadcells, 3 mV/V, 350 ohm
- nominal load: 500 kg
- save overload 120 %, breaking load 150 %
- accuracy: +/- 0.02 %
- waterproof in accordance with protection class IP68
- operating temperature: -35 to +65 degrees Celsius
- temperature compensation: -10 to +40 degrees Celsius

6 Assembly of scale

The components of the scale are delivered in three boxes. The appliance can be assembled by one person.

Please follow the assembly instructions below.

6.1 Assembly of base frame

required mounting material	size	pieces
hex bolt	M8x20	4
washer	M8	4
spring washer	M8	4

Lay the frame part with the wheel fastenings sideways on a flat surface. Be careful not to damage the attached cables.

The wheel mounts on the frame must face outwards.

Add the floor panel. The edging of the floor panel must point in the direction of the feet.

Screw the front side of the floor panel to the frame part with 2 screws from the inside to the outside.

Repeat the process with the frame part with the handles on the other side of the floor panel. The handles must point outwards. The side with the wheels is referred to as "front" in this manual, the side with the handles as "rear". The directions left and right are seen from the handle side.

Then place the balance on the floor with the feet.

6.2 Mounting of side panels

required mounting material	size	pieces
hex bolt	M8x20	16
washer	M8	16
lock washer	M8	16

The lower two side panels (1 x right, 1 x left) are identical. Each has 4 holes at the top and 5 holes at the bottom. Place the side panels with the smooth surface facing inwards and secure them with only two screws each at the front and rear. Don't tighten the screws yet.

The upper two side panels are different. The left side panel has three holes on top, the right side two holes. Place the upper side panels also with the smooth surface facing inwards, while paying attention to the cables. Secure the panels with two screws each at the front and back, too. Don't tighten the screws yet.

6.3   Screwing together the side panels

required mounting material	size	pieces
hex bolt	M8x20	8
washer	M8	16
lock washer	M8	8
nut	M8	8

Mount the 4 screws per side to attach the lower side panels to the upper ones.

6.4   Mounting the strengthening parts

required mounting material	size	pieces
hex bolt	M8x20	10
washer	M8	14
lock washer	M8	10
nut	M8	10

Turn the scale over so that the feet are facing up. Pay attention to the cables.

Screw the side panels to the floor panel. In case of the middle 3 screws, one reinforcement angle is screwed and no second washer is used.

Now tighten all screws.

6.5 Mounting the doors

required mounting material	size	pieces
fillister head screw	M10x25	6
washer	M10	18-22
stop nut	M10	6

The door with the two holes for remote control and the castor is mounted at the front, and the door without additional holes at the rear.

Mount the doors with the notch at the door stop pointing downwards.

One disc each is to be installed between the fixing bracket and the doors. Close the doors to test them. If a door needs to be positioned higher, an extra disc can be placed between them.

Tighten the stop nuts only enough to ensure that the doors can still be moved easily.

Mount the two door latches as shown. One disc is to be mounted between the stop and the latch. At the rear door, tighten the stop nuts only enough to ensure that the door latches can still be moved easily.

The front door is usually remote controlled, and kept closed due to the construction of the remote control. The bolt can here also be fixed in the open position.

6.6 Mounting the wheels

required mounting material	size	pieces
fillister head screw	M8x60	2
washer	M8	8
spring washer	M8	2
nut	M8	2

Mount the two wheels at the front of the scale. One disc each is to be installed between the wheel and the fastening latch. The wheels have a mounted inner socket, and the screws can therefore be tightened.

6.7 Mounting the castor

required mounting material	size	pieces
fillister head screw	M10x50	1
washer	M10	2
stop nut	M10	1

Mount the castor at the front door, as shown.

6.8 Mounting the door lever

required mounting material	size	pieces
hex bolt	M8x20	2
washer	M8	5
spring washer	M8	3
nut	M8	3
fillister head screw	M10x25	1
washer	M10	3
stop nut	M10	1
hex bolt	M12x25	1
washer	M12	1

Attach the mounting bracket on the left-hand side of the scale with two M8 screws. The standing component must point inward.

Attach the lever to the outside of the mounting bracket. The short part of the lever must face inward. The rounded head screw must point from inside to outside.
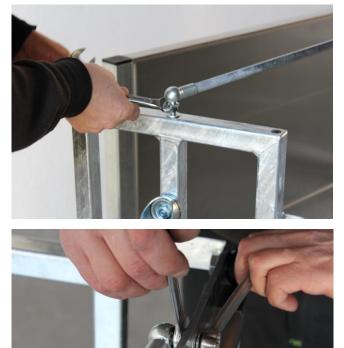
Mount the ball outside on the lever.

Attach the rubber buffer on the left-hand side panel, as shown.

6.9 Mounting the door operating rod

required mounting material	size	pieces
ball joint	M10	2
washer	M10	3
spring washer	M10	1

Screw a ball joint to the operating rod on both sides.

Fasten the rod and ball joint in the middle hole on the front door.

Fasten the rod with the second ball joint into the hole on the door lever.

Open and close the front door using the lever to test it. When the door is closed, the door lever must be able to move over the dead centre and rest on the rubber buffer with a slight tension.

If necessary, you can slightly remove one of the ball joints from the bar.

6.10 Mounting the display and the bracket

required mounting material	size	pieces
hex bolt	M6x20	2
washer	M8	2
nut	M6	2

Fasten the mounting plate of the weighing indicator with the 2x M6 screws in the two holes provided.

6.11 Connecting the cabling

Required mounting material	size	pieces
cable tie		
cable tie socket		

Connect the two weighing signal cables on the right and left to the distributor.

Insert the middle connection of the distributor through the side part of the balance and the bar upwards and plug in the connection cable of the display.

Thread one cable connector each through the latch of the self-adhesive cable brackets.

Glue the brackets to the underside of the side panel and attach the cables. Use the additional cable connectors to attach the cables.

7 Weighing Display WA01

7.1 Turning on the display

Switch on the weighing display with the middle button [ENTER]. The display shows a start-up sequence and then the current weight on the scale, based on the last set zero point.

7.2 Zeroing

The zero point of the display is reset with the [0/cal] key. Always use this function to zero the scale. This zero point is saved until another zero point is set. Automatic zeroing in animal weighing mode: "Smaller" impurities that remain on the scale after an animal has been weighed are recognized and deducted accordingly after the

automatic zeroing, so that the next weighing can be assumed to be "zero" without further intervention.

7.3 Standard Weighing Process

Load and unload the scales, the current weight of the animal is shown directly on the weighing display. Thanks to the stabilized display, the weight is easy to read even with restless animals. After the animal has left the scales, the display is automatically set to zero when the animal weighing mode is switched on (indicated by a cattle symbol on the display); when the animal weighing mode is deactivated, the weight of any legacies and dirt remains the same.

7.4 Calibration

The scale is delivered fully calibrated. If you notice any deviations or use the scale north of the 52nd or south of the 45th latitude, the scale can be calibrated. Starting with an empty scale that has been set to zero, it must now be loaded with a known weight of between 200 and 300 kg. Press [0/cal] for 3 seconds, the [+/-] symbol appears on the display and the weight can be adjusted to the actual load with the two arrow keys - and confirmed with [ENTER]. This calibration is saved until the next calibration or a factory reset.

7.5 Setup/ Menu

Briefly press the [ENTER] button to access the AW01 menu. Here you can change the unit from kg →lbs, activate/deactivate the **animal weighing mode**, activate/deactivate the **Bluetooth interface** and reset the display to the factory settings (**RESET**). The desired menu item is selected using the arrow keys and marked with a [>] character. Use the [ENTER] key to select.

7.6 Switching off the WA01

Press the [ENTER] button for 3 seconds until the weighing display disappears. If the power supply is interrupted, the last display remains and is deleted with the next restart. In battery operation, the display switches off automatically after 5 minutes without a change in weight.

8 Troubleshooting

To determine the properly function of the scale, place a weight first on each corner, and then in the centre of the scale. The weight of one person will probably sufficient for a rough function test. For an accuracy check, a test weight with at least 20 % of the scale's nominal load should be used.

Should significant deviations occur, this can have the following causes:

- One or more weighing feet are not standing on the ground, and the scale may even tilt. -> Adjust the height of the weighing feet using the levelling screws.

- The scale is placed with one of its sides against a wall or other object. -> Set up the scale so that no part of the construction is in contact with any other object.

- The scale construction is in contact with the ground, possibly due to dirtying. -> Ensure that the entire scale construction is in contact with the floor only through the weighing feet.

- One or more cables are damaged. -> Find the corner at which an incorrect weight is displayed and check the relevant cable. In the case of damage to a cable, the affected cable, including the loadcell, must be replaced.

- If all of the above are excluded, please contact the manufacturer.

9 Warranty

In addition to the statutory warranty, the following warranty provisions apply to the AGRETO animal scale:

- AGRETO electronics GmbH guarantees the function of and shall repair or replace all parts which show material or manufacturing damage within the warranty period.

- Warranty service is provided only by AGRETO electronics GmbH directly.

- The decision on the existence of a warranty claim is the exclusive responsibility of AGRETO electronics GmbH.

- The warranty period begins with the date of the first invoice to an end customer and ends five years after this date.

- The prerequisite for warranty service is the presentation of the original invoice and compliance with all points of this manual.

- Signs of usage, normal wear and tear and damage caused by improper use, negligence and accidents are excluded from warranty service.

- Any transport costs incurred during the processing of a warranty claim go to the buyer's expense.

10 Disposal

Ensure that the disposal of the product or its components as part of final decommissioning is environmentally sound and that individual types of material have been separated (metal to scrap metal, plastic to plastic waste, etc. - do not dispose of with household waste!)!

For detailed information see Directive 2002/96/EC

11 Legal Notice

All information, specifications and illustrations are based on the product state as of 2022, subject to technical changes or design modifications.

All information contained in this manual is given without any guarantee. The liability of the author is excluded.

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