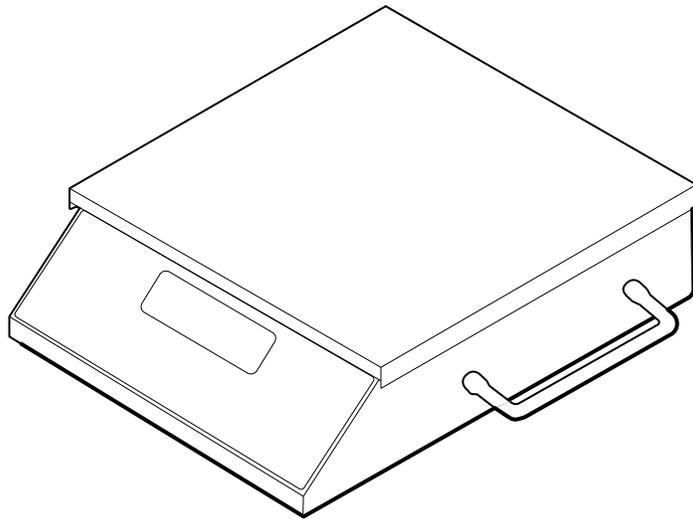


Welch Allyn Diaper and Organ Scale



Directions for use

Model 4302

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This manual applies to REF 901110 NONMASTED SCALES.

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Introduction

Intended use

The Welch Allyn Diaper and Organ Scale is intended to be used by clinicians for weighing items up to 11 pounds (5 kg) for models 4302-EK and 4302-EX, and 6.6 pounds (3 kg) for models 4302-XK and 4302-XX.

Indications for use

The Welch Allyn Diaper and Organ Scale is used by clinicians to weigh items up to 11 pounds (5 kg) for models 4302-EK and 4302-EX, and 6.6 pounds (3 kg) for models 4302-XK and 4302-XX.

Symbols

Documentation symbols



WARNING The warning statements in this manual identify conditions or practices that could lead to illness, injury, or death. Warning symbols will appear with a grey background in a black and white document.



Caution The caution statements in this manual identify conditions or practices that could result in damage to the equipment or other property, or loss of data.



Consult Directions for Use

Shipping, storing, and environment symbols



Temperature limit



Keep dry



Separate collection of Electrical and Electronic Equipment. Do not dispose as unsorted municipal waste.



Fragile

	Humidity limitation		Atmospheric pressure limitation
	This way up		Stacking limit by number
	Recyclable		

Miscellaneous symbols

	Manufacturer		Reorder Number
	Product Identifier		For indoor use only
	Serial Number		Prescription only or "For Use by or on the order of a licensed medical professional"
	Battery		Power

About warnings and cautions

Caution statements can appear on the Welch Allyn Diaper and Organ Scale, the packaging, the shipping container, or in this *Directions for use*.

The Welch Allyn Diaper and Organ Scale is safe for patients and clinicians when used in accordance with the instructions and caution statements presented in this *Directions for use*.

Before using the device, you must familiarize yourself with all cautions, with the steps to power up the device, and with the sections of this *Directions for use* that pertain to your use of the device. In addition to reviewing the general cautions presented in the next section, you must also review the more specific cautions that appear throughout the manual in conjunction with setup/startup, operation, and maintenance tasks.

- Failure to understand and observe any warning statement in this manual could lead to patient injury or illness.
- Failure to understand and observe any caution statement in this manual could lead to damage to the equipment or other property, or loss of patient data.

General warnings and cautions



WARNING Patient injury risk. Make sure the scale is properly cleaned between measurements.



WARNING Patient or operator injury risk. Make sure the scale is positioned on a stable surface and in a way to avoid shock or bumping hazards.



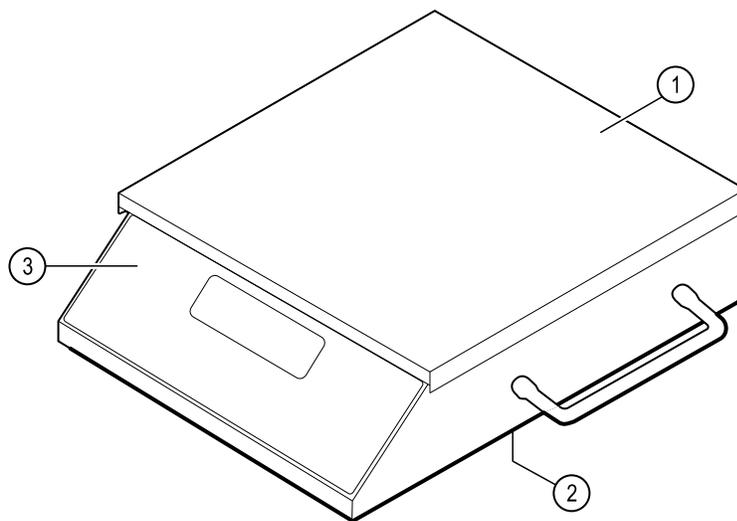
CAUTION Make sure that you routinely perform general maintenance and equipment safety checks on your scale. Remove the scale from service when you notice damaged power cords.



CAUTION Make sure the scale is set in the proper measurement units for your facility. Make sure you record the measurement units as they are displayed.

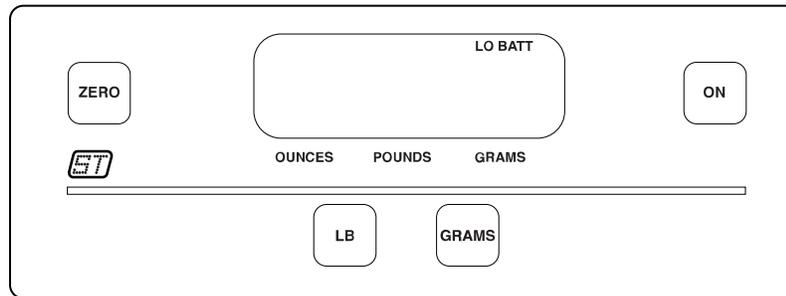
Controls and indicators

Scale



-
- 1 Weighing platform
 - 2 Battery access door (located on the bottom of the cabinet)
 - 3 Front panel
-

Front panel buttons



Button	Function
ZERO	Press this button to reset the scale to zero.
ON	Press this button to turn on the scale.
GRAMS	Press this button to display the weight in grams.
LB	Press this button to display the weight in pounds and ounces.
	Note If you purchased a scale with the grams-only option, this button is not present.
ST	Press this button in conjunction with ON to enter the setup mode.

Assembly and setup

The scale is fully assembled at the factory and tested. In some instances, the scales are shipped assembled. However, due to size and shipping restrictions, most scales are partially disassembled. If assembly is required, it can be done with common hand tools. When special tools are required, they are supplied with the scale. Ensure that all bolts and fasteners are securely tightened.

Use the following instructions to assemble and setup your scale for use.

Assembly instructions

The scale is shipped with batteries installed and is ready for use.

1. Carefully remove all parts from the shipping carton and inspect the components for shipping damage.
2. Place the scale on a counter or table.
3. Press **ON** to turn on the scale.

The scale beeps once and displays **888888**, followed by **4302**.

4. The scale is ready for use.

Custom setup

You can customize the scale to best suit your needs. Configurations that can be selected include the automatic shut-off time, weighing units, weight resolution, and more.

Enter custom setup mode

1. Make sure the scale is powered down.
2. Press and hold **ST** while pressing **ON**.
3. Once the scale powers up, release **ST** and quickly press and release **ST** five times.

The scale displays **Set-UP** and produces a series of four long beeps.

Set the options

Enter the custom setup as described.

Press **ST** to scroll through the custom setup options.

The options displayed with each press are as follows:

Press the setup mode select button to turn these options **On** or **OFF**.

Note Options indicated with an asterisk require an additional press of **ST** to change the value.

Option displayed	Feature
SOft	This option displays the software version of your scale.
dAtE	This option displays the release date of the software. The format is MM/DD/YY.
SCALE	This option displays the model number of the scale.
AutOFF*	This displays the number of seconds before the scale turns off when operating on battery power. The Cont value prevents the scale from turning off automatically.
AC con*	This option causes the scale to remain on when plugged in to AC power.
rES	This option allows you to change the resolution of weight. Pressing the setup mode select button switches between the following options: 0.001 0.002 0.005 0.010
UnitS*	This option allows you to change the weight units. Note Do not change the scale units if you have purchased the gram-only option. POUNDS* This option allows the weight to display in pounds. OUNCES* This option allows the weight to display in ounces. GRAMS* This option allows the weight to display in grams.
bEEPEr*	This option determines the audible signal that occurs when a front panel button is pressed.
PC brd*	This option displays the model number of the printed circuit board. A third press of ST displays the revision of the printed circuit board.
SEt-UP	This option is displayed when you have cycled through all the options. Press and hold ON to power down the scale.

Scale operation

Power options

The scale can be used with battery power or with AC power.

Battery power



CAUTION Use only size C disposable alkaline batteries. The use of any other battery will void the warranty.

Press **ON** to turn on the scale.

The scale automatically turns off after 45 seconds of non-use when on battery power.

The **LO BATT** indicator displays when the battery power is low.

bAttrY appears on the control panel when the batteries are unable to properly power the scale.

Replace the batteries when either of these messages appear.

AC power

When plugged in, the scale continuously runs on AC power automatically.

The scale switches to battery power when AC power is not present.

Audible beeps

The following beeps occur when using the scale.

Sound	Meaning
One beep	Acknowledgment of a button press.
Two beeps	The scale is zeroed and ready to take a measurement.
Three beeps	The weight reading is obtained and displayed.
Four long beeps	The battery is too weak to operate the scale.
Four short beeps	The scale has entered setup mode.

Long/short beeps	There is a problem with the scale. See the troubleshooting section.
Continuous long beep	There is a problem with the scale. See the troubleshooting section.

Weighing procedure

1. Press **ON** to turn on the scale.
The scale goes through the startup sequence.
2. (Optional) Press **ZERO** to zero the scale.
3. Place the item you wish to weigh on the scale.
Three beeps sound and the weight is displayed.
4. Record the measurement displayed on the scale.

Note A measurement is stored in the scale until a new weight is taken and zeroes out.

A stationary display of - - indicates a negative weight. Press **ZERO** to set the zero.

If **O-LOAD** is displayed, the item on the scale exceeds the weight capacity of the scale.

Diaper weighing procedure

1. Press **ON** to turn on the scale.
The scale goes through the startup sequence.
2. (Optional) Press **ZERO** to zero the scale.
3. Place a dry diaper of the proper size on the weighing platform, and ensure that the scale is in grams mode.
Three beeps sound and the weight is displayed.
4. Record the measurement displayed on the scale, and remove the dry diaper.
5. Place the wet diaper on the scale.
Three beeps sound and the weight is displayed.
6. Record the measurement displayed on the scale.

Note A measurement is stored in the scale until a new weight is taken and zeroes out.

7. Subtract the dry weight measurement from the wet weight measurement to obtain the weight change in grams.

The result is equivalent to the urine sample in CC.

A stationary display of - - indicates a negative weight. Press **ZERO** to set the zero.

If **O-LOAD** is displayed, the diaper exceeds the weight capacity of the scale.

Storage, cleaning, and maintenance

Storage

The scale should be stored in a convenient storage facility or closet. Make sure to not leave the scale in an area where someone could trip on it or run into it.

Cleaning

1. Clean the scale after each use.
2. Use one of the following products when cleaning your scale:

70 percent isopropyl alcohol

PDI Sani-Cloths®

Battery replacement



CAUTION Use only size C disposable alkaline batteries. The use of any other battery will void the warranty.

1. Using a screwdriver, remove the three fasteners on the access door located on the bottom of the control panel housing and remove the door.
2. Install new batteries in the battery holder. Make sure to follow the polarity instructions.

Note In instances where the scale is not used often, replace the batteries annually.

3. Re-attach the access door.

Maintenance

Routinely perform the following preventive maintenance to keep your scale in working order.

1. Check the calibration annually or as required.
2. Inspect the scale for cracks or loose mounting hardware. Replace or repair as necessary.
3. Visually inspect the scale enclosure for damage or loose or missing hardware. Replace or repair as necessary.
4. If equipped, inspect the AC line cord for abrasions or other signs of wear.

5. Do not expose the scale to excessive water or moisture.
6. Do not store the scale where heavy objects can be placed on it.
7. Replace the batteries annually or as required.
8. Do not service or perform maintenance while the scale is in use with a patient.

Troubleshooting

This section presents tables of information to help you troubleshoot issues with the scale.

To use these tables, locate the specific problem with your scale in the left column of the table. The remainder of the row explains possible causes and suggests actions that can resolve the issue.

Issue	Possible cause	Suggested action
The weight measurement is not accurate	There may be a mechanical obstruction on the platform	Make sure the platform is not touching a foreign object or has anything restricting its downward motion.
The weight measurement takes too long to display	The platform may be in motion	Wait for the platform to settle.
The scale displays O-LOAD	The object on the scale may be larger than the maximum value allowed	If the weight value is within the specified range, contact your service department.
The measurement does not change when weight is applied to the scale	The load cell transducer, connector, or cable may be damaged	Contact your service department.
The scale buttons are not responding	The buttons may be damaged	Check for visible signs of damage. Contact your service department.
The error message E-FAIL is displayed	The scale's memory has failed	Contact your service department.
The error message r-FAIL is displayed	The scale's memory has failed.	Contact your service department.
The error message A-FAIL is displayed	The scale's memory has failed	Contact your service department.
The error message C-FAIL is displayed	The scale's memory has failed.	Contact your service department.

Appendices

Specifications

Item	Specification
Scales	4302
Resolution (factory default)	1 g
Weighing capacity	4302-EK and 4302-EX: 11 lb (5,000 g) 4302-XK and 4302-XX: 6.6 lb (3,000 g)
Readout	Large, bright light-emitting diode display. Selectable weight displayed in pounds or grams. Indicator light to show selected units.
Power source	Battery <ul style="list-style-type: none"> • 6 C alkaline batteries Power adapter <ul style="list-style-type: none"> • Medical grade UL listed external power supply • Nominal input voltage: 100-240V AC $\pm 10\%$ • Nominal input frequency: 50/60 Hz • Nominal input current: 0.3-0.15Arms @ max load • Standby power consumption at U_{in}: 230V AC : $\leq 0.1W$ • Nominal output voltage: U_{out} : 12V DC +5% / -5% U_{Br} : $\leq 150mVpp$ • Nominal output current: I_{out} : 1000mA
Platform dimensions	8.5 in. x 8.5 in.

Product configurations

The Welch Allyn Diaper and Organ Scale is available in the following configurations:

Model 4302, Diaper and Organ Scale

Model	Description
4302-EX	Diaper and Organ Scale, extended capacity, standard weight
4302-XX	Diaper and Organ Scale, standard capacity, standard weight
4302-EK	Diaper and Organ Scale, extended capacity, grams only
4302-XK	Diaper and Organ Scale, standard capacity, grams only

Approved accessories

Part number	Description
341001	Power adapter

Warranty

Welch Allyn will warranty the weight scale to be free of defects in material and workmanship and to perform in accordance with manufacturer specifications for the period of one year from the date of retail purchase.

The warranty period shall start on the date of purchase. The date of purchase is: 1) the invoiced ship date if the device was purchased directly from Welch Allyn, 2) the date specified during product registration, 3) the date of purchase of the product from a Welch Allyn authorized distributor as documented from a receipt from said distributor.

This warranty does NOT cover damages caused by misuse or abuse, including but not limited to:

- Failure caused by unauthorized repairs or modifications
- Damage caused by shock or dropping during transportation
- Damage caused by improper use of the power supply
- Failure caused by improper operation not consistent with the instructions stated in this *Directions for use*

Should this device require maintenance (or replacement at our option) under warranty, contact your local Welch Allyn representative: <http://www.welchallyn.com/en/other/contact-us.html>

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