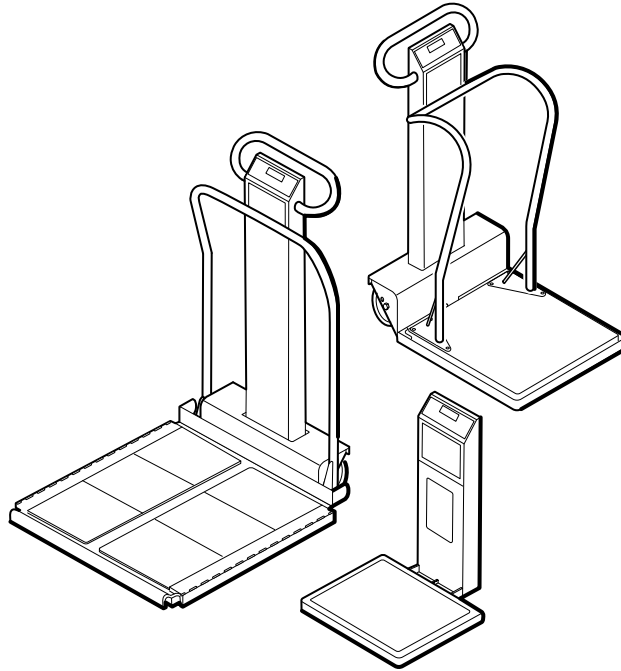


Welch Allyn Masted Scales



Directions for use

Models 5002, 5122, 5702, 6002

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Introduction

Intended use

The Welch Allyn Masted Scales are intended to be used by clinicians for weighing patients up to 660 pounds (300 kg) for model 5122, up to 880 pounds (400 kg) for models 5002 and 6002, and up to 1000 pounds (454 kg) for model 5702.

Indications for use

The Welch Allyn Masted Scales are used by clinicians to weigh patients. An optional height gauge is available on some models.

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 Masted Scales, the packaging, the shipping container, or in this *Directions for use*.

The Welch Allyn Masted Scales are 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 patients.



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.

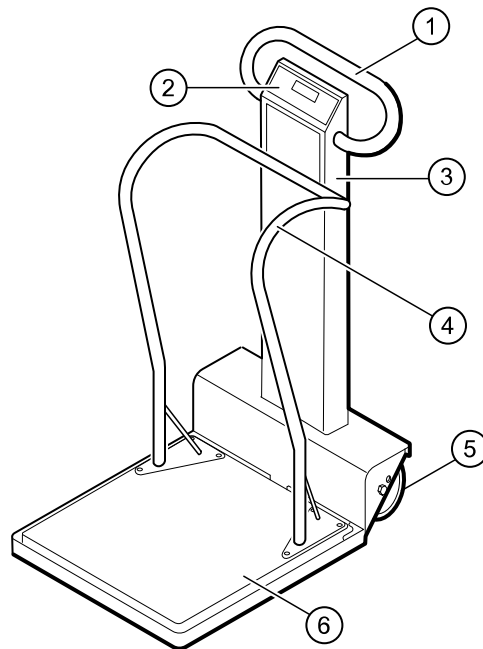


CAUTION Do not use this scale to transport patients or items.

Controls and indicators

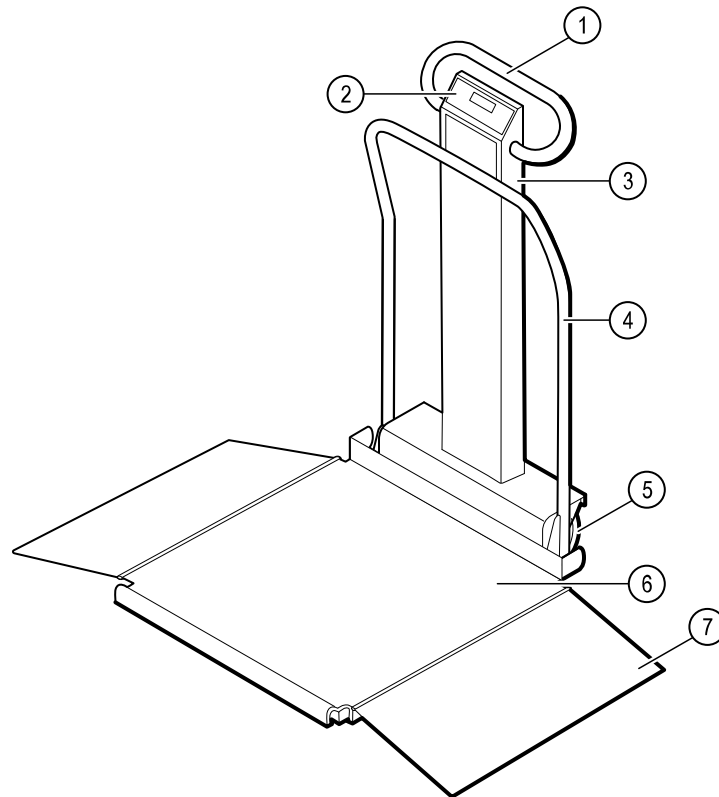
Scale

Models 5002 and 5702



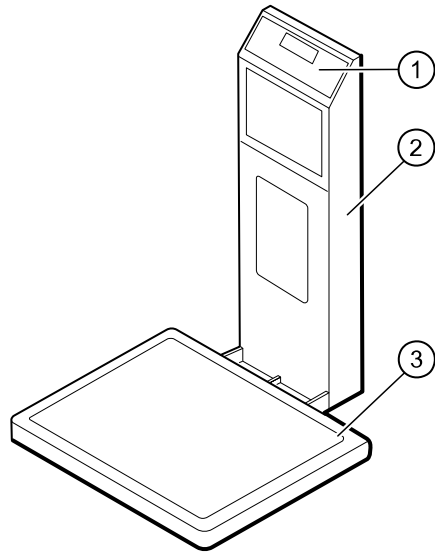
-
- 1 Steering handle/hand grip
 - 2 Front panel
 - 3 Mast
 - 4 Hand rail

- 5 Wheels
 - 6 Weighing platform
 - N/A Battery access door (located on the rear of the mast)
 - N/A Height gauge (optional)
-

Model 6002

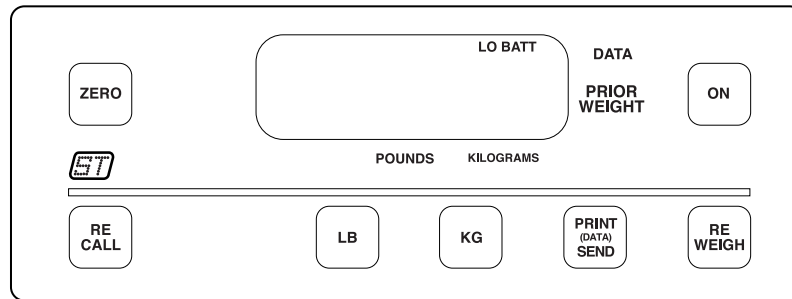
-
- 1 Steering handle/hand grip
 - 2 Control panel
 - 3 Mast
 - 4 Hand rail (optional)
 - 5 Wheels
 - 6 Weighing platform
 - 7 Wheelchair ramp
 - N/A Battery access door (located on the rear of the mast)
 - N/A Height gauge (optional)
-

Model 5122



-
- 1 Control panel
 - 2 Mast (battery access door located on front)
 - 3 Weighing platform
-

Front panel buttons



Button	Function
ZERO	Press this button to reset the scale to zero.
ON	Press this button to turn on the scale.
ST	Press this button in conjunction with ON to enter the setup mode.
RECALL	Press this button to recall the previously stored scale reading.
LB	Press this button to display the weight in pounds.
Note	This button is not present if you purchased a scale with the kilogram-only option.
KG	Press this button to display the weight in kilograms.
PRINT (DATA) SEND	Press this button to print the current weight. On models equipped with a RS-232 port, pressing this button when the scale is connected to a computer sends the current measurement to the computer.
REWEIGH	Press this button to retake the patient's weight.

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.

Models 5002 and 5702 stand-on scales

1. Carefully remove all parts from the shipping carton and inspect the components for shipping damage.
2. Place the scale base on the floor or on a workbench.
3. Insert the mast into the base. Ensure that the readout display is facing the patient when the patient stands on the scale.
4. Fasten the mast with the bolts and washers provided.
5. Tighten the bolts securely to ensure a solid connection is made.

Weighing deck mounting (model 5702)

1. Position the weighing deck so that the two sets of holes are closest to the mast.
2. Line the weighing deck up with the mounting holes in the aluminum plate.
3. Install the four flat head screws through the weighing deck.
4. Securely tighten the supplied mounting screws with the provided hex key.

Handrail mounting

1. Attach the handrail to the top of the weighing platform using the button head screws and the provided hex key.
Three screws are required for each mounting plate (six total screws).
2. Tighten all six screws securely to ensure a safe and stable handrail.

Height gauge assembly (purchasable option)

If your scale was ordered with a height gauge, follow the installation directions packed with the height gauge.

Model 5122 stand-on scale

The 5122 model scale is shipped assembled, so no assembly is required. It operates the same as the 5002 model. Handrails are not available for this scale.

Model 6002 wheelchair scale

1. Carefully remove all parts from the shipping carton and inspect the components for shipping damage.
2. Place the scale base on the floor or on a workbench.
3. Insert the mast into the base. Ensure that the readout display is facing the patient when the patient stands on the scale.
4. Fasten the mast with the bolts and washers provided.
5. Tighten the bolts securely to ensure a solid connection is made.

Weighing deck mounting

1. Position the weighing deck so that the two sets of holes under the flaps are closest to the mast.
2. Line the weighing deck up with the mounting holes in the aluminum plate.
3. Install the four flat head screws through the weighing deck.
4. Securely tighten the supplied mounting screws with the provided hex key.

Handrail mounting (purchasable option)

1. Align the mounting feet of the handrail to the underside of the weighing deck.
2. Install and securely tighten the two flat head screws and locking nut on each foot of the handrail.

Height gauge assembly (purchasable option)

If your scale was ordered with a height gauge, follow the installation directions packed with the height gauge.

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, 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 ST switches between the following options: 0.1 pounds / 0.05 kilograms 0.1 pounds / 0.1 kilograms 0.2 pounds / 0.1 kilograms 0.5 pounds / 0.2 kilograms 1 pound / 0.5 kilograms
UnitS*	This option allows you to change the displayed weight unit. Note Do not change the scale units if you have purchased the kilogram-only option. KILOS* This option allows the weight to display in kilograms. POUNDS* This option allows the weight to display in pounds.
bEEPEr*	This option determines the audible signal that occurs when a front panel button is pressed.
rECALL	This option allows you to turn ON or OFF the RECALL button functionality.
rS-232	Detailed instructions for this feature are available from Welch Allyn. Go to http://www.welchallyn.com/en/other/contact-us.html to find your local representative.
OutPut*	This option displays the current data port output option. Detailed instructions for this feature are available from Welch Allyn. Go to http://www.welchallyn.com/en/other/contact-us.html to find your local representative. Set the value to OFF to disable the optional internal printer or the RS-232 port.
PrtUnt*	This option determines whether pounds or kilograms are displayed on a printout. If the pounds and kilograms indicators are illuminated on the control panel, the printed output is determined by whichever unit is selected on the control panel. If the kilogram indicator is illuminated, it will only print in kilograms, regardless of the unit is selected on the control panel.

If the pounds indicator is illuminated, it will only print in pounds, regardless of the unit is selected on the control panel.

PrtOPT*	<p>Press RECALL to choose between the following options:</p> <p>PnlPrt: The current weight is printed when PRINT is pressed on the control panel.</p> <p>AutPrt: The current weight is automatically printed when a weight reading occurs.</p>
bAud*	<p>This option allows you to set the baud rate. Values are 1200, 2400, 4800, 9600, and 19200.</p>
pArity*	<p>This option allows you to change the parity between the following options:</p> <p>Off: No parity, 8 data bits</p> <p>Odd: Odd parity, 7 data bits</p> <p>EuEn: Even parity, 7 data bits</p>
StPbit*	<p>This option allows you to change the stop bits between the following options:</p> <p>1 bit: One stop at the end of a word</p> <p>2 bits: Two stops at the end of a word</p>
rtS.ctS*	<p>This option allows you to turn On for the printer or Off for RS232 serial transmissions.</p>
Prtbtn*	<p>This option allows you to turn On or Off the front panel PRINT button.</p>
rtEPrt*	<p>This option allows you to turn On or Off the enabling of printing from a remote location by connecting the receive line to the ground.</p>
PC brd*	<p>This option displays the model number of the printed circuit board. A second press of ST displays the revision of the printed circuit board.</p>
SEt-UP	<p>This option is displayed when you have cycled through all the options. Press and hold ON to power down the scale.</p>

Scale operation

Power options

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

Battery power



CAUTION Use only size D 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 operating on battery power.

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

bAttrY displays when the batteries are unable to properly power the scale.

Replace the batteries when either of these messages are displayed.

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.
No print, four short beeps	A print was requested, but valid weight is not displayed on the scale, or PRINT was pressed while the printer is in use.
No print, four long beeps	There is a problem with the printer. Contact your service department.

Four long beeps The battery is too weak to operate the scale.

Four short beeps The scale has entered setup mode.

Weighing procedure

1. Press **ON** to turn on the scale.
The scale sounds one beep.
2. Wait for the scale to display **0.0**.
The scale sounds two beeps.
3. Place the patient on the scale and make sure that his or her weight is evenly distributed.
The scale sounds three beeps and the patient's weight is displayed.
4. If necessary, press **REWEIGH** to perform another weight measurement.
5. If necessary, press **RECALL** to display the previously stored scale measurement.

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. Make sure that there is nothing on the scale and press **ZERO** to set the zero.

If **O-LOAD** is displayed, the capacity of the scale has been exceeded.

Wheelchair weighing procedure (model 6002)

1. Make sure that the scale ramps are down.
2. Press **ON** to turn on the scale.
The scale sounds one beep.
3. Wait for the scale to display **0.0**.
The scale sounds two beeps.
4. Place the empty wheelchair on the scale and make sure the weight is evenly distributed.
The scale sounds three beeps and the empty wheelchair weight is displayed. Write down and save this measurement.
5. Place the patient in the wheelchair and place both on the scale. Make sure the weight is evenly distributed.
The scale sounds three beeps and the patient's weight is displayed.
6. Subtract the measurement obtained in Step 4 from the measurement in Step 5 to get the patient's weight.
7. If necessary, press **REWEIGH** to perform another weight measurement.
8. If necessary, press **RECALL** to display the previously stored scale measurement.

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. Make sure that there is nothing on the scale and press **ZERO** to set the zero.

If **O-LOAD** displays, the capacity of the scale has been exceeded.

If **OFF SCALE PLEASE** – displays, remove the patient from the scale. Wait for the scale to display **0.0** and retry the measurement.

Print a weight measurement

Printers are a purchasable option for some scales. The printer will only print a valid weight. If your printer is set up with the auto-print option, a print is automatically generated after a measurement is taken.

1. Take a weight measurement as described.
A single beep sounds.
2. Press **PRINT (DATA) SEND**.
A single beep sounds and the measurement is printed.
3. To print a previously stored scale measurement, press **RECALL** and then press **PRINT (DATA) SEND**.

The following errors can occur:

- Four short beeps indicate an invalid print request. Make sure that the weight is properly displayed on the scale, or that a measurement is not already in the printing process.
- Four long beeps indicate an internal problem with the printer. See the Troubleshooting section.

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 at least once per day, and the optional handrail after each use.
2. Use one of the following products when cleaning your scale:

70 percent isopropyl alcohol

PDI Sani-Cloths®

Battery replacement



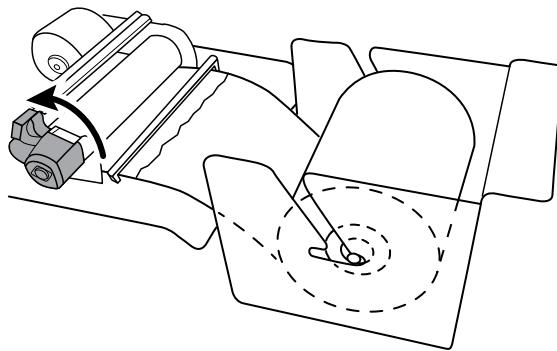
CAUTION Use only size D disposable alkaline batteries. The use of any other battery will void the warranty.

1. Using a screwdriver, remove the two fasteners on the access door and remove the door.
2. Install six new batteries in the battery holder. Make sure to follow the polarity instructions.
3. Re-attach the access door.

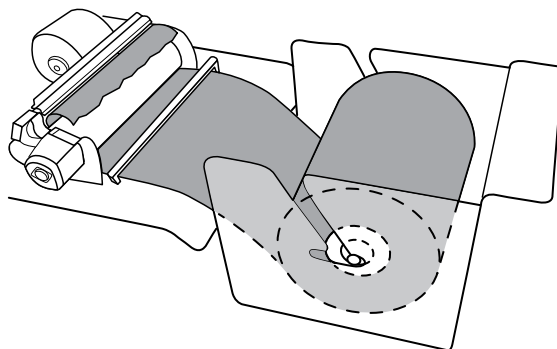
Change the printer paper

The printer is a purchasable option.

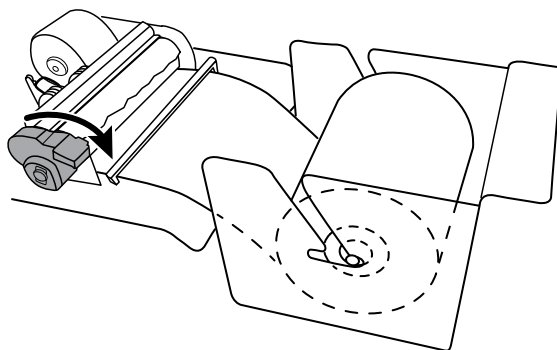
1. Use a screwdriver to loosen the screw on the battery access door and remove the printer access door.
2. Remove the spindle containing the empty printer paper roll from the printer paper well.
3. Replace the printer paper roll in the spindle. Make sure the new printer paper is advancing from the bottom of the roll.
4. Lift the green knob to lift the print head lever.



5. Insert the paper through the paper guide slot, and make sure it goes under and around the black roller bar.



6. Pull the paper under the print head lever and push the green knob down to push the print head lever down.



7. Press **PAPER ADVANCE** to move the paper through the printer.

8. Install the printer access door, and advance the new paper through the slot on the door.
9. Install the screw on the printer 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 reading is not accurate	There may be a mechanical obstruction on the platform	Make sure the platform is not touching a foreign object or something restricting its downward motion.
	The cable between the platform and the instrument circuit board may not be connected	Connect the cable.
	The cable on the mast may not be connected	Connect the cable.
The weight reading takes too long to display	The platform may be in motion	Wait for the platform to settle.
The scale displays CABLE	There may be a cable failure	Contact your service department.
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 reading does not change when weight is applied to the scale	The load cell transducer, connector, or cable may be defective	Contact your service department.

Issue	Possible cause	Suggested action
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 printer failed to print, and there were four short beeps	A valid weight may not be present	Make sure the patient's weight is indicated on scale before you press PRINT .
The printer failed to print, and there were four long beeps	There may be a problem with the printer	Contact your service department.
The printer runs but the result is blank or is faint	There may be a problem with the printer paper	Make sure you are using thermal paper in the printer.
The print is distorted	There may be a problem with the printer head or the printer interface door	Contact your service department.
The low battery light flashes during printing	The battery may be low	Replace the battery.
The printed paper tears poorly or unevenly	The tear bar may be damaged	Check for signs of damage such as missing teeth or cracks. If damaged, contact your service department.

Appendices

Specifications

Item	Specification
Scales	5002, 5122, 5702, 6002
Resolution (factory default)	0.1 lb / 100 gm
Weighing capacity	Models 5002 and 6002: 880 lb (400 kg) Model 5702: 1000 lb (454 kg) Model 5122: 660 lb (300 kg)
Readout	Large, bright light-emitting diode display. Selectable weight displayed in pounds or kilograms. Indicator light to show selected units.
Power source	Battery <ul style="list-style-type: none"> • 6 D 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 • Nominal output voltage: U_{out} : 12V DC +5% / -5% • Nominal output current: I_{out} : 1000mA
Platform dimensions	5002: 18 in. x 19.5 in. x 1.5 in. 5702: 24 in. x 26 in. x 2 in. 6002: 24 in. x 26 in. x 2 in. 5122: 16 in. x 14 in. x 1.5 in.

Product configurations

The Welch Allyn Masted Scales are available in the following configurations:

Model 5002, Mobile Stand-On Scale

Model	Description
5002-KP	Mobile Stand-On Scale, kilogram only, printer
5002-KX	Mobile Stand-On Scale, kilogram only, data port
5002-XP	Mobile Stand-On Scale, standard weight, printer
5002-XX	Mobile Stand-On Scale, standard weight, data port

Model 5122, Low-Profile Stand-On Scale

Model	Description
5122-K	Low-Profile Stand-On Scale, kilogram only
5122-X	Low-Profile Stand-On Scale, standard weight

Model 5702, Mobile Bariatric Stand-On Scale

Model	Description
5702-KP	Mobile Bariatric Stand-On Scale, kilogram only, printer
5702-KX	Mobile Bariatric Stand-On Scale, kilogram only, data port
5702-XP	Mobile Bariatric Stand-On Scale, standard weight, printer
5702-XX	Mobile Bariatric Stand-On Scale, standard weight, data port

Model 6002, Wheelchair Scale

Model	Description
6002-KP	Wheelchair Scale, kilogram only, printer
6002-KX	Wheelchair Scale, kilogram only, data port
6002-XP	Wheelchair Scale, standard weight, printer
6002-XX	Wheelchair Scale, standard weight, data port

Approved accessories

Model 5002

Part number	Description
845010	Height gauge (in and cm)
845010M	Height gauge (metric only)
845010W	Wall-mounted height gauge (in and cm)
50231	Printer
23709	Thermal printer paper (box, 15 rolls)
845233	UL/CSA power adapter with hospital-grade plug

Model 5122

Part number	Description
845010W	Wall-mounted height gauge (in and cm)
341001	Power adapter

Model 5702

Part number	Description
845010B	Height gauge for 5702 (in and cm)
845010W	Wall-mounted height gauge (in and cm)
50231	Printer
23709	Thermal printer paper (box, 15 rolls)
845233	UL/CSA power adapter with hospital-grade plug

Model 6002

Part number	Description
60224	Handrail
845010	Height gauge (in and cm)
845010M	Height gauge (metric only)
845010W	Wall-mounted height gauge (in and cm)
50231	Printer

Part number	Description
23709	Thermal printer paper (box, 15 rolls)
845233	UL/CSA power adapter with hospital-grade plug

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.

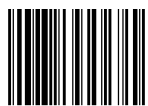
The warranty period shall start on the date of purchase. The date of purchase is: 1) the invoiced ship date if the device was purchased directly from Welch Allyn, 2) the date specified during product registration, 3) the date of purchase of the product from a Welch Allyn authorized distributor as documented 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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Material No. 725556