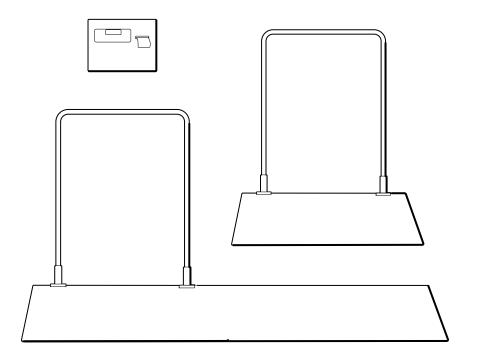
Welch Allyn In-Floor Scales



Directions for use

Models 6102, 6154



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This manual applies to REF 901110 NONMASTED SCALES.

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Introduction

Intended use

The Welch Allyn Integrated Scales are intended to be used by clinicians for weighing patients up to 825 lb (375 kg) for models 6102 and 6154.

Indications for use

The Welch Allyn In-Floor Scales are used by clinicians to weigh patients.

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



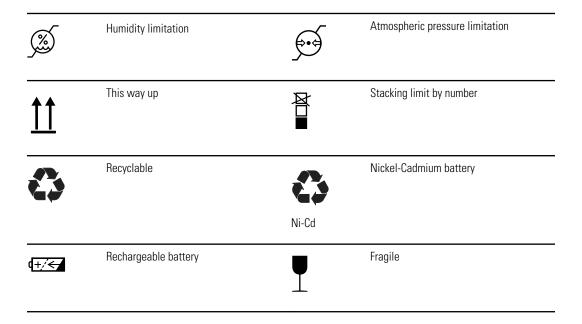
Keep dry



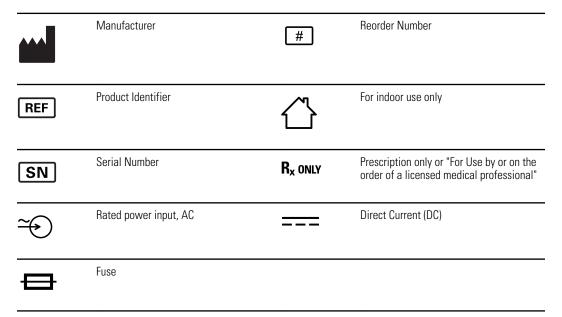
Separate collection of Electrical and Electronic Equipment. Do not dispose as unsorted municipal waste.



Separate collection of batteries. Do not dispose as unsorted municipal waste.



Miscellaneous symbols



About warnings and cautions

Caution statements can appear on the Welch Allyn In-Floor Scales, the packaging, the shipping container, or in this *Directions for use*.

The Welch Allyn In-Floor 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

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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.



WARNING Improper disposal of batteries may create an explosion or contamination hazard. Never dispose of batteries in refuse containers. Always recycle batteries according to local regulations.



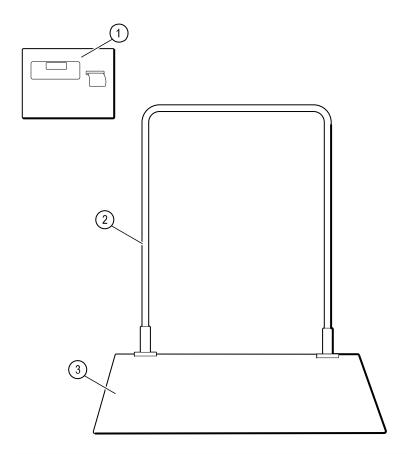
CAUTION Make sure that you routinely perform general maintenance and equipment safety checks on your scale. Remove the scale from service when you notice damaged power cords.



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

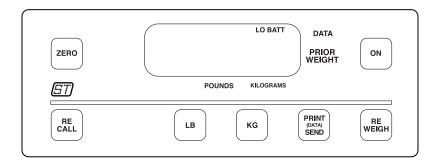
Scale



- 1 Front panel
- 2 Hand rail (optional)
- 3 Weighing platform

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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 \mathbf{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

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

Scale and handrail installation

Please refer to the instructions that shipped with your scale for installation information.

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.

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

Note Options indicated with an asterisk (*) have multiple selections.

- 2. Press **RE CALL** once a value is displayed to change the value. When the desired value appears, press **ST** to set the new value.
- 3. You can exit the menu at any time by pressing **ON** to power down the scale. The scale saves all changes.

The options displayed with each press are as follows:

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.	
Aut0FF*	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. Press \bf{RE} \bf{CALL} to turn this option \bf{ON} or \bf{OFF} .	
rES*	This option allows you to change the resolution of weight. Press RE CALL to switch 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.	
	Press RE CALL to switch between the following options:	
	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. Press RE CALL to switch between ON and OFF .	
	Tiess NE GALE to switch between GN and GIT.	
rECALL*	Press RE CALL to change the RE CALL button functionality between ON and OFF .	
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.	

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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.

Press **RE CALL** to switch between the following options:

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* Press **RE CALL** to switch between the following options:

PnIPrt: The current weight is printed when **PRINT** is pressed on the control panel. **AutPrt**: The current weight is automatically printed when a weight reading occurs.

bAud* This option allows you to set the baud rate.

Press RE CALL to switch between 1200, 2400, 4800, 9600, and 19200...

pArity* Press **RE CALL** to switch between the following options:

Off: No parity, 8 data bits
Odd: Odd parity, 7 data bits
EuEn: Even parity, 7 data bits

StPbit* Press **RE CALL** to switch between the following options:

1 bit: One stop at the end of a word2 bits: Two stops at the end of a word

rtS.ctS* Press **RE CALL** to switch between **ON** for the printer and **OFF** for RS232 transmissions.

Prtbtn* Press **RE CALL** to turn **On** or **Off** the front panel **PRINT** button.

rtEPrt* Press **RE CALL** to turn **On** or **Off** the enabling of printing from a remote location by

connecting the receive line to the ground.

PC brd This option displays the model number of the printed circuit board. A second 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

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

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

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

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

For surface-mounted scales, plug the scale into a power source 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. 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.

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 and internal problem with the printer. See the Troubleshooting section.

Cleaning and maintenance

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®

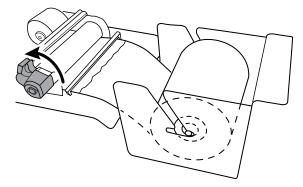
Rechargeable battery replacement

Contact your service department.

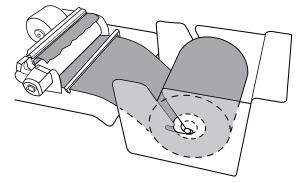
Change the printer paper

The printer is a purchasable option.

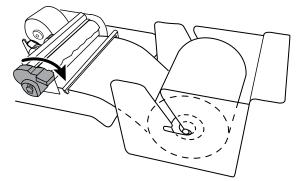
- 1. Use a screwdriver to loosen the screw on the battery access door and remove the printer access door.
- 2. Remove the spindle containing the empty printer paper roll from the printer paper
- 3. Replace the printer paper roll in the spindle. Make sure the new printer paper is advancing from the bottom 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
- 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 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.

Issue	Possible cause	Suggested action
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	6102, 6154
Resolution (factory default)	0.1 lb / 100 g
Weighing capacity	6102, 6154: 825 lb (375 kg)
Readout	Large, bright light-emitting diode display. Selectable weight displayed in pounds or kilograms. Indicator light to show selected units.
Power source	Battery Ni-Cd 7.2V DC, 10.8wh, 1500mAH minimum AC power 115V ± 10% VAC, 6 watts Fuse 1/8A 250 V S.B.
Platform dimensions	6102: 32 in. x 36 in. 6154: 54 in. x 36 in.

Product configurations

The Welch Allyn In-Foor Scales are available in the following configurations:

Model 6102, Flush-Mounted In-Floor Scale

Model	Description
6102-KP	Flush-Mounted In-Floor Scale, kilogram only, printer
6102-KX	Flush-Mounted In-Floor Scale, kilogram only, data port
6102-XP	Flush-Mounted In-Floor Scale, standard weight, printer
6102-XP	Flush-Mounted In-Floor Scale, standard weight, data port

Model 6154, Flush-Mounted In-Floor Scale

Model	Description	
6154-KP	Flush-Mounted In-Floor Scale, kilogram only, printer	
6154-KX	Flush-Mounted In-Floor Scale, kilogram only, data port	
6154-XP	Flush-Mounted In-Floor Scale, standard weight, printer	
6154-XP	Flush-Mounted In-Floor Scale, standard weight, data port	

Approved accessories

Models 6102 and 6154

Part number	Description	
61022	Handrail	
845010W	Wall-mounted height gauge	
846112	Printer	
23709	Thermal printer paper (box, 15 rolls)	
360007	Battery pack 7.2V	

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

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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





Material No. 724518