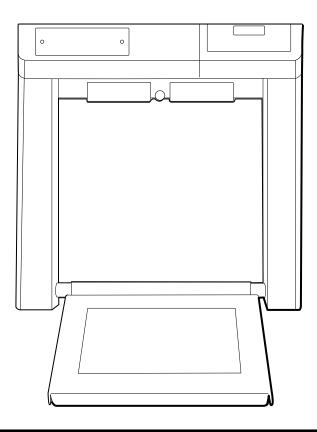
# Welch Allyn Stow-A-Weigh Scales



# Directions for use

Models 5202, 6202, 6202D



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This manual applies to **REF** 901110 NONMASTED SCALES.

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## Introduction

#### Intended use

The Welch Allyn Stow-A-Weigh Scales are intended to be used by clinicians for weighing patients up to 660 pounds (300 kg) for model 5202, up to 880 pounds (400 kg) for model 6202, and up to 1000 pounds (450 kg) for model 6202D.

#### Indications for use

The Welch Allyn Stow-A-Weigh 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.

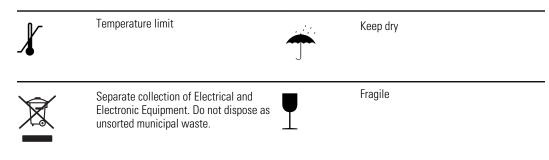


**Caution** The caution statements in this manual identify conditions or practices that could result in damage to the equipment or other property, or loss of data.

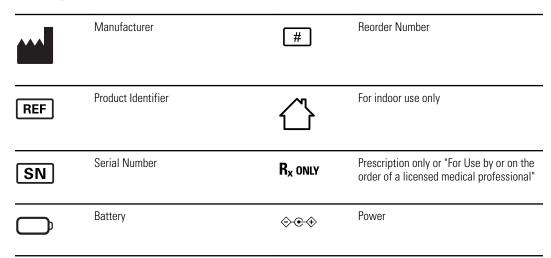


Consult Directions for Use

#### Shipping, storing, and environment symbols



#### Miscellaneous symbols



## About warnings and cautions

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

The Welch Allyn Stow-A-Weigh 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.

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#### 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.

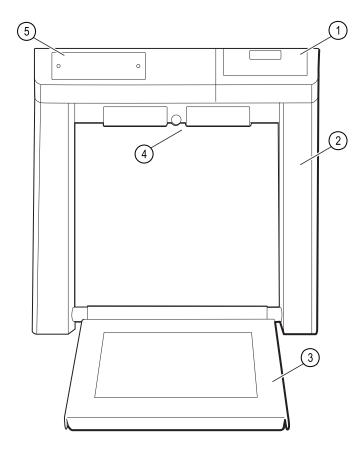


**CAUTION** For scale model 6202D, make sure the cable connecting the main scale and the satellite platform are connected before taking a weight measurement.

# Controls and indicators

#### Scale

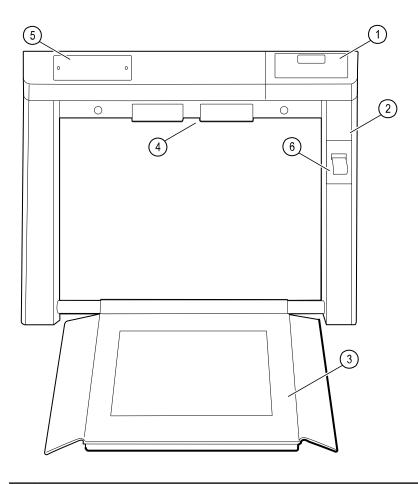
#### **Model 5202**



- 1 Front panel
- 2 Scale frame
- 3 Weighing platform
- 4 Mounting bracket
- 5 Battery access door

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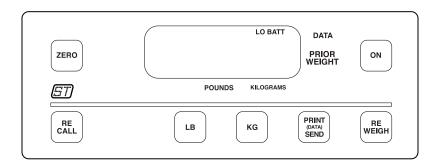
#### Models 6202 and 6202D



- 1 Front panel
- 2 Scale frame
- 3 Weighing platform
- 4 Mounting bracket
- 5 Battery access door
- 6 Printer (optional)

N/A Satellite platform for model 6202D

## Front panel buttons



Button	Function		
ZERO	Press this button t	Press this button to reset the scale to zero.	
ON	Press this button t	o turn on the scale.	
ST	Press this button i	n conjunction with <b>ON</b> to enter the setup mode.	
RECALL	Press this button t	o 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 t	o 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.		

# Installation and setup

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

### Installation instructions

The scale should be installed in a location with a flat, firm floor. It can be installed over dense, low height commercial carpeting without problem. When used with some thicker, looser carpet piles the weighing platform might not fold down squarely against the floor. In severe cases, a flat plastic or metal shim can be inserted under each leg of the scale frame to better support the scale structure on carpet.

- 1. Select a suitable location to install the scale. Make sure that the location is free from excessive molding, guard rails, or other items that can impede installation.
- 2. Make sure you have selected attaching hardware suitable for the construction of your wall.

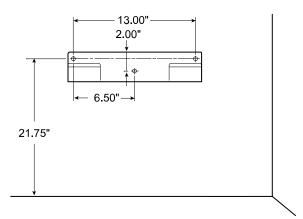
**Note** Attaching hardware is not included with the scale.

3. Follow the instructions for your model and bracket size, as indicated in the following sections.

#### Model 5202 with a 14-inch bracket



**CAUTION** The mounting bracket serves only to retain the scale against the wall to keep it from tipping over. The mounting bracket should not support the scale and keep the scale frame from resting on the floor.

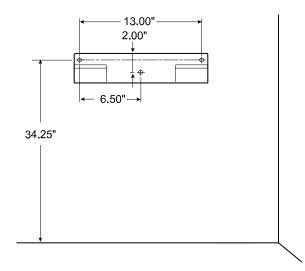


- 1. From the floor, use a tape measure and make a mark at 21.75 in. This mark will be the left mounting hole of the bracket.
- 2. Align the hole on the left side of the bracket over the mark. Using a level, ensure that the bracket is straight horizontally, and make two marks on the wall based on the location of the holes in the center and top right of the bracket.
  - Make sure that the two top holes are 13 in. apart and that the center hole is 2 in. from the top of the bracket.
- 3. Drill holes through the marks you made and install the mounting hardware through the bracket.
- 4. Once the bracket is mounted, lift the scale and lower it into position on the lip of the bracket. Center the scale side to side in the bracket.

#### Model 6202 with a 14-inch bracket



**CAUTION** The mounting bracket serves only to retain the scale against the wall to keep it from tipping over. The mounting bracket should not support the scale and keep the scale frame from resting on the floor.



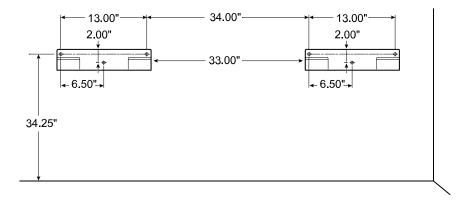
- 1. From the floor, use a tape measure and make a mark at 34.25 in. This mark will be the left mounting hole of the bracket.
- 2. Align the hole on the left side of the bracket over the mark. Using a level, ensure that the bracket is straight horizontally, and make two marks on the wall based on the location of the holes in the center and top right of the bracket.
  - Make sure that the two top holes are 13 in. apart and that the center hole is 2 in. from the top of the bracket.
- 3. Drill holes through the marks you made and install the mounting hardware through the bracket.
- 4. Once the bracket is mounted, lift the scale and lower it into position on the lip of the bracket. Center the scale side to side in the bracket.

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#### Model 6202D with two 14-inch brackets



**CAUTION** The mounting brackets serve only to retain the scale against the wall to keep it from tipping over. The mounting brackets should not support the scale and keep the scale frame from resting on the floor.



- 1. From the floor, use a tape measure and make a mark at 34.25 in. This mark will be the left mounting hole of the left bracket.
- 2. Align the hole on the left side of the bracket over the mark. Using a level, ensure that the bracket is straight horizontally, and make two marks on the wall based on the location of the holes in the center and top right of the bracket.
  - Make sure that the two top holes are 13 in. apart and that the center hole is 2 in. from the top of the bracket.
- 3. Drill holes through the marks you made and install the mounting hardware through the bracket.
- 4. From the edge of the left bracket, measure 33 inches to the right and make a mark. This mark is the location of the left edge of the right bracket.
- 5. Follow steps 1 through 3 to mount the right bracket. Make sure that the left edge of the bracket aligns with the mark made in Step 4.
- 6. Once the brackets are mounted, lift the scales and lower them into position on the lip of the bracket. Make sure the main platform is on the right. Center the scales side to side in the bracket.
- 7. Connect the cable between the main platform and the satellite platform.

#### 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. Lower the weighing platform to the weighing position.
- 2. Press **ON** to power down the scale.
- 3. Press and hold **ST** while pressing **ON**.
- 4. 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.
Aut0FF*	This displays the number of seconds before the scale turns off when operating on battery power. The <b>Cont</b> 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 <b>ST</b> 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.
	<b>Note</b> 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 <b>ON</b> or <b>OFF</b> the <b>RECALL</b> button functionality.
rS-232	Detailed instructions for this feature are available from Welch Allyn. Go to <a href="http://www.welchallyn.com/en/other/contact-us.html">http://www.welchallyn.com/en/other/contact-us.html</a> 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 <a href="http://www.welchallyn.com/en/other/contact-us.html">http://www.welchallyn.com/en/other/contact-us.html</a> to find your local representative.  Set the value to <b>OFF</b> 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.

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If the pounds indicator is illuminated, it will only print in pounds, regardless of the unit is selected on the control panel. PrtOPT\* Press **RECALL** to choose 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. Values are 1200, 2400, 4800, 9600, and 19200. pArity\* This option allows you to change the parity between the following options: Off: No parity, 8 data bits **Odd**: Odd parity, 7 data bits **EuEn**: Even parity, 7 data bits StPbit\* This option allows you to change the stop bits between the following options: 1 bit: One stop at the end of a word 2 bits: Two stops at the end of a word rtS.ctS\* This option allows you to turn **On** for the printer or **Off** for RS232 serial transmissions. Prtbtn\* This option allows you to turn **On** or **Off** the front panel **PRINT** button. rtEPrt\* 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. 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**



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

Lower the weighing platform to power on the scale.

The scale automatically turns off after 45 seconds of non-use when operating on battery power. Press **ON** to power on the scale.

The **LO BATT** indicator displays 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 when the weighing platform is lowered.

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 <b>PRINT</b> 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. Make sure that the scale platform is down.
- 2. If necessary, press **ON** to turn on the scale.

The scale sounds one beep.

- 3. After two beeps have sounded, have the patient step on the scale.
- 4. The scale displays a series of moving dashes as it waits for stabilization and calculates the weight.

Once the measurement is obtained, the scale beeps three times and displays the weight on the front panel.

- 5. If necessary, press **REWEIGH** to perform another weight measurement..
- 6. 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.

# Storage, cleaning, and maintenance

#### Storage

The scale's weighing platform should be stowed in its upright position when then scale is not in use.

## Cleaning

- 1. Clean the scale at least once per day.
- 2. Use one of the following products when cleaning your scale:

70 percent isopropyl alcohol

PDI Sani-Cloths®

### Battery replacement



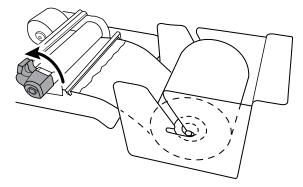
**CAUTION** Use only size D disposable alkaline batteries. The use of any other battery will void the warranty.

- 1. Using a screwdriver, remove the two fasteners on the access door located on the front of the scale 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.

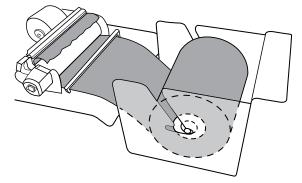
## Change the printer paper

The printer is a purchasable option.

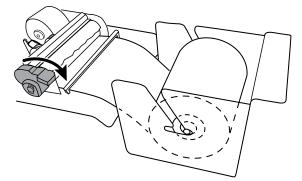
- 1. Use a screwdriver to loosen the screw on the battery access door and remove the printer access door.
- 2. Remove the spindle containing the empty printer paper roll from the printer paper
- 3. Replace the printer paper roll in the spindle. Make sure the new printer paper is advancing from the bottom 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 <b>O-LOAd</b>	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 <b>E-FAIL</b> is displayed	The scale's memory has failed	Contact your service department.

Issue	Possible cause	Suggested action
The error message <b>r-FAIL</b> is displayed	The scale's memory has failed.	Contact your service department.
The error message <b>A-FAIL</b> is displayed	The scale's memory has failed	Contact your service department.
The error message <b>C-FAIL</b> is displayed	The scale's memory has failed.	Contact your service department.

# Appendices

# **Specifications**

Item	Specification
Scales	5202, 6202, 6202D
Resolution (factory default)	5202, 6202: 0.1 lb. / 0.1 kg (100 g) 6202D: 0.5 lb. / 0.2 kg
Weighing capacity	5202: 660 lb. (300 kg) 6202: 880 lb. (400 kg) 6202D: 1000 lb. (450 kg)
Readout	Large, bright light-emitting diode display.  Selectable weight displayed in pounds or kilograms.  Indicator light to show selected units.
Power source	Battery • 6 D alkaline batteries  Power adapter • Medical grade UL listed external power supply • Nominal input voltage: $100\text{-}240\text{V AC} \pm 10\%$ • Nominal input frequency: $50/60\text{ Hz}$ • Nominal input current: $0.3\text{-}0.15\text{Arms}$ @ max load • Standby power consumption at $U_{\text{In}}$ : $230\text{V AC}$ : $\leq 0.1\text{W}$ • Nominal output voltage: $U_{\text{out}}$ : $12\text{V DC}$ +5% / -5% $U_{\text{Br}}$ : $\leq 150\text{mVpp}$ • Nominal output current: $I_{\text{out}}$ : $1000\text{mA}$
Platform dimensions	5202: 18 in. x 18 in x 1.5 in. 6202: 24 in. x 30 in. x 1.5 in. 6202D: 24 in. x 30 in. x 1.5 in. (main platform) and 12 in. x 30 in. x 1.5 in. (secondary platform)

# **Product configurations**

The Welch Allyn Stow-A-Weigh Scales are available in the following configurations:

#### Model 5202, Stow-A-Weigh Stand-On Scale

Model	Description
5202-K	Stow-A-Weigh Stand-On Scale, kilogram only
5202-X	Stow-A-Weigh Stand-On Scale, standard weight

#### Model 6202, Stow-A-Weigh Wheelchair Scale

Model	Description
6202-KP	Stow-A-Weigh Wheelchair Scale, kilogram only, printer
6202-KX	Stow-A-Weigh Wheelchair Scale, kilogram only, data port
6202-XP	Stow-A-Weigh Wheelchair Scale, standard weight, printer
6202-XX	Stow-A-Weigh Wheelchair Scale, standard weight, data port

#### Model 6202D, Dual Platform Stow-A-Weigh Wheelchair Scale

Model	Description
6202D-KP	Stow-A-Weigh Wheelchair Scale, kilogram only, printer
6202D-KX	Stow-A-Weigh Wheelchair Scale, kilogram only, data port
6202D-XP	Stow-A-Weigh Wheelchair Scale, standard weight, printer
6202D-XX	Stow-A-Weigh Wheelchair Scale, standard weight, data port

## Approved accessories

#### **Model 5202**

Part number	Description
845010W	Wall-mounted height gauge

#### Models 6202 and 6202D

Part number	Description
845010W	Wall-mounted height gauge
846202	Printer

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Part number	Description
23709	Thermal printer paper (box, 15 rolls)
341001	AC 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: <a href="http://www.welchallyn.com/en/other/contact-us.html">http://www.welchallyn.com/en/other/contact-us.html</a>





Material No. 724514