

# BladderScan® BVM 6500

UEBW (Ultrasound-Estimated Bladder Weight) and Bladder Volume Instrument



# Quick Reference Guide

for UEBW  
(Ultrasound-Estimated  
Bladder Weight)

**BladderScan®**


**The Standard of Care for Bladder Volume Measurement**

Noninvasive, Accurate, Reliable, & Easy to Use

Note: To turn on the scanning unit when it is in sleep mode, press and release any button and wait for the chirp.

### 1 Select Gender Button

Select the female option  ONLY for female patients who have not had a hysterectomy

Press the Gender button, located below the LCD screen, to select or deselect the female option. When the female option is selected, a Female icon  appears on the LCD screen. Use the female option ONLY when scanning a female patient who has NOT undergone a hysterectomy. For all other patients, press the gender button until no icon is displayed.



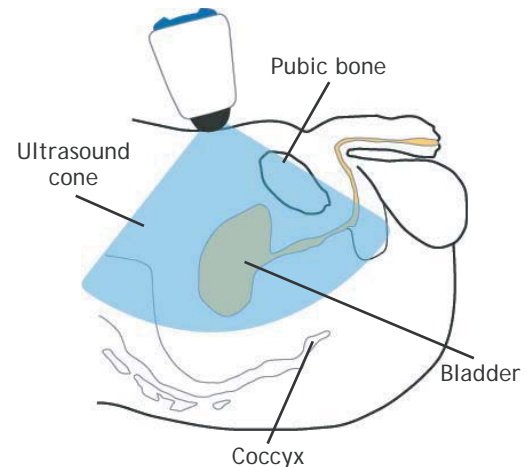
### 2 Patient Supine, Apply Gel

Have the patient lie in the supine position with the abdominal muscles relaxed. Palpate the patient's symphysis pubis (pubic bone). Place an ample quantity of gel midline on the patient's abdomen, approximately one inch (3 cm) above the symphysis pubis. Make sure that there are as few air bubbles as possible.

### 3 Aim Toward Bladder


Aim the Probe slightly downward toward the patient's coccyx (tail bone)

Place the Probe on the gel, aimed toward the expected location aimed toward the expected location of the bladder. For most patients, this means aiming the Probe slightly downward toward the patient's coccyx (tailbone). Make sure the Probe has good contact with the gel and the patient's skin to ensure good conduction.

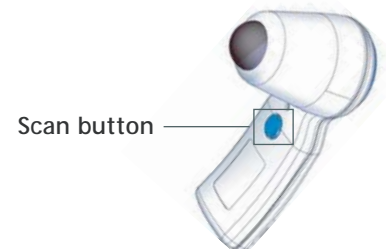


Place gel on the abdomen of the patient, one inch (3 cm) above the symphysis pubis. Place the Probe on the gel.

### 4 Press Scan Button

Press and release the Scan button, located at the underside of the handgrip. A scanning symbol  appears in the upper right-hand corner of the LCD screen during the scan.

Hold the Probe steady until the scan is finished (approximately 6 seconds). When you hear a beep, the scan is complete and a bladder volume measurement is displayed on the LCD screen.



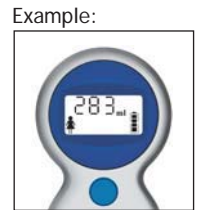
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### 5 Verify Aim

Verify that the Probe was properly aimed by using the flashing **Aiming arrows**. Accept only readings with no arrow or a solid arrow. Flashing arrows can lead to inaccurate UEBW (bladder mass) readings.

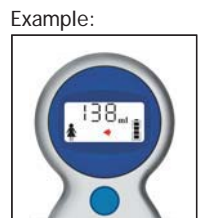
### 5A Solid Arrows or No Arrows = Accept Scan Re-Aiming Not Necessary

The displayed bladder volume measurement is accurate when no aiming arrow or a solid aiming arrow appears on the LCD screen after the scan. Note the patient's bladder volume. The scanning unit will not save this measurement after a new scan is taken.



### 5B Flashing Arrows = Scan Not Accepted Re-Aiming Necessary

If a flashing aiming arrow appears on the LCD screen below the bladder volume measurement, you need to re-adjust your aim in the direction indicated by the flashing arrow. Please refer to Visual Aiming Guide below.



Arrow points left  
Aim left, then scan again

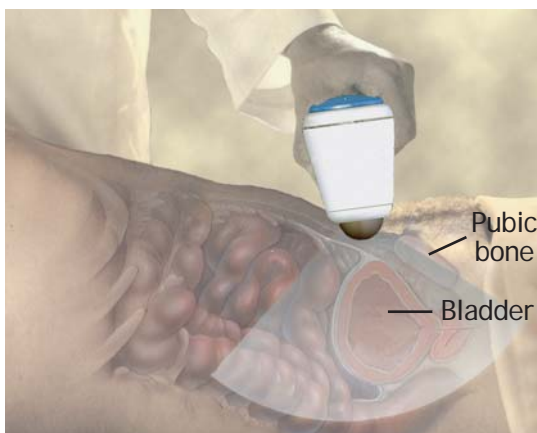
### 6 Verify In Range Volume for UEBW Exam

If measuring UEBW, verify that the measured volume is sufficient for a successful exam. The patient's bladder volume must be between 200 and 400 ml.

### 7 Use ScanPoint® to View UEBW Exam Results

Use ScanPoint® to view UEBW exam results: Place the BVM 6500 in the ScanPoint® Docking Station and log on to ScanPoint®. Choose **BladderScan® UEBW** for the exam type and enter the required data. Transmit exam results and then view UEBW measurement (if applicable) and ultrasound images. If desired, print the exam results for patient records and reimbursement. Please see back page for sample report and images.

## BVM 6500 VISUAL AIMING GUIDE



When re-aiming, visualize ultrasound waves being projected out of the Probe toward the patient's body. If the flashing aiming arrow points toward the left, aim the scanning unit so that the ultrasound waves will be projected further to the left. Then re-scan the patient. Repeat as necessary until a solid arrow or no aiming arrow appears on the screen.

### Good Scan - No Arrows



- Bladder contained completely within ultrasound cone
- Bladder centered in ultrasound cone

Bladder volume measurement between 200 and 400 ml

Top View



Side View



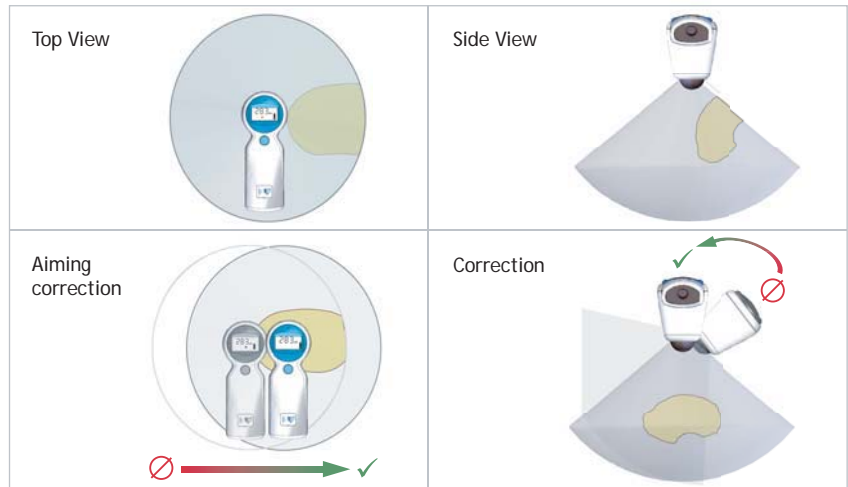
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### Required Re-Aiming

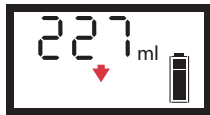
#### Flashing Arrow



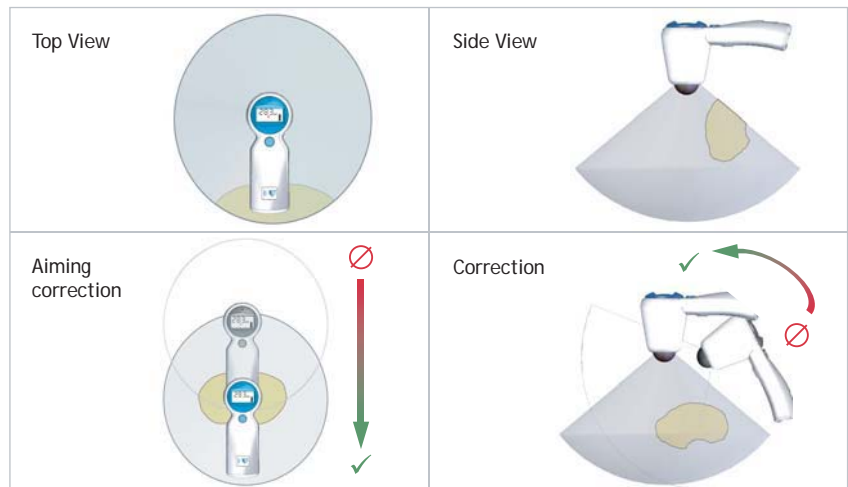
- Bladder not contained completely within ultrasound cone
- Bladder not centered in ultrasound cone



#### Flashing Arrow



- Bladder not contained completely within ultrasound cone
- Bladder not centered in ultrasound cone

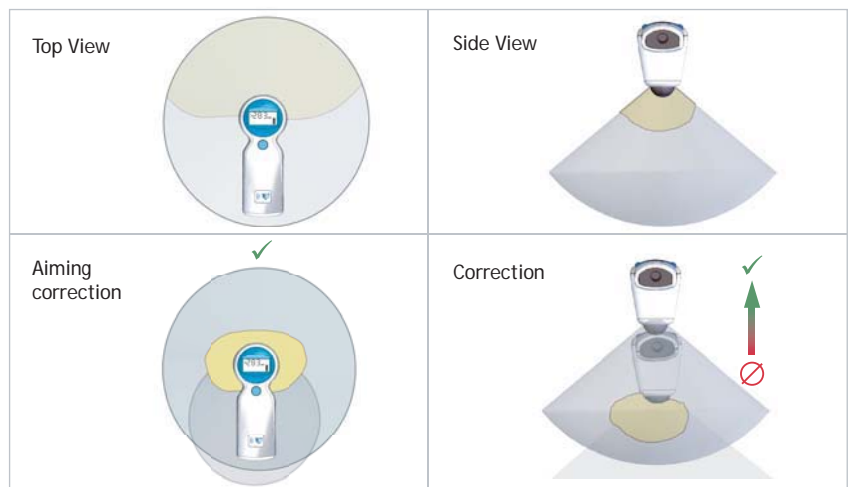


### Optional Re-Aiming

#### Greater Than Symbol



- Most of bladder contained within ultrasound cone
- Too much pressure applied to BVM 6500
- Apply less pressure



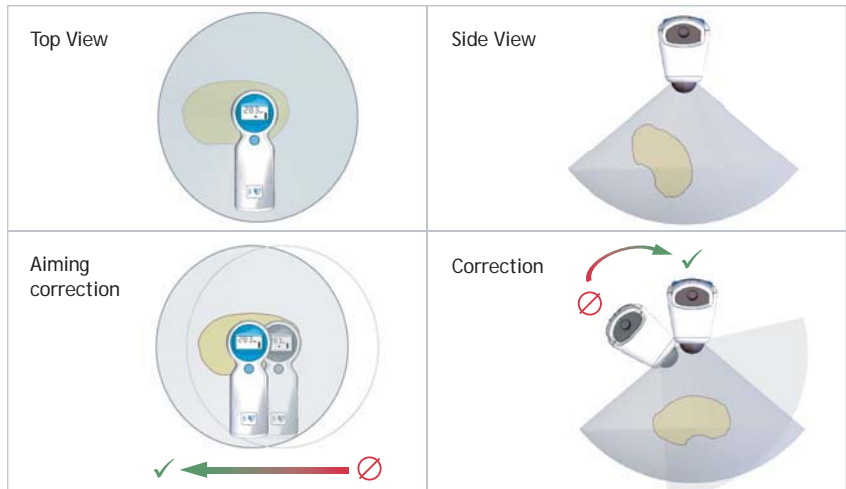
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### Optional Re-Aiming Continued

#### Solid Arrow



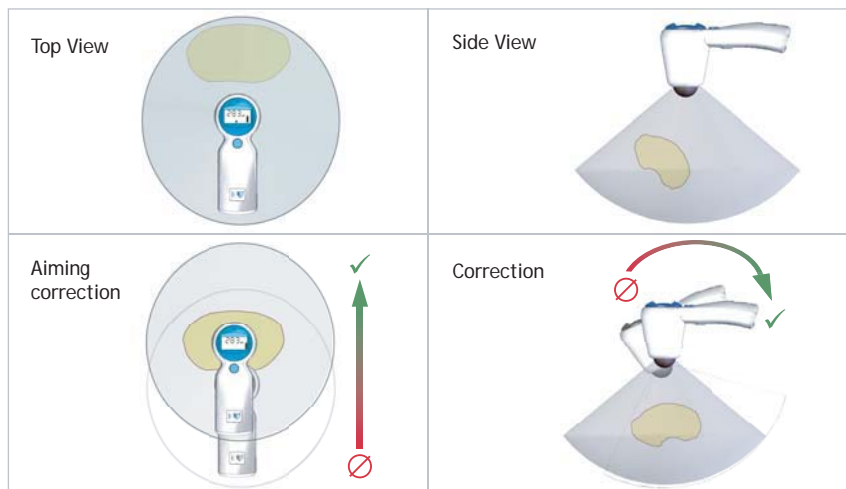
- Bladder contained completely within ultrasound cone
- Bladder not centered in ultrasound cone



#### Solid Arrow



- Bladder contained completely within ultrasound cone
- Bladder not centered in ultrasound cone



### BVM 6500 MEASUREMENT ANNOTATIONS

Because the BVM 6500 is a sensitive instrument, you need to obtain a good scan to have the device provide accurate measurements. Please familiarize yourself with the Aiming and Annotation information provided here, to help you achieve a good scan. We recommend that you download the images from ScanPoint® and review them before releasing your patient, in case you do need to rescan.

<ul style="list-style-type: none"> <li>• Volume was &lt;100 ml or &gt;600 ml.</li> <li>• Volume for UEBW was out of range. Surface area, thickness, and mass measurements not available. Please re-scan.</li> </ul>	<table border="1"> <thead> <tr> <th colspan="2">Measurements</th> </tr> </thead> <tbody> <tr> <td>Urine Volume:</td> <td>53 ml</td> </tr> <tr> <td>Surface Area:</td> <td>Not available.</td> </tr> <tr> <td>Wall Thickness:</td> <td>Not available.</td> </tr> <tr> <td>Ultrasound Estimated Bladder Weight:</td> <td>Not available.</td> </tr> <tr> <td colspan="2">Volume out of range for mass measurement.</td> </tr> </tbody> </table>	Measurements		Urine Volume:	53 ml	Surface Area:	Not available.	Wall Thickness:	Not available.	Ultrasound Estimated Bladder Weight:	Not available.	Volume out of range for mass measurement.		<ul style="list-style-type: none"> <li>• Volume was &gt;100 ml but &lt;200 ml, or &gt;400 ml but &lt;600 ml.</li> <li>• Inspect the bladder and wall outlines for accuracy. Individual anatomy may allow for accurate measurement. If you have questions, please contact VM.</li> </ul>	<table border="1"> <thead> <tr> <th colspan="2">Measurements</th> </tr> </thead> <tbody> <tr> <td>Urine Volume:</td> <td>162 ml</td> </tr> <tr> <td>Surface Area:</td> <td>158 cm<sup>2</sup></td> </tr> <tr> <td>Wall Thickness:</td> <td>2.4 ± 0.1 mm</td> </tr> <tr> <td>Ultrasound Estimated Bladder Weight:</td> <td>37 ± 2 g</td> </tr> <tr> <td colspan="2">Volume out of range for mass measurement. Usually verify thickness</td> </tr> </tbody> </table>	Measurements		Urine Volume:	162 ml	Surface Area:	158 cm <sup>2</sup>	Wall Thickness:	2.4 ± 0.1 mm	Ultrasound Estimated Bladder Weight:	37 ± 2 g	Volume out of range for mass measurement. Usually verify thickness	
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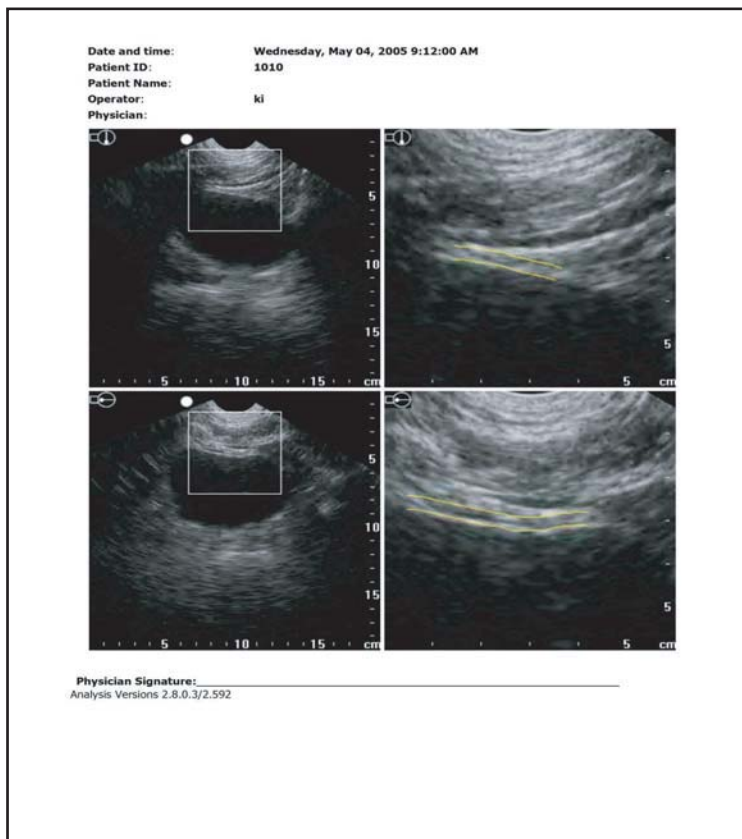
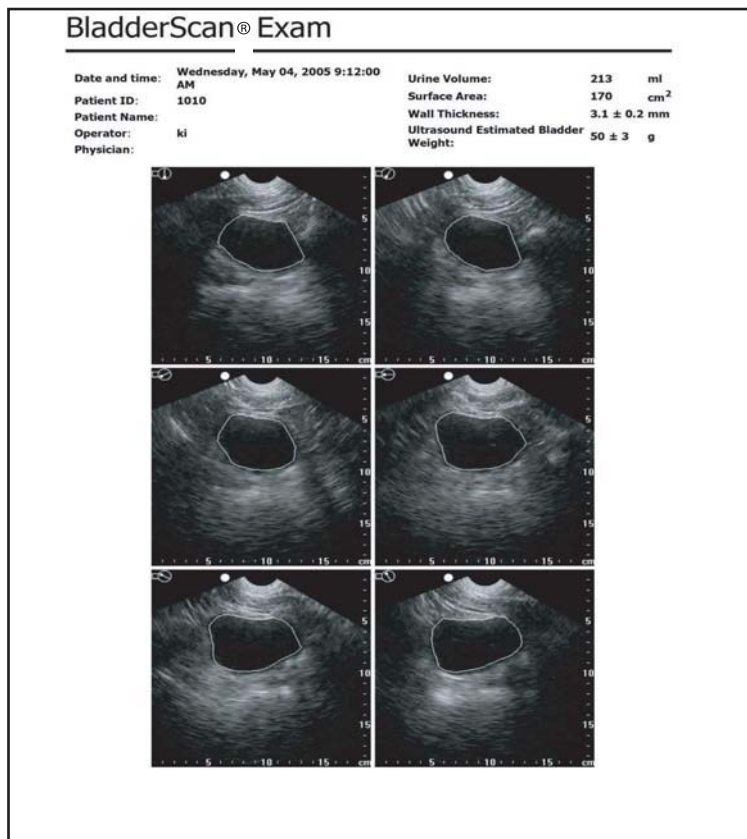
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### Additional Scanning Tips

1. Applying too much pressure when scanning will lead to a **Greater than symbol (>)** preceding the measurement. Apply less pressure and re-scan.
2. Hold the device steady while scanning. Movement will result in an inaccurate reading.

3. Volume reading will be affected by:
  - The presence of scar tissue
  - The presence of a catheter
  - Overly obese patients
    - With obese patients, lift as much abdominal adipose tissue out of the way of the instrument as possible. Apply more pressure to the BladderScan® UEBW instrument to reduce the amount of adipose tissue through which the ultrasound must pass.

### ScanPoint® Sample Printout



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