### VitaScan Bladder Scanner

# Educational guide

### VITACON.

Educational guide for good clinical practice in real-time bladder scanning.

Read Quick User Guide Launch user video from screen Use Ultrasound gel

- 1. Plug in wall contact to charge system.
- 2. Start system by pressing ON/OFF button.
- 3. Wait for the screen to boot up the VitaScan application.
- 4. Scan yourself from a sitting position.
- Press pre- scan, press and release probe button.
  Activate volume calculation by pressing/releasing same probe button.
  The commands can also be done from the display/screen.
- 6. Keep the probe steady during the scanning sequence.
- 7. Evaluate the result Images.
- SCAN a patient from a patient in a supine position.
  Consider ergonomics, bed elevated to protect your back, position of cart to see images clear, probe left- right hand etc.
- 9. Aim to position the bladder in the middle of the cone using the green position line to center the bladder. The bladder outline will be green when the bladder is centered and turn yellow when the bladder is off center.



- 10. Angle the probe towards the tailbone, behind the pubic bone and try to obtain the largest bladder in the middle of the cone.
- 11. Different scan depths offer a better image within the cone. The whole bladder image must be captured within the cone. Alternate and observe the bladder position within the cone.



When turning off the scanner it will start in default mode (16 cm)

- 12. Press scan and keep probe still until the volume is displayed in the screen.
- 13. Verify result images. The bladder will have a defined border in both images.

**Notes** 



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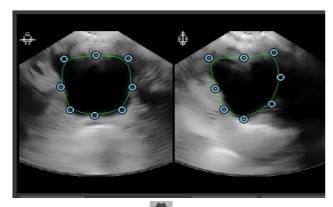
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14. A red arrow in the threaded cross shows you where to move the probe. Rescan and verify images again.

OR

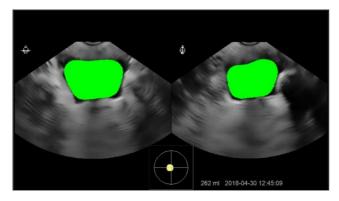
Choose "manual measurement" / "adjust". Move the markers in both images to better outline the correct bladder wall. Press accept and the revised volume will appear in the screen. In the PD version the manual measurement is done from the box "adjust".



Activate bladder icon at the right corner of the start- up screen.

The green color indicates bladder correct positioned.

A yellow color indicates out of midline position and result to be rejected.



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#### 15. Saving scans

VitaScan LT (tablet version)

Pressing save will save result images and volume by day/time stamp.

VitaScan PD

Not possible to save any scans to the machine. Only possible to save to a memory stick. Embedded printer for printout.

#### SCAN SCENARIOS for advanced training

- 1. Obtain a "false" scan and figure out what happened.
- 2. Practice bladder manual adjustment and align dots correct.
- Perform a scan/volume measurement when you have NOT obtained a correct image in pre scan.
- 4. Try to use less gel and see image of less quality.
- Scan a "shadow" in the lower area of the cone and obtain a ml result. Look at result images and explain why scan is not valid.
- 6. Scan scenarios to practice:
  - Scan for PVR (result expected to be 0ml 200 ml).
  - Scan a big bladder in a patient with a retention after anesthesia.
  - Scan a patient with high BMI and experience how to lift abdomen and aim behind the pubic bone.
  - Scan a patient with heavy abdominal scars and experience how this may affect the scanned volume result.
  - Scan an infected patient.
    Apply gel inside the tip of the cover before sliding in the probe. Then put more gel outside the cover to ensure the best contact between the probe and the skin.

Real-time bladder volume measurement is a non-invasive, easy to use technology reducing patient discomfort, decreasing UTI's, and saving cost and time in all Health Care.

**Notes** 

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#### Tips and tricks

- · Use plenty of ultrasound gel
- · Place in midline position 3-4 cm above the pubic bone
- Always palpate the pubic bone
- Slide the probe down angling behind the pubic bone towards the coccyx
- · Ensure the probe is placed correct
- · Press key button to activate pre-scan
- Localize the bladder in pre-scan, aim to position in the middle of the cone using the dotted position line
- Keep the probe still and activate the same key button for volume calculation
- When volume result is present in display the probe can be released from the scan position
- See user video at https://www.vitacon.com/support/tutorials5/
- · Print quick user instruction at www.vitacon.com



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#### Cleaning instructions

- · Please read carefully cleaning guide
- Clean the VitaScan LT with a soft cloth soaked in detergent solution
- Carefully dry the VitaScan LT with a clean soft cloth
- Dampen soft cloth with 70% Isopropyl Alcohol (IPA)
  Chlorine and Chlorine Compounds or equivalent agents
  Wipe the probe with the dampened soft cloth
- · Let the ethanol evaporate
- Do not subject any part of the VitaScan LT to steam sterilization or ethylene oxide sterilization
- Do not immerse the instrument in disinfectant solution

#### **Notes**

#### Contact

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