

HD3 Bladder Scanner - Quick Guide

1

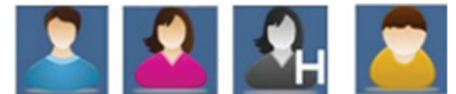
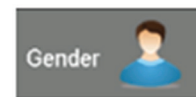
Turn the System On/Off by pressing the power button.



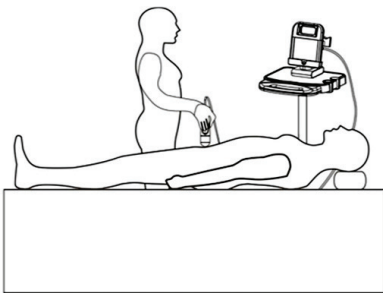
2

Enter the patient data

- Touch the PATIENT button to enter patient management system
- Select the patient gender by touching the gender icon. Select "Child" icon to scan a small child under 47 inches tall and weighing less than 55 pounds.
- Click the blank and input patient NAME/ID/AGE through visual keyboard.



3

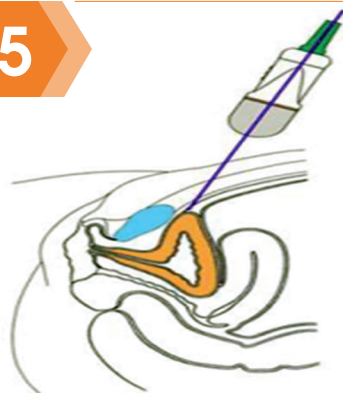


Have the patient lie in the supine position with the abdominal muscles relaxed.

4

Place an ample amount of gel mid-line on the patient's abdomen, approximately 3cm above the public bone.

5



Aim the ultrasound probe

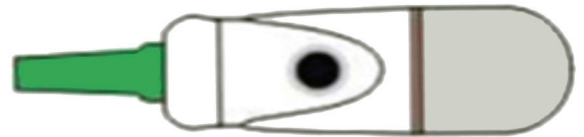
- Stand at the patient's right side.
- Place the probe on the gel and make sure the probe button is facing the patient's head directly.
- Angle the Probe slightly toward the patient's coccyx (tailbone) so the scan clears the pubic bone.

HD3 Bladder Scanner - Quick Guide

6

Press the Scan button

- a) Press the probe button to start ultrasound scanning. Hold the button for approximately 0.5-1 second and release.



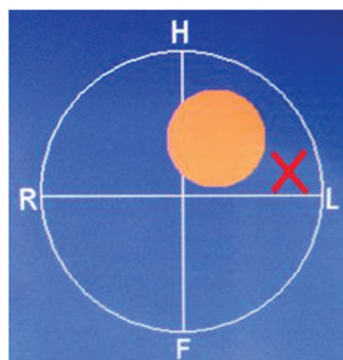
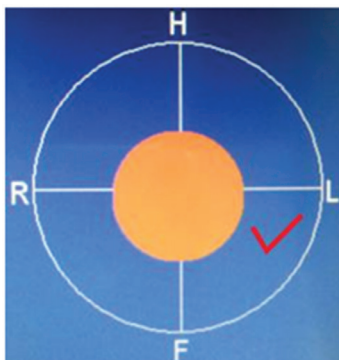
- b) Make sure the bladder image is large and centered; A central guide line will help you to center the bladder.



- c) When the guide line turns from orange to green, press the probe button again. The HD3 will start its calculation automatically. Make sure the probe position is fixed during the calculation.



7



Accuracy Check

As long as the orange circle covers the center of the cross hair, the scan is good.

HD3 Bladder Scanner - Quick Guide

8

Save, review and print



a) Touch the SAVE button to save current scan.



b) Touch the UP/DOWN button to review any two of the 12 planes of the current scan.



c) Touch the REVIEW button to enter the Patient Data Management system to review the images and results of all saved scans. You must first save the current scan before you can review it.



d) Touch the PRINT button to print the current scan. You can also print the other saved scans from the Patient Data Management System.

9

Finish exam

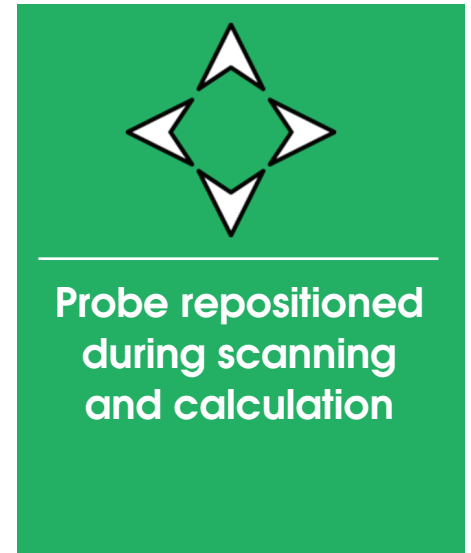
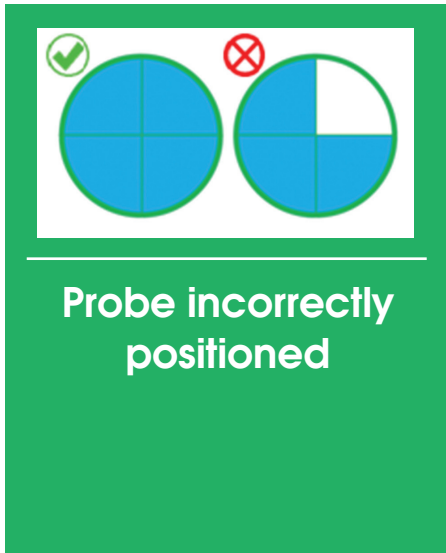
Once you have completed the scan, wipe the ultrasound gel off the patient and the probe.



The HD3 applies the world's most advanced and patented 3D two step-up motors probe, allowing every scan to record 12 planes. With its' unique algorithm the users can see that they will always receive accurate readings. Advanced handling skill of the users is not required in the pre-scan mode (when they are trying to locate the bladder).

HD3 Bladder Scanner - Quick Guide

Common User Error



Application

Keep probe vertically aligned when patient contains a large amount of urine



Tilt probe slightly when there is small amount of urine



HD3 Bladder Scanner - Quick Guide

In expert mode/Easy mode, move the bladder image to the center
A dark green guide line indicates the bladder is centered
An orange guide line indicates the bladder has deviated from the center.

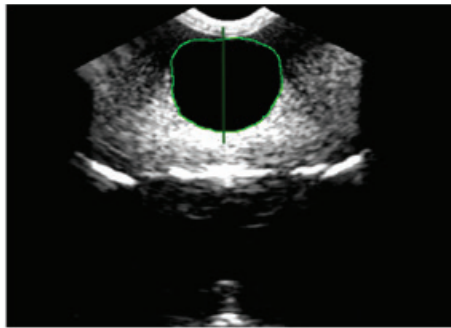


Figure 1: correct position (expert mode)

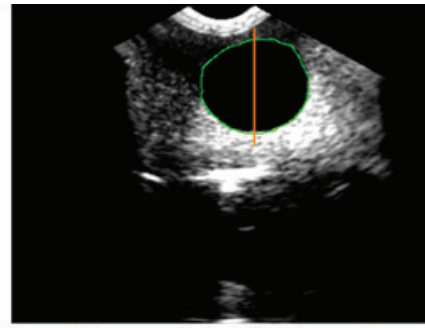


Figure 2: incorrect position (expert mode)

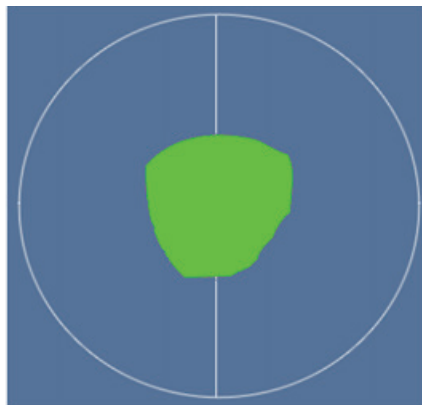


Figure 3: correct position (easy mode)

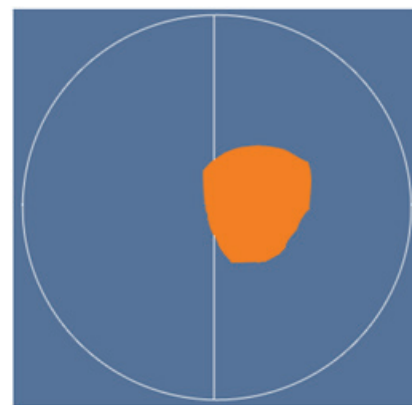
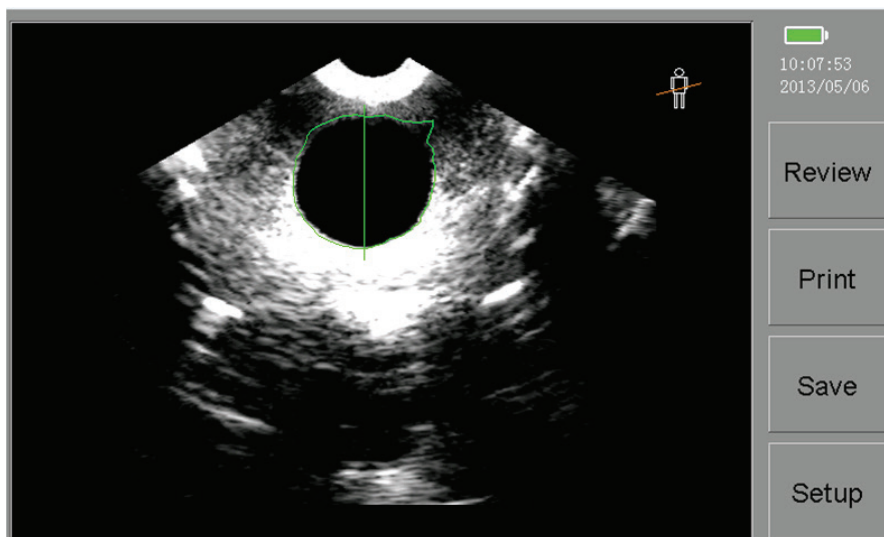


Figure 4: incorrect position (easy mode)



The first picture of the 12 slices is the most important and is the biggest factor in determining accuracy

HD3 Bladder Scanner - Quick Guide

Adjust the angle of the probe until you get the largest bladder image possible

When the guide line turns from orange to green press the probe button again for half of a second.

The HD3 will start its calculation automatically for 12 planes of the bladder.

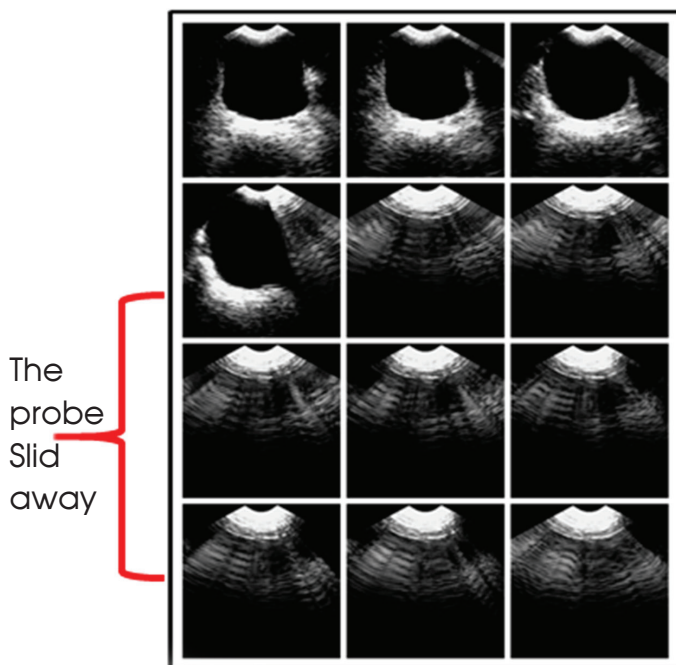
The skills in point 2:

Press and release (interval time, 0.5 second) to start the 12 planes' scan

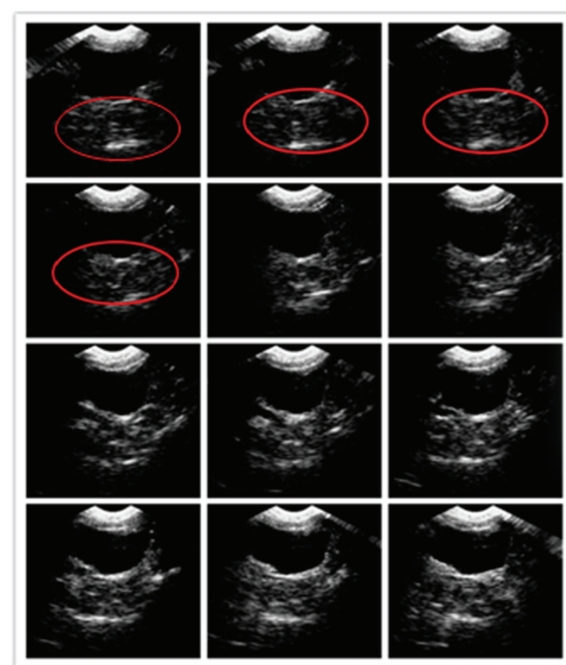
and

Hold the probe still

Two typical handling mistakes



The black shape (bladder) is missing



Lower area should be lighter but in this case it's dark. This shows the probe was placed too high above patients pubic bone