



ULTRASONIX
ultrasound your way

SonixGPS™ - Needle Guidance

With our SonixGPS needle Guidance Positioning System, targeting is easy

Our SonixGPS ultrasound guidance technology helps predict and clearly see the needle's trajectory during invasive procedures. Our guidance system is smart enough to show the needle in-plane or out-of-plane with the transducer, saving experts time with difficult cases and reducing the learning curve for clinicians new to ultrasound. It's designed to reduce complications and improve patient safety during complex procedures.

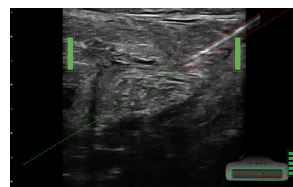


SonixGPS - reduces the learning curve

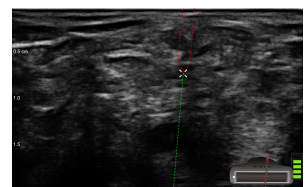
It's no secret that guidance procedures take time to perfect. SonixGPS is the ideal training tool for nerve blocks, vascular access procedures, core biopsies, fine needle aspirations and other interventional procedures that require accuracy and experience.

Works in-plane and out-of-plane

With SonixGPS, you can insert the needle from any direction – either exactly in-plane with the transducer, or out-of-plane. For in-plane procedures, you will see orientation bars on the lower right side of the monitor that will help guide your needle and hand position. For out-of-plane needle navigation, you will be guided by an x or a circle on the monitor. Watch the video demonstration at www.ultrasonix.com/GPS to see SonixGPS in action.



In-plane - Orientation bars on the right side of the monitor guide your needle and hand position.



Out-of-plane - An x on the monitor guides you to your target.

SonixGPS – Needle Guidance without compromises

With SonixGPS, you can position your transducer in the ideal location for your target and select a needle direction and angle that is safest and most comfortable for the patient. Whether in-plane or out-of-plane, it shows you the predicted trajectory and true path of the needle in real time. Needle adjustments are reflected instantly on the display and you'll always see where the needle will intersect the sound beam.

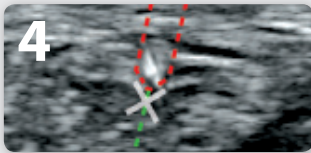
SonixGPS offers clinicians the freedom and flexibility to:

- Optimize the ultrasound image for highest confidence in target visualization.
- Select a needle direction and angle that is safest and most comfortable for the patient.
- Predict where the needle will intersect the sound plane.
- Improve patient care and safety - better accuracy prevents multiple procedure attempts and reduces patient discomfort.
- Perform procedures faster and with better accuracy.

SonixGPS overcomes anatomical variations, pathology and other guidance issues by operating in-plane and out-of-plane

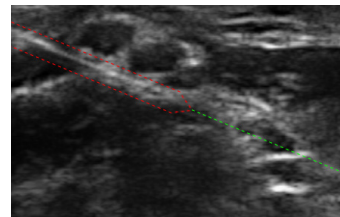
- **Regional Anesthesia:** SonixGPS improves accuracy and facilitates deeper blocks, enabling block procedures on patients with difficult anatomy, such as obese patients.
- **Emergency Medicine:** SonixGPS helps with placement of Central lines, including sub-clavian procedures.
- **Vascular Access and PICC lines:** Allows for improved accuracy on patients with difficult anatomy, such as small patients.
- **Interventional Radiology:** Improves the speed and accuracy of deep and difficult biopsies. Enables guidance of TIPSS procedures.

Easy Setup

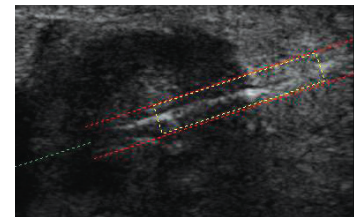
			
<p>1 Press the GPS Button Activate SonixGPS technology by pressing the button on the touch screen.</p>	<p>2 Position the GPS arm Place the easy-to-maneuver GPS arm near the patient and adjust the GPS transmitter for good signal strength.</p>	<p>3 Start Scanning Scan around the target area for possible obstructions and select your target image and needle entry point.</p>	<p>4 Perform procedure Once you have the X over the location where you would like the needle tip to end up, enter the patient with the needle straight while holding the transducer still.</p>

The advantage of visualizing in 3D

Typical ultrasound images are in 2D while the actual operating region is in 3D. SonixGPS technology shows the relative positions between the needle and the ultrasound image so the needle can be easily positioned in the region of interest. The intersection point between the ultrasound image and the target point is shown as a circle or white cross mark.



Anesthesia - Nerve blocks made easier with our custom designed needles for anesthesia.



Breast Biopsy Needles - Outlined aperture location for improved sample accuracy.