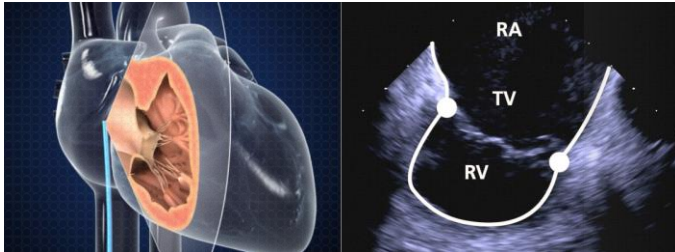
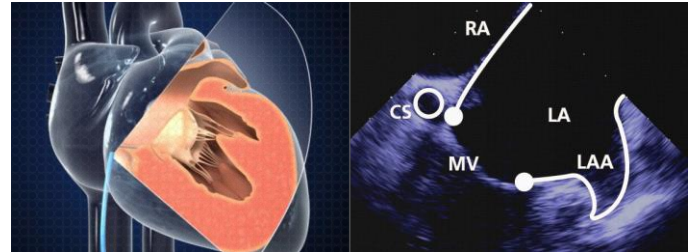


Intracardiac Echocardiography Imaging Step-by-Step Guide



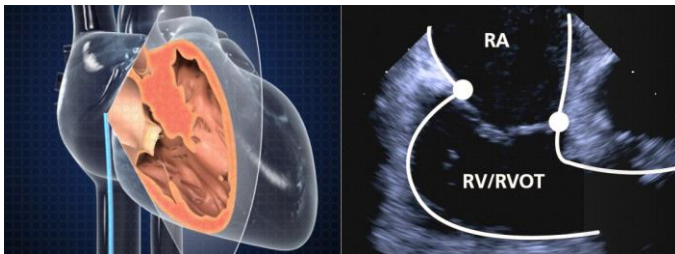
① HOME POSITION: RA, TV, RV View

Once the liver appears on the screen, advance the SOUNDSTAR® Catheter slightly into the mid right atrium (RA). This image of the RA, tricuspid valve (TV), and the right ventricle (RV) is referred to as the Home Position. In the Home Position, the SOUNDSTAR® Catheter is in an unlocked or neutral position, meaning there is no steering and the tension control knob is disengaged.



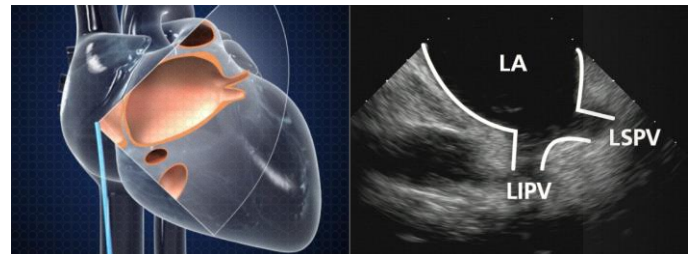
④ Right Atrium (RA), Coronary Sinus (CS), Left Atrium (LA), Mitral Valve (MV), Left Atrial Appendage (LAA)

Rotate the SOUNDSTAR® Catheter clockwise from the RVOT view. The coronary sinus (CS) will be visualized directly below the right atrium (RA) in the same plane as the mitral valve (MV). The left atrial appendage (LAA), also in the same plane as the MV, will appear as an “out-pouching” from the left atrium (LA).



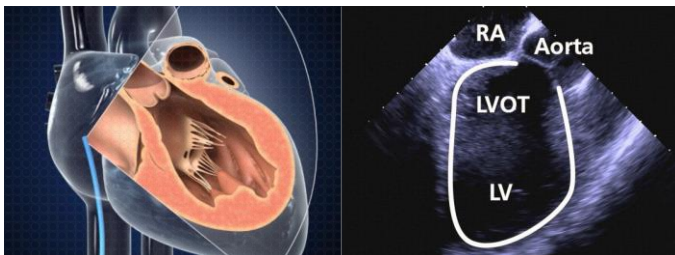
② Right Atrium, Right Ventricular Outflow Tract (RVOT)

From the mid right atrial Home Position with no steering activated, rotate the SOUNDSTAR® Catheter slightly clockwise or to the patient's left side. You will begin to see the aortic valve just above the RVOT.



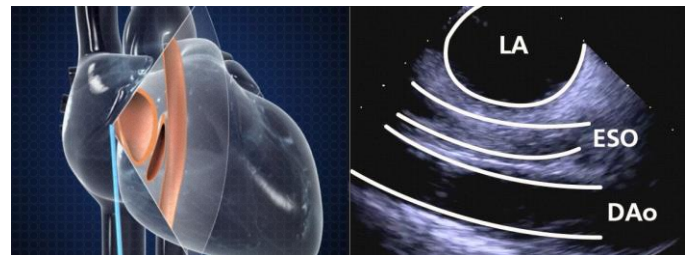
⑤ Left Atrium (LA) - Left Inferior Pulmonary Vein (LIPV) and Left Superior Pulmonary Vein (LSPV)

The left inferior pulmonary vein (LIPV) and the left superior pulmonary vein (LSPV) are often visualized in the same imaging plane. This is known as the “pant view”. To visualize the LIPV, rotate the SOUNDSTAR® Catheter clockwise from the CS/MV/LAA view slightly. A slight clockwise rotation from the LIPV may be needed to visualize the LSPV.



③ Right Atrium, Left Ventricular Outflow Tract (LVOT)

From the RVOT view, rotate the catheter very slightly clockwise. The aortic valve and left ventricular outflow tract (LVOT) will begin to appear in the middle of the screen. You may also be able to see the pulmonary artery and/or pulmonary valve just behind the aortic valve.



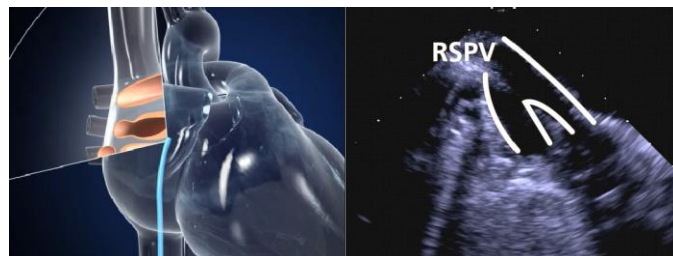
⑥ Left Atrium (LA), Esophagus (ESO), Descending Aorta (Dao)

Rotate the SOUNDSTAR® Catheter clockwise from the left pulmonary veins. The esophagus and aorta may be viewed in the same view. Both structures are visualized between the left and right pulmonary veins. The esophagus will lie anterior to the descending aorta behind the left wall.



⑦ Left Atrium (LA) - Right Inferior Pulmonary Vein (RIPV)

The right pulmonary veins will appear close to the imaging surface of the SOUNDSTAR® Catheter image. To visualize the right inferior pulmonary vein (RIPV), continue clockwise rotation beyond the left pulmonary veins and slightly beyond the esophagus view. Utilize Doppler to assist with identifying the pulmonary vein inflow.



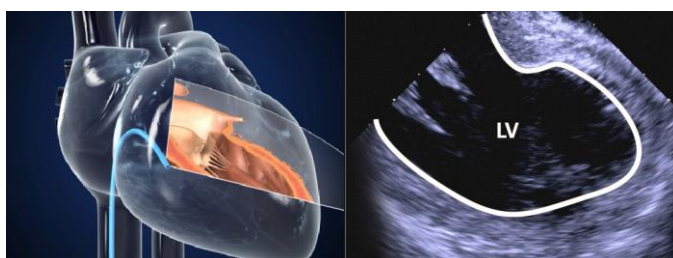
⑨ Left Atrium - Right Superior Pulmonary Vein (RSPV) Long Axis

In order to view the right superior pulmonary vein (RSPV) more longitudinally, advance the catheter higher in the right atrium and continue clockwise rotation. In many cases, the addition of posterior tilt and right/left steering at this time will further optimize the image. Utilize color Doppler to assist with identifying the pulmonary vein inflow.



⑧ Right Inferior Pulmonary Vein (RIPV) and Right Superior Pulmonary Vein (RSPV) Short Axis

From the left atrium/ right inferior pulmonary vein view, continue a slight clockwise rotation of the catheter to visualize both the inferior and superior pulmonary veins in a short axis. Utilize color Doppler to assist with identifying the pulmonary vein inflow.



⑩ Left Ventricle (LV)

A long axis view of the left ventricle (LV) can be seen by returning the catheter beam to the Home Position and withdrawing the SOUNDSTAR® Catheter low in the right atrium, visualizing the Eustachian ridge. Using the top control on the catheter handle (P-A), the knob is rotated clockwise, which puts an anterior tilt on the catheter tip. The catheter is then advanced through the tricuspid valve into the right ventricle (RV). When the catheter is in the RV, the anterior steer is released. Rotate the catheter clockwise. The imaging beam will move from imaging the RV to imaging the LV. A pericardial effusion can be visualized from these views.

Important information: Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, warnings and precautions.

Caution: US law restricts this device to sale by or on the order of a physician.

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