

Summary

The EchoNous 4.4.1 system software update release introduces Tissue Harmonic Imaging (THI) mode on the EchoNous **Vein probe** for improved image quality at low depths viz. 1-3cm and the addition of 2.5cm depth.

This document provides EchoNous / Signostics Sales and Clinical Support personnel and Biomedical Engineering customers with information on the Vein Probe, Hub, S3 Samsung and system software version 4.4.1.

System Software v4.4.1 Update

The v4.4.1 system software features the following improvement in Vein Imaging.

- ◇ The 4.4.1 software updates the imaging profile of Vein probe by selectively using THI mode from 1-3cm depth and fundamental imaging mode for 4 and 5 cm depth
- ◇ The software update also introduces a new depth setting of 2.5cm.
- ◇ It will be possible to enable/disable 4 & 5 cm depth through the following ways:
 - Global settings: From home screen, navigate to Three dots -> Settings -> Vascular Access -> Enable 4 & 5 cm. If the option is checked, then 4 & 5 cm depth are enabled for all vascular access scan and disabled when not checked.
 - Local Scan setting: This option is applicable if the “Enable 4 & 5 cm” option is not selected in global setting
 - Before starting an exam: Once in Vascular Access scan, navigate to Three dots -> select “Enable 4 & 5 cm” option.
 - After starting an exam: Stop the scan and then navigate to Three dots -> select “Enable 4 & 5 cm” option.

Unaddressed Software Anomalies

The v4.4.1 system software does not address the following bugs discovered in the design and testing process.

- ◇ **Dead Samsung tablet not charging:** If the Samsung Tablet is allowed to reach a low-to-no charge status, the user may need to initially restore charge to the Tablet using an EchoNous-approved, medical-grade wall-wart charger.
 - Pay close attention to the charge status of the Tablet and re-charge when not in use.
 - Store the charger in the biomedical engineering lab for safekeeping.
- ◇ When using calipers in “Volume Measurement” menu (Ultrasound Imaging), deleting the calipers alone will not automatically refresh the volume estimation on the image.
 - Resolve by clicking anywhere on the scan image to update the measurement.
- ◇ Anonymized voluntary data upload feature to EchoNous for Research & Development purposes is suspended for this release.

Field Upgrade Method to Update to 4.4.1

The EchoNous 4.4.1 system software update release should only be updated using USB Flash Drive. Use of WIFI may *unintentionally* allow the operating system software to update to Android 9.

Preparing USB Flash Drive

Make sure there is no content on the Flash Drive. Delete all previous patch information on the Drive or format the Drive.

- ◇ Download the software from this link: <http://bit.ly/uscan-current-release>
- ◇ Allow download (if prompted).
- ◇ The file should be "sigViewer-4-4-4-31942.zip".
- ◇ Unzip and on Mac – copy and paste both files to the USB drive. On Windows – Extract all to the USB drive.

Using USB Flash Drive – Samsung Tablet

Contact Customer Support to assist with downloading and installing the software by means of a USB flash drive if you have issues.

- ◇ Plug the USB Flash Drive directly into the tablet's USB-C port.
- ◇ Navigate to Three dots -> Settings -> Maintenance -> Install from USB drive
- ◇ Follow on-screen instructions to install the update.
- ◇ **You will have to repeat for both files.**
- ◇ Disconnect the HUB and then **switch OFF the tablet** by holding down the power button.
- ◇ Switch ON the tablet and wait for Uscan software to boot up. Once done, connect the HUB back and **WAIT FOR 30 secs** to re-install the HUB software.
- ◇ Please convey enhanced Vein feature update to clinic users.
- ◇ **Please confirm WIFI is off and tablet is password-protected before returning to service!**

If you have any questions regarding the update process contact EchoNous / Signostics customer support at 844-854-0800.