

## 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.