

SIMON

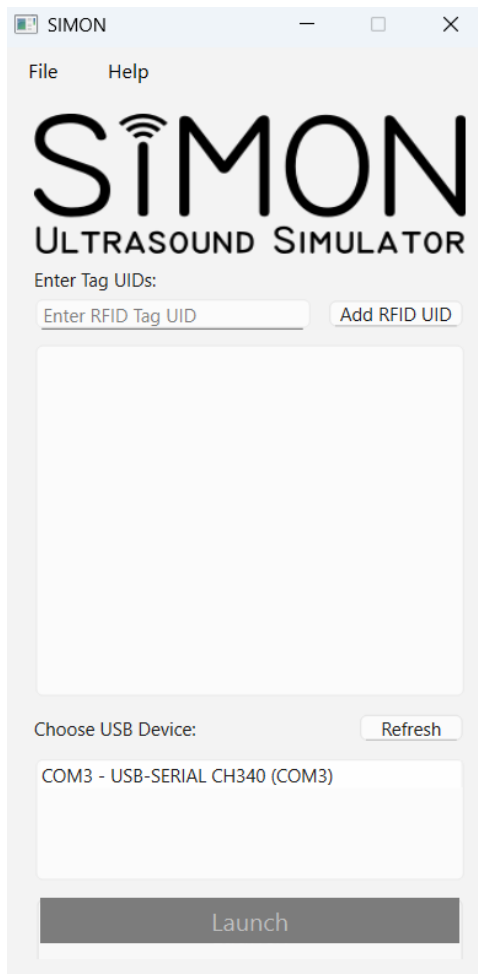
SIMON Ultrasound Simulator (Doctor's Kit)

Information Packet

Tutorial

Before starting, create a new folder in your computer's library. This is where you should save the ultrasound videos you plan to use for the simulator (**the name and location of this folder is irrelevant**). Videos can either be your own collection, or you can download ultrasound videos from our website at: simonedu.org

Step 1: To start, download the SIMON software on your computer from our website at simonedu.org. Once the software has been installed, double click the program to open the user interface as seen below.



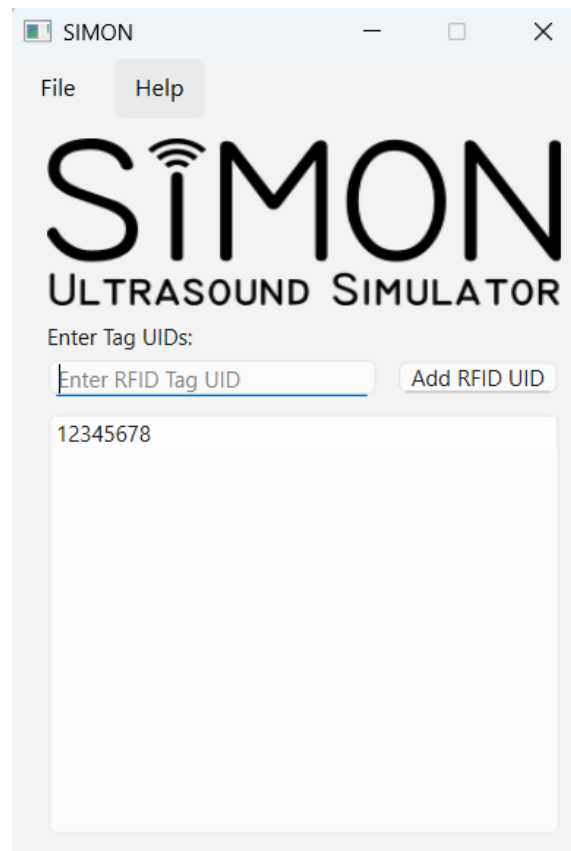
Step 2: Refer to the “Tag ID Card” included in your kit and find the first code listed on your card (all codes are 8 characters long). The first code listed on your card should correspond with “Right Liver”. Next, on the user interface, enter the first code from your card into the space titled “Enter RFID Tag UID” (**first image shown below**). Once you have entered the code, click the button titled “Add RFID UID”. This should add it to the white box (**second image shown below, with “12345678” as an example**).



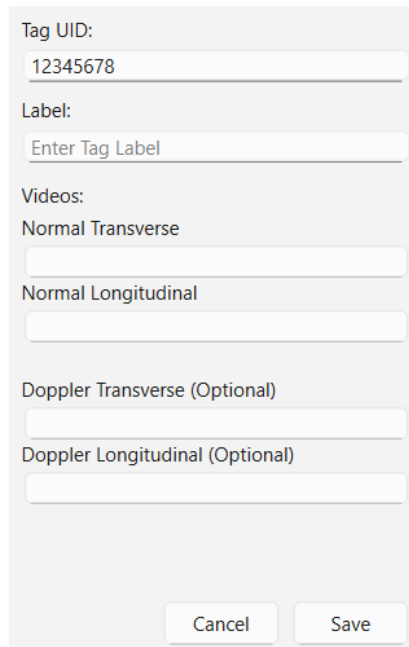
Enter Tag UIDs:

Enter RFID Tag UID

Add RFID UID



Step 3: Double click the code in the white box. This should open another window (**shown below**). In the section titled “Label”, enter the tag name as listed on the “ID Card” in your kit (for example, Tag #1 should be labeled “Right Liver”, Tag #2 should be labeled “Middle Liver”, etc.).



The screenshot shows a form with the following sections:

- Tag UID:** A text input field containing the value "12345678".
- Label:** A text input field with the placeholder text "Enter Tag Label".
- Videos:**
 - Normal Transverse:** A text input field.
 - Normal Longitudinal:** A text input field.
 - Doppler Transverse (Optional):** A text input field.
 - Doppler Longitudinal (Optional):** A text input field.
- Buttons:** "Cancel" and "Save" buttons at the bottom.

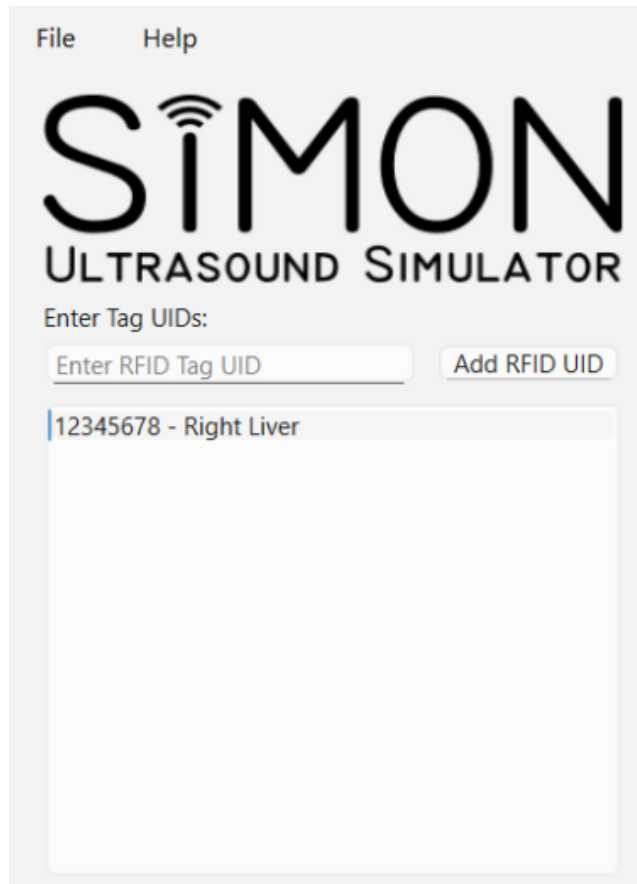
Next, double click the white box under “Normal Transverse”, which will open file explorer on your computer.

In file explorer, navigate to the folder containing your collection of ultrasound videos (created at the beginning of this tutorial). Select a transverse video corresponding with the label from your “Tag ID Card” and then click “Open” to upload it (for example, with Tag #1, you would upload a transverse video of the right liver). **The video you upload can either be normal or pathological, whatever you want to see in this location.** Repeat this process for the Longitudinal section.

Make sure you upload transverse videos to the transverse section, and longitudinal videos to the longitudinal section.

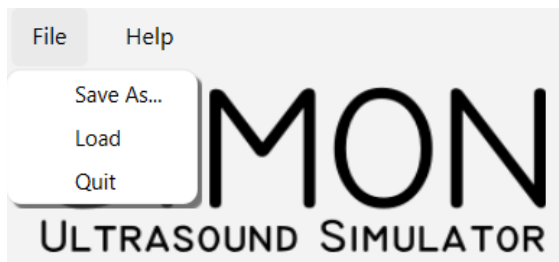
“Doppler” videos are completely optional for the simulator. If you have any doppler videos that you wish to use for this specific region, you can upload them to the corresponding section. **Once you have uploaded all the desired videos for this specific tag, click “Save” at the bottom.**

Step 4: Clicking “Save” should bring you back to the main user interface. The tag you just entered should now be listed in the large white box (**example shown below**). If you wish to edit the information or videos associated with this tag, simply double click it to re-open the window from the previous step.



Step 5: Repeat steps 1-4 for each tag listed on your “Tag ID” card. Make sure to title the tags correctly and upload the right videos for each anatomical location.

Step 6: Once you have finished uploading the videos for each tag, you can save this information as a “case” by going to “File” → “Save As...” and saving under the appropriate name (**shown below**). The next time you run the program and want to access this “case”, go to “File” → “Load” and select the desired file in your computer library. **For example, if the videos you uploaded to each tag are considered “normal findings”, you can save these settings as a “Normal Case”. Then, the next time you want to look at a “Normal Case”, you can simply press “Load” and select the appropriate file. By saving your settings, this will prevent you from having to re-upload videos every time you run the software.**



Step 7: Plug the ultrasound probe into your computer using the USB cord included in your kit. When the probe is plugged in, a device should appear in the white box at the bottom of the user interface (**shown below as “COM3”**). If you do not see a device when you plug your probe in, try pressing “Refresh”. If this does not work, try plugging the probe into a different USB port. **Once the probe is detected by your computer, simply click once on the name listed in the box to select it.**



Step 8: After completing steps 1-7, click the button at the bottom of the user interface titled “Launch”. **The program will not launch unless a USB Device has been selected.** Pressing “Launch” will start the simulator and should prompt a black screen to appear.

Step 9: You are now ready to perform a simulated ultrasound exam on the dog model included in your kit. Start by placing the dog model in dorsal recumbency (on its back).

Very Important: With the dog in dorsal recumbency, the user needs to sit/stand behind the dog with the hind end closest to them and the head furthest from them.

The black vest must remain on the model at all times.

To begin your exam, hold the probe by the handle and lightly press the gray end against different regions of the dog's abdomen (aka the "belly" or the "underside" of the dog). **If you are not familiar with the location of canine abdominal organs, refer to the "Canine Abdominal Organ Guide" included in this guide below the tutorial.**

While scanning the abdomen...

- If the probe encounters a tag, a video will play on your screen
- If the probe does not detect a tag, then a video will not play and the screen will remain black.
- Once you see an organ, hold the probe over that spot to inspect it.
- While a tag is being scanned, the probe can be rotated horizontally and vertically to demonstrate transverse and longitudinal videos of that location, respectively.
- Scan the full abdomen to see different organs. The dog model is anatomically accurate and represents the location of organs in a live canine patient.

Step 10: To activate "Doppler Mode", press "D" on your keyboard while scanning a particular tag. This will play a doppler video of that specific location, **but only if a doppler video has been uploaded to that tag.** If a doppler video has not been uploaded to this tag (as previously described in this tutorial) then pressing "D" will do nothing. To exit "Doppler Mode", press "D" again.

Step 11: When you are done using the simulator, press "Q" on your keyboard to exit and return to the user interface.

Step 12: Before closing the program, make sure you have saved your current settings (if desired). If you close the program without saving your settings then your progress will be lost.

Educational Product Disclaimer

IMPORTANT NOTICE — PLEASE READ BEFORE USE

The products offered by SIMON Education Systems, LLC are educational simulators designed solely for instructional and demonstrational purposes. These simulators are intended to help users, including students, educators, and curious learners, better understand the concepts and basic techniques of medical diagnostic procedures. They are not medical devices, and they do not provide real-time diagnostic data or clinical assessments.

Ultrasound Simulator Disclaimer

This product is a non-functional simulation tool. It does not produce ultrasound waves or interact with body tissues. It relies on RFID (radio-frequency identification) technology to display pre-recorded or pre-selected videos on a computer or tablet when scanning specific areas of a physical model. It is meant to help users understand probe placement, basic scanning techniques, and image recognition in an engaging, hands-on format.

- This device does not diagnose, monitor, treat, or prevent any medical conditions.
- It is not a substitute for real ultrasound equipment or professional medical training.
- It should never be used in a clinical or emergency setting.

The anatomy of the canine abdomen is complex. While this anatomy guide can be a helpful way to learn canine abdominal anatomy, it is mainly intended to teach the user about major structures they should see on ultrasound. In other words, structures like nerves, vessels, and smaller ligaments/tendons have not been depicted in this anatomy guide simply because they aren't as relevant on ultrasound. If one wishes to learn more intricate details about canine abdominal anatomy, we encourage the user to refer to other sources in conjunction with this anatomy guide, as opposed to using this guide alone.

Additionally, the structures seen with ultrasound of the canine abdomen often vary to a certain extent. While the images in this anatomy guide are accurate and serve as a good reference for canine abdominal anatomy, it is possible that the user may encounter slight differences between live patients and the appearance of their abdomen on ultrasound.

General Use and Safety

- These products are intended for use by students, educators, and general learners in educational environments such as classrooms, labs, science fairs, or home learning.
 - Children should use these products under adult supervision.
 - SIMON Education Systems, LLC makes no medical claims and accepts no responsibility or liability for misuse of these products outside of their intended educational scope.
 - Do not modify the devices or attempt to use them in any way other than as directed by accompanying materials and instructions.
-

By using this product, you agree to the following:

- You understand that it is a simulation and not a functional medical device.
 - You agree to use it exclusively for educational and demonstrational purposes.
 - You acknowledge that SIMON Education Systems, LLC is not liable for any outcomes, interpretations, or uses of this product outside the intended scope.
-

For questions about the proper use of this educational tool, please visit www.simonedu.org.