



neo Training

Outline



- Basic Information
- Get Started
- Workshop Setup and Troubleshooting
- Exam Review and Export
- Maintenance, Cleaning, and Disinfection



Basic Information

Highlights of neo



Excellent Imaging Quality

- 64 physical channels
- 128 elements

Ergonomic & Elegant Design

- Ultra-light / Compact size
- Seamless in all direction
- Optimal grip feeling

Smart Algorithm

- IMT thickness
- Needle enhancement
- Voice control

User Friendly

- Wi-Fi direct connectivity
- USB type-C charging on-the-go
- Android/iOS supported
- OTA software upgrade
- Lanyard

Waterproof and Ruggedness

- IP68
- MIL-810G





High Clinical Coverage

- Convex: 2~6MHz
- Linear: 4~15 MHz
- HF Linear: 7~18 MHz
- Phased Array: 2~4 MHz

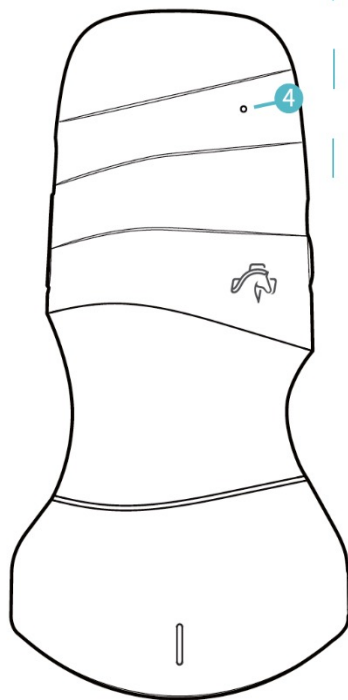
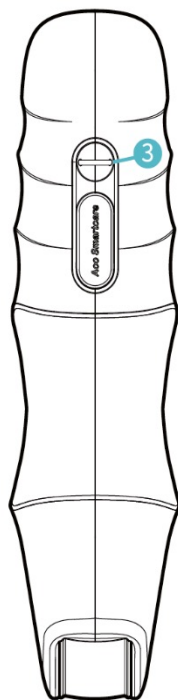
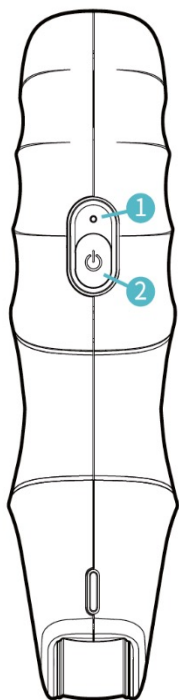


neo Specifications

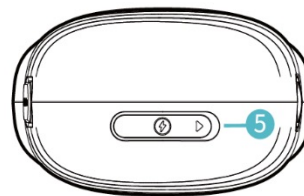


Model	neo C62	neo L154	neo L187	neo P42
Appearance				
Dimension	144.8 x 74.3 x 37 mm	135.5 x 62.2 x 37mm	135.5 x 62.2 x 37mm	136.6 x 62 x 37mm
Weight	253.7g	233.4g	233.4g	233.5g
Transducer	Convex	Linear	Linear	Phased Array
Frequency	2~6 MHz	4~15 MHz	7~18 MHz	2~4 MHz
Elements	128			64
Channels	64			
Ruggedness	IP68, MIL-810G			
Scanning time	90+ min			
Charging time	60 min charging from 10% to 70%			
Scan depth	30 cm	12 cm	8 cm	30 cm
OS supported	Android, iOS			

Open Box Quick Overview

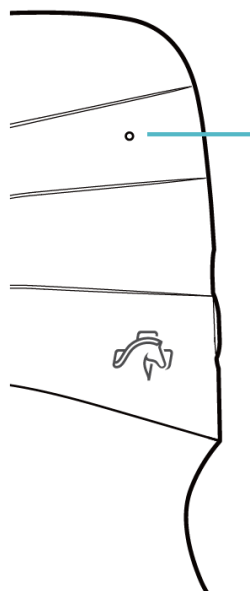


- ① System Status Indicator
- ② Power Key
- ③ Lanyard hole
- ④ Charging Status Indicator
- ⑤ Type-C Charging Port



Must charge the device the 1st time use to unlock the battery

Charging Status Indicator



Blinking White:
when battery
capacity \geq 20%



Blinking Yellow-Orange:
when battery
capacity $<$ 20%



Steady White:
Charging completed



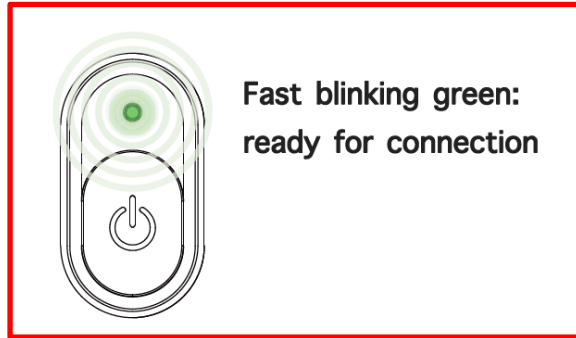
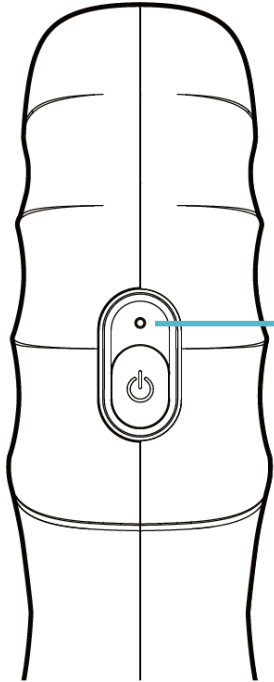
2 second

Fast blinking (2s):
battery low

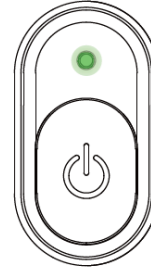


**Blinking yellow
orange and white:**
battery abnormal

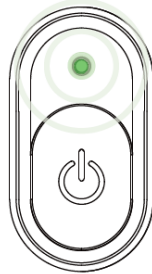
System Status Indicator



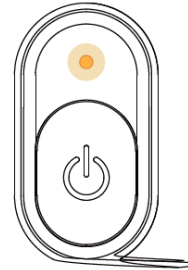
Fast blinking green:
ready for connection



Steady green: device
connects with mobile device



Slow blinking green:
booting



Steady yellow:
system abnormal

- Boot up time: 25-30 seconds

- When temperature gets high: let it cool off for 10 minutes before scanning again.
- When battery is low: Turn off the probe and charge it first.

Mobile Device System Requirement



➤ Device Compatibility Requirements:

- CPU: Qualcomm Snapdragon 855/ Apple A13 or above with minimum 6GB RAM
- OS: Android 10 or above / iOS 14 or above

➤ Compatibility Verified List:

- Samsung Tablet: Tab S7, Tab S7+, Tab S8, Tab S9
- Samsung phone: S10, S21.
- iPad: iPad 9th, 10th, Air 4th, Air 5th, Pro 4th,
- iPhone: X/11/12/13/14/15
- Google Pixel 6

* Only Tablet supports screen rotation

Download APP



Search: Aco Apache Ultrasound App

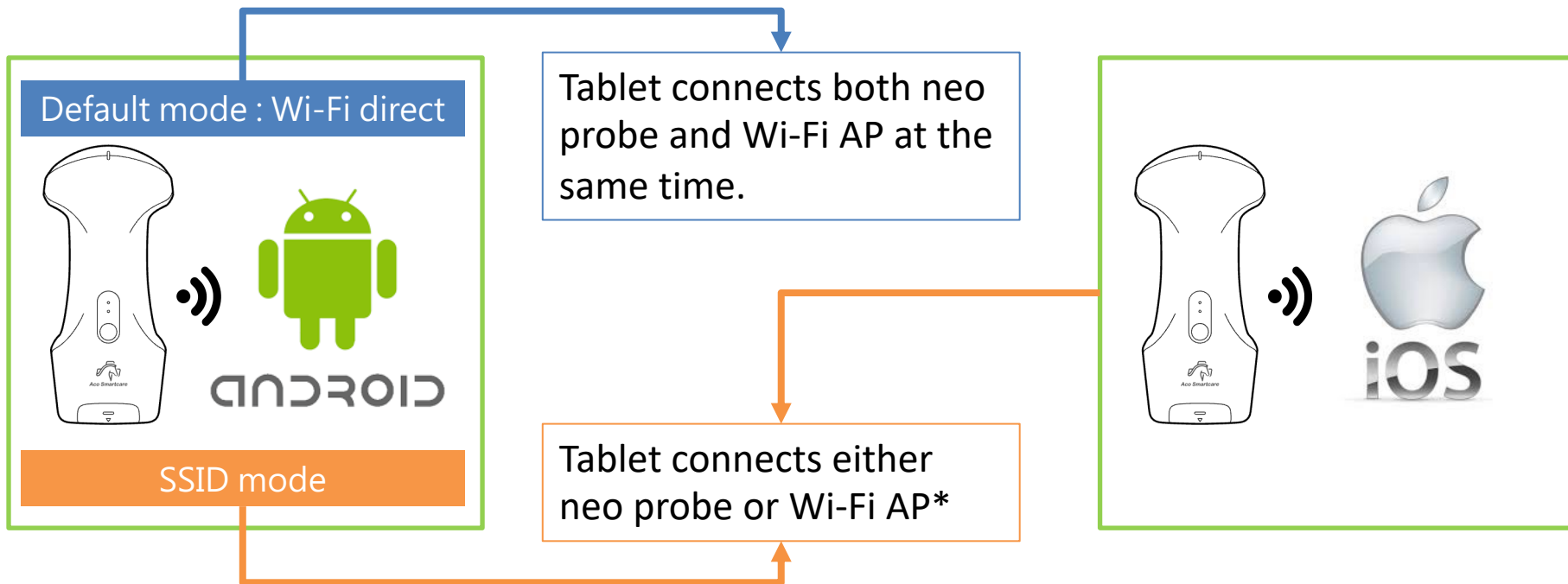


Different Behaviors between iOS and Android



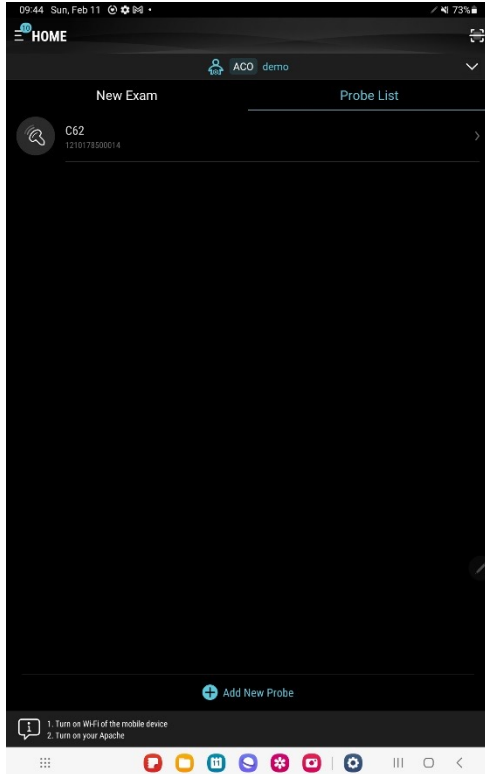
- **Wi-Fi connection**
 - iOS does not support Wi-Fi direct, so iOS is unable to connect to a Wi-Fi AP when connecting a probe.
 - If we want to keep probe and internet connected simultaneously on iOS device, iOS must be a 5G version and install a SIM card.
- **Probe list page**
 - Android shows the probes around that are available to connect.
 - iOS shows all the probes under the permission of the login account.

Wi-Fi Behavior



* Need to manually switch Wi-Fi AP connection in some scenarios, like when exporting DICOM files to PACS when a probe is still connected.

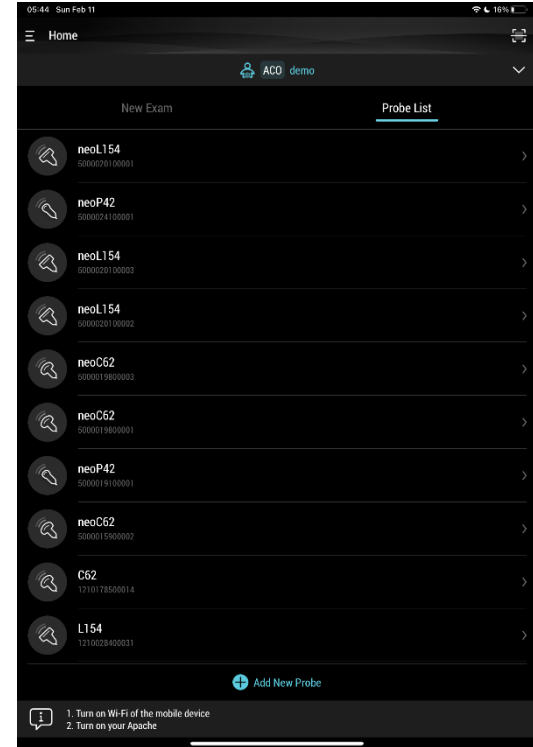
Probe List Page



- Android shows the probes around that are available to connect.

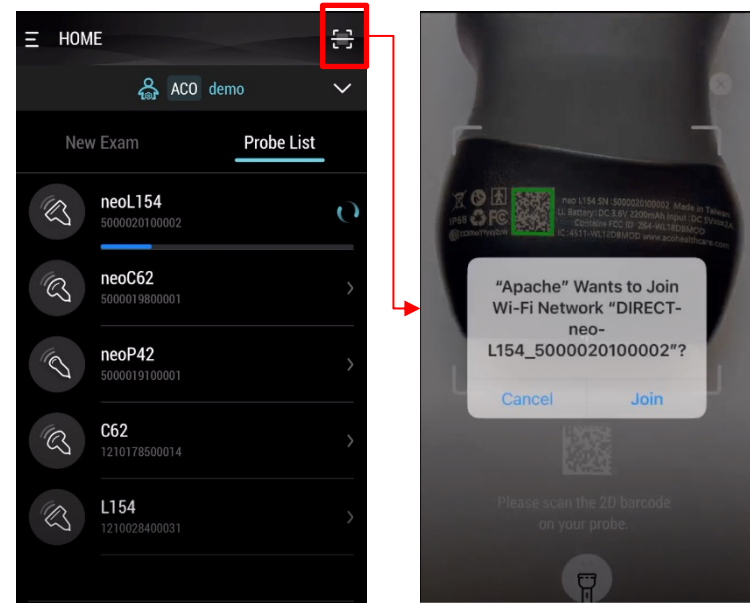


- iOS shows all the probes under the permission of the login account.



Connect Probe

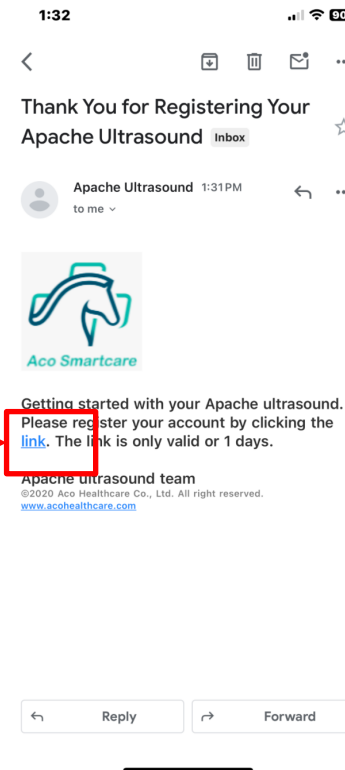
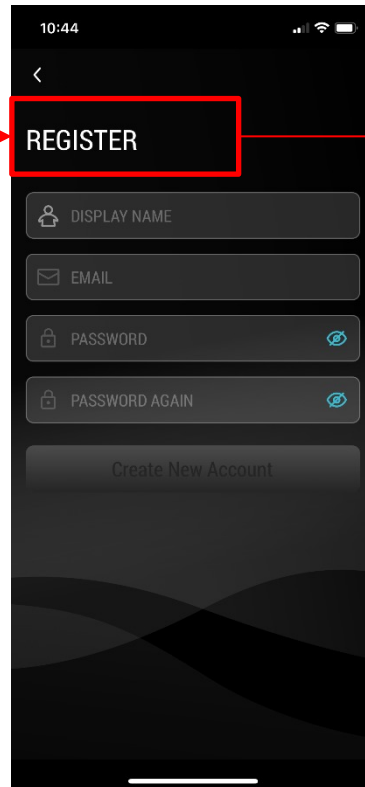
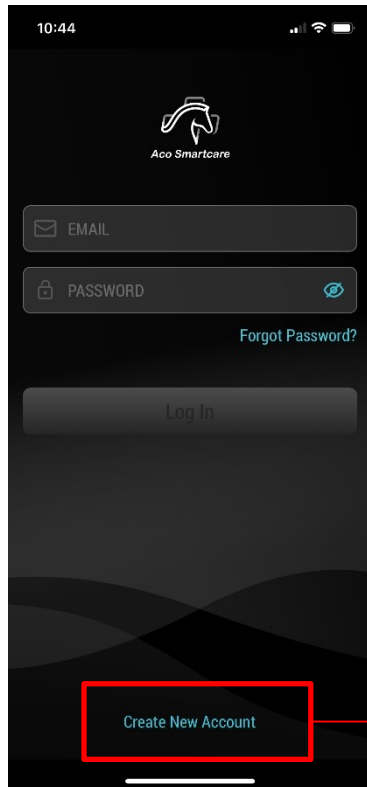
- Connect Probe
 - By clicking the probe shown on probe list
 - or
 - By scan the barcode on the probe.
- How do I connect to the correct probe?
 - Identify the serial number of the probe before connecting
 - or
 - Use barcode scanner on the upper right





Get Started

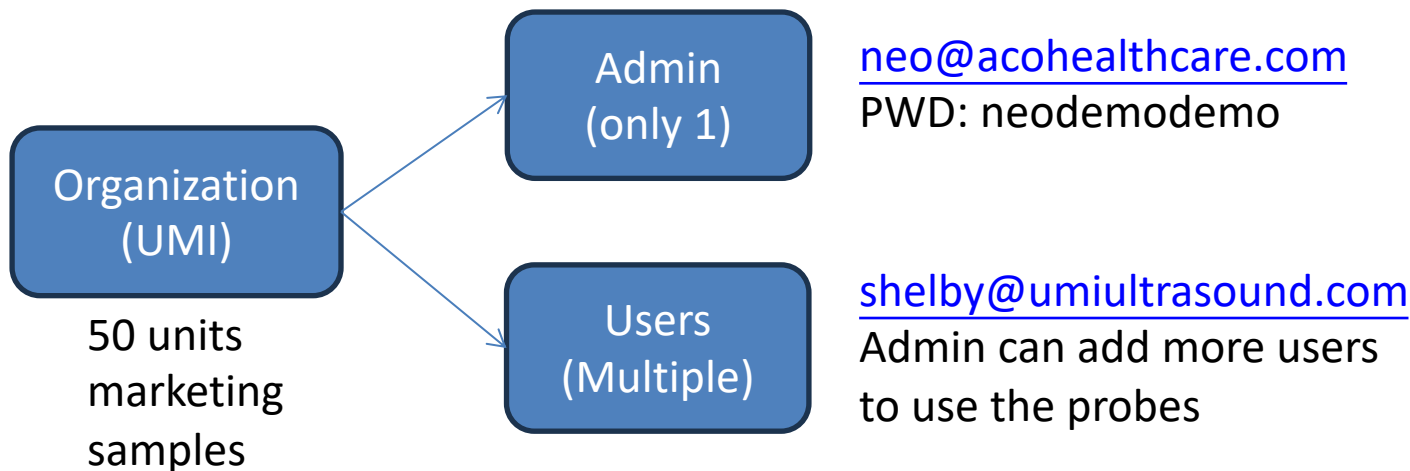
Register an Account



Organization – Admin and Users



- An organization only has one administrator, but multiple users
 - Admin: manage the probes and users
 - Users: share the authority to use the probes under this organization
 - Admin and users have the permission to used the authorized probes.



Invite and Remove Users



Cloud address:

<https://cloud.acosmartcare.com/login>

The screenshot displays the Apache Cloud user management interface. On the left sidebar, the 'User' option is highlighted with a red box and a red circle containing the number 1. The main area shows a table of users with columns for ID, Name, App Version, Status, and Created At. The 'Single User' button is highlighted with a red box and a red circle containing the number 2. A modal window titled 'Add Single User' is open, showing an 'Email' field with the value 'dk.lee@acohealthcare.com' and 'Cancel' and 'Add' buttons. The modal is highlighted with a red box and a red circle containing the number 3.

ID	Name	App Version	Status	Created At
4090	Shelby	2.0.0-2.0.75	Enable	2023-07-21 00:18:43
3959	neo	2.0.000(204306)	Enable	2023-07-11 09:17:32
1245	Sean			2022-12-12 08:49:45

Scan Page UI



The screenshot displays the Scan Page UI with the following numbered callouts:

- 1** Probe Indicator: A circular icon on the probe image that indicates the current probe position.
- 2** Edit Patient Info. 1707615885649: A button in the top left corner for editing patient information.
- 3** 98% TIS 0.06 TIB 0.06 MI 0.48: A status bar at the top right showing battery level and technical parameters.
- 4** Settings, Record, Capture, Freeze: A vertical sidebar on the left containing icons for these functions.
- 5** Ruler and Focus: A vertical scale on the right side of the screen used for measurement and focus adjustment.
- 6** PRESET Abdomen: A button at the bottom left for selecting a preset scan mode.
- 7** B Color M PW Power: A row of buttons at the bottom right for selecting different scan modes.

Scanning gestures



Pinch

Zooms in when pinching outward, zooms out when pinching inward. Magnification ratio shows on the upper right corner.



Slide left/right

To adjust scanning gain (Gain)



Slide up/down

To adjust scanning depth (Depth)

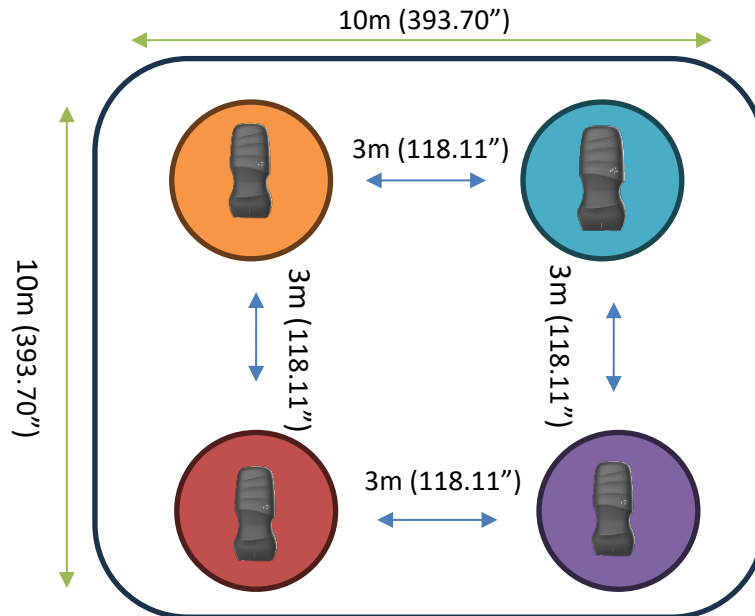


Workshop Setup and Troubleshooting

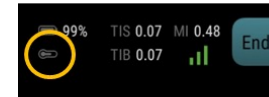
Setup of Workshop



- How many probes are used at the same time? And how far is it between 2 groups?
 - Suggest to keep the distance between probes 3 meters (118.11 inches) to reduce Wi-Fi interference.

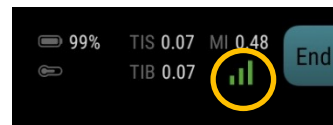


- How many spare devices should be prepared?
 - Suggest 3 probes for a group. One for using, the other 2 for backup (cooling & charging).
- When the thermometer becomes yellow, how to react?
 - When the thermometer turns to yellow, the frame rate will decrease.
 - Turn off the original probe and use the backup probe instead.
 - Return to the probe list page and connect the probe.



※ For high-temperature probes (orange), please turn off the power for 30 (without fan) or 15 (with fan) minutes without charging or put it to a water tank to cool down.

- When probe connection fail
 - 1) Reconnect the probe.
 - 2) If the issue still exists, please use the spare probe instead
- When frame rate becomes low or image lags
 - 1) Check the thermometer. If it turns to yellow or orange, please change the probe.
 - 2) Check the signal bar. If it is in poor signal, get the probe closer or change the probe.



Signal good



Signal poor

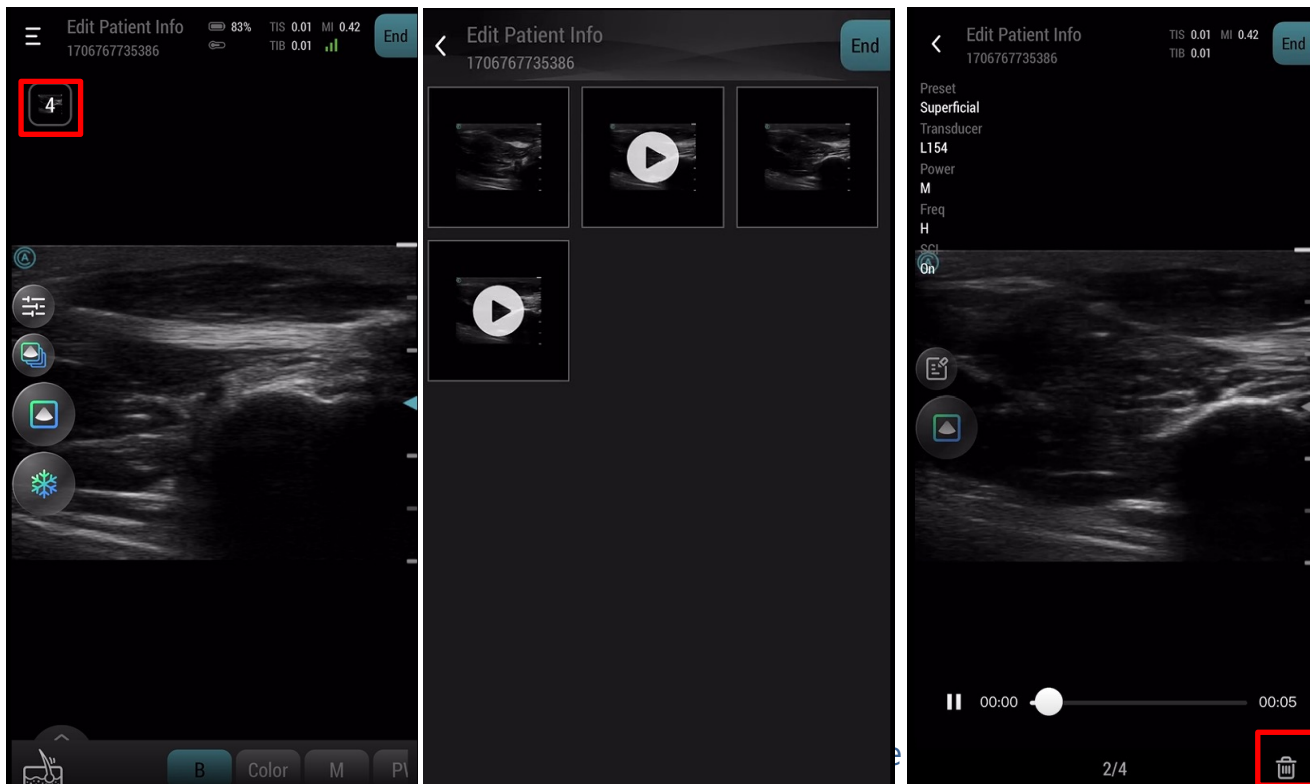


Exam Review & Export

Review during Scanning



- Captured images and videos will be stored in the thumbnails during scanning.



- Tap on the "trash" icon to delete any unwanted images or videos in the thumbnails.

Review after "Ending an Exam"

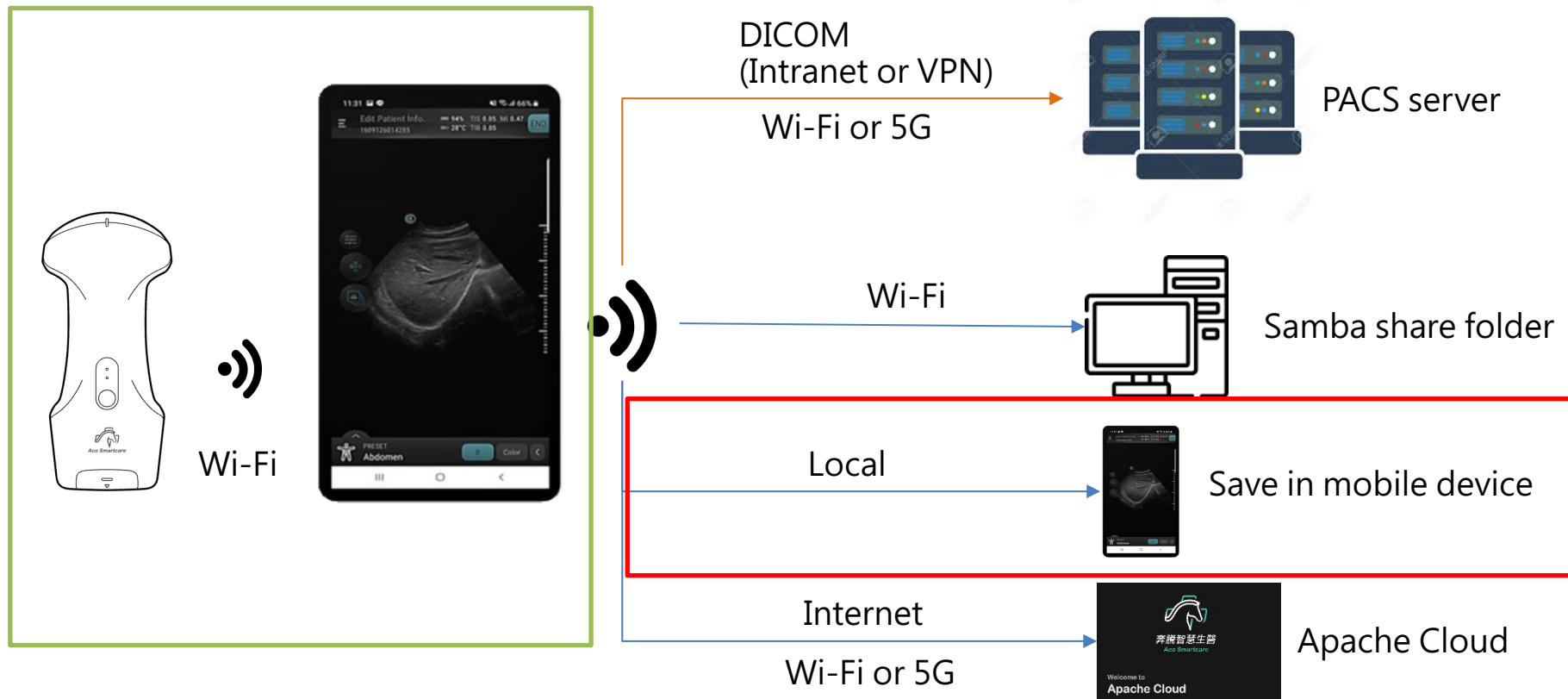


- Exams will be stored in the "Exam List" after ending an exam.

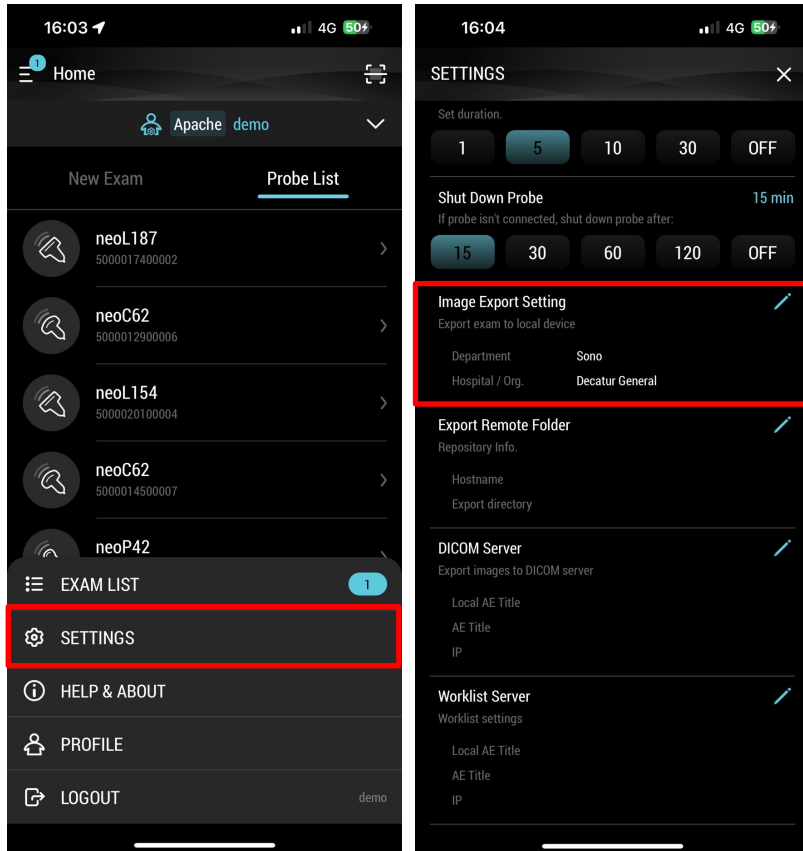
The image displays four sequential screenshots from a mobile application:

- First Screenshot:** "Edit Patient Info" screen for patient ID 1706767735386. An "End" button in the top right corner is highlighted with a red box.
- Second Screenshot:** "EXAM NOTE" screen. The clinical assessment is set to "Normal" (checked). A "Preview report" button is visible. At the bottom, the "Export to local directory" option is checked, and the "Exam" option under "Export to archive" is selected.
- Third Screenshot:** A menu overlay with options: PROBE LIST, NEW PATIENT, EXAM LIST (highlighted with a red box and a blue notification bubble containing the number "1"), SETTINGS, HELP & ABOUT, PROFILE, and LOGOUT.
- Fourth Screenshot:** "EXAM LIST" screen showing a list of exams under the "Local" tab. The list includes three entries with their respective patient IDs and timestamps.

Exporting



Export Setting



1. Set up a local directory folder.
2. Name a Depart. & Hospital/Org which will be shown in the pdf exam file.
3. Export folder naming rule:

➤ Android

- **Apache** | – Patient ID | – Study date –
Images and PDF

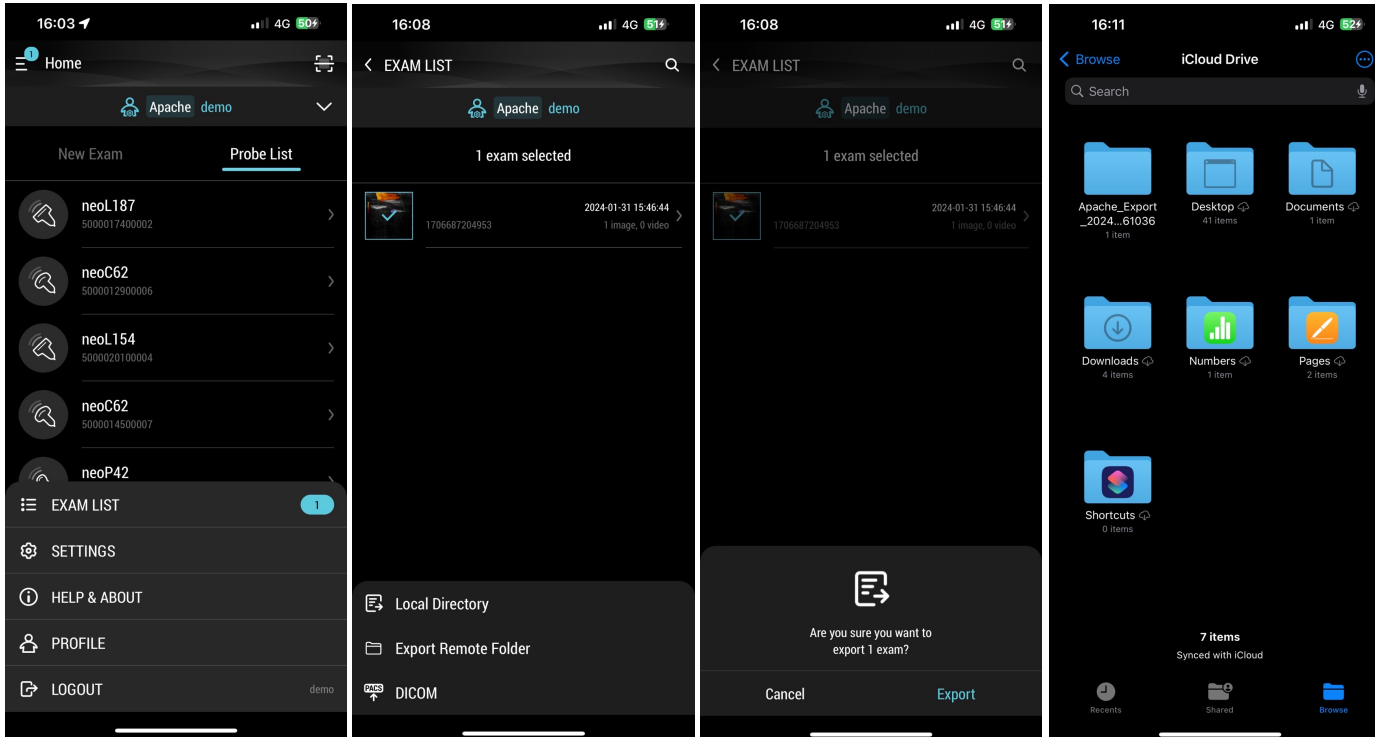
➤ iOS

- **Apache_Export_ExportTime** | – Patient ID | – Study date –
Images and PDF

To Export an Exam



➤ Select an exam to export to your mobile device.



In PDF Format

Exam Time: 2024-01-31 15:46:44
Hospital / Org.: Decatur General
Department: Sono
Physician:

Patient Info

Accession:
ID: 1706687204953
Name:
Sex: M
Birthday:
Age:

Result

Status:
Comments:



Maintenance, Cleaning, and Disinfection

Maintenance



Check the probe before each use. The probe does not require calibration. Please stop using the probe if there are any signs of deterioration such as corrosions, discoloration, or obvious cracks.

Before Cleaning,

1. Check the probe before cleaning for any signs of deterioration such as corrosions, discoloration, or damaged cracks.
2. Turn off the probe and disconnect from the charger.
3. Remove remaining gel from the probe by using a soft cloth or soft sponge.

Cleaning



Select cleansers and disinfectants for non-critical or semi-critical uses defined by Spaulding classifications and clean the probe following by the steps as shown below:

1. Turn off the probe and disconnect from the charger before cleaning.
2. Use a soft cloth or soft sponge with the selected cleaner.
3. Clean starts from the tail part, wiping toward the head of the probe. Remove all gel and debris from the probe.
4. If necessary, repeat the steps with new cleaning materials.
5. Dry the surface of the transducer using clean soft cloth. Do not use heat to dry the probe.

Disinfecting



Spaulding has specific cleaning and disinfection requirements for different categories of equipment. Cleaners and Disinfectants for Non-Critical Uses.

CaviWipes

- Has been tested for efficacy with the probe and can be used to clean and disinfect the probe.



fico

Thank You.