SonopTek



AS-300 PREG & BACKFAT CHECER

USERS Manual

Section 1 INTRODUCTION

AS-300 Wireless Scanners is the new generation instruments for veterinary ultrasonography with the outstanding feature of wireless and the updated combined AI function for both preg-check & backfat.

Different with traditional veterinary ultrasound scanner with a cable connecting from probe to main unit, no cable appears at the end of the probe of AS-300 Scanners. The probe of a AS-300 Scanner is highly integrated with ultrasound image processing, power management and a wireless signal provider to be connected by the main unit. The main units different with traditional devices are now changed to be any mobile device. The probe acted as a Wi-Fi Access

Point and can be connected by mobile device. With the probe be connected through Wi-Fi and the App is running, enjoy your days of working without the trouble making cables.

This manual is intended to provide a through overview of the AS-300 Scanner and should be carefully read before starting operating the device.

Thank you for your trust in us to provide for your veterinary ultrasonography needs.



Figure 1 AS-300 Veterinary scanner

1.1 SPECIALIST

Display:	Android Device
Scan:	Convex, 60°
AI：	Preg check & backfat
Probe:	3.5MHz Transducer
Depth:	180mm
Display Mode:	B-Mode
Battery last:	> 3 hours
Size:	140mm x 45mm x 40mm
Weight:	< 0.2 Kg

Section 2 GETTING STARTED

FOR YOUR PROTECTION, please read these safety instructions completely before applying power to, or operating the system.

2.1 UNPACKING

The AS-300 Scanner is carefully packed to prevent damage during shipment. Before unpacking, please note any visible damage to the outside of the shipping containers.

Items should be checked in order to ensure that all ordered items have been received. The following table lists the items which should be received with each particular system.

Table 2-1Items List for AS-300 Wireless Scanner

ITEM	INCLUDED
Scanner probe	√
USB Charger cable	√
Wrist stripe	√
Manual	OPTIONAL
Waterproof bag	OPTIONAL

Each item should be examined for any noticeable defects or damage that may have occurred during shipment although it is packed carefully. If any defect or damage exists, please contact to your local representative immediately to report the problem.

2.2 Installing APP

If the App is not installed in your mobile device, for iOS, search”iLUS” in apple store, for Android, scan the following QR code to install, it is free to install the App.



iLUS

2.3 Starting probe



Figure 2-1 AS-300 Scanner probe

The Wireless signal and the Battery Capacity Indicator on the probe may be invisible before the probe is turned on.

Press the button to turn on the probe. The Battery Capacity Indicator will be light to indicate the capacity of the battery. The four

grids of the indicator imply the battery capacity. (Probe charging will be described in section 4.)

Seconds after the probe turned on, the Wireless Connection Indicator will be light and blinking to notice that the probe is ready for a wireless connection from the iPad.

The probe can be turned off by hold down the button for seconds. When the probe is off, the indicators will be turned off.

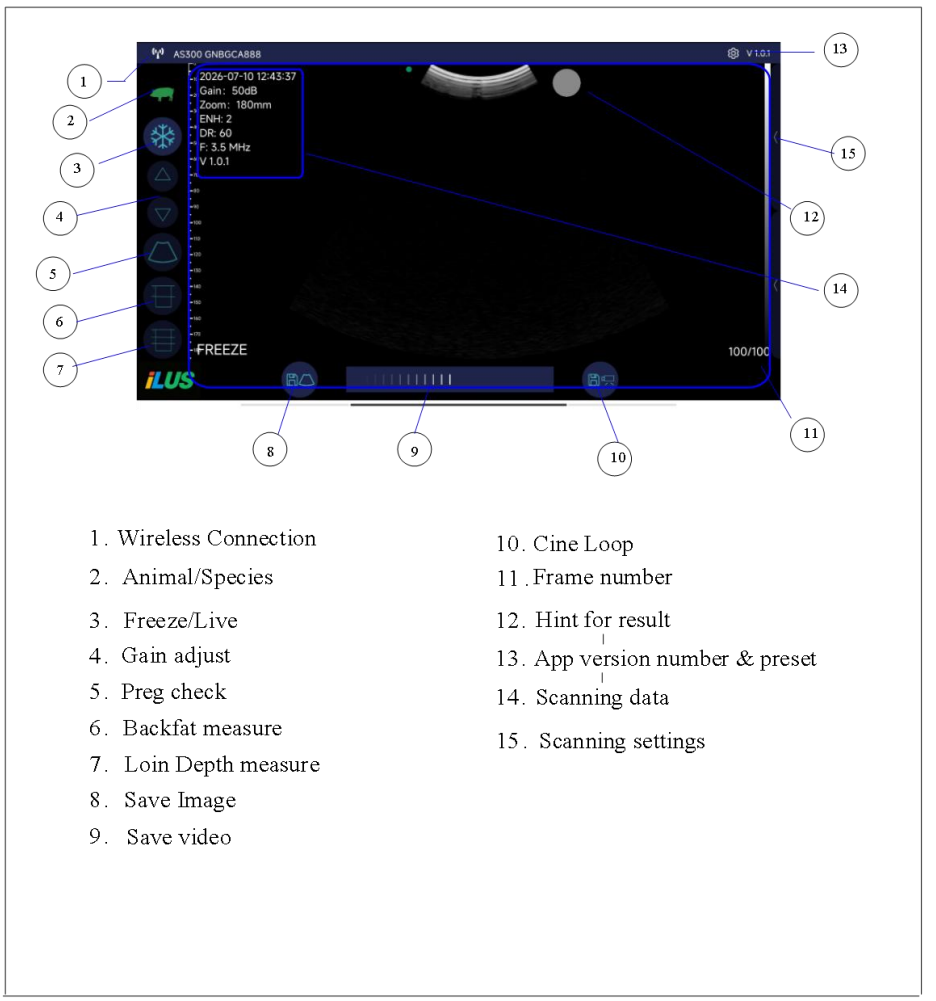
2.4 Wireless Connection

When the probe is ready to be connected, launch the settings of mobile device, turn on Wi-fi, it could recognize the SSID number of probe. Password is printed on the tail of the probe,type in lower-case.

After Wi-Fi is connected, launch the App, SSID is shown on the left-up side, it is ready for scanning.

3 APP APPLICATIONS

3.1 Scanning Screen



1. Wireless Connection
2. Animal/Species
3. Freeze/Live
4. Gain adjust
5. Preg check
6. Backfat measure
7. Loin Depth measure
8. Save Image
9. Save video
10. Cine Loop
11. Frame number
12. Hint for result
13. App version number & preset
14. Scanning data
15. Scanning settings

Figure 3-1 Main screen

After the probe is connected, launch the App, the Main Screen will show similar in Figure 3-1. (No image is visible when the App is firstly launched.)

The Wireless Connection Status indicates the SSID of the Wi-Fi of the connected probe.

Press Freeze/Live button or the button on the probe to freeze or live the image. On LIVE status, press Gain Up/Down button to adjust the gain, wipe up/down screen to adjust the depth. On FREEZE status, the parameters of image is shown on the image area.

On FREEZE status, Cine Loop is recorded the video of last 10 seconds. Swipe left/right button 9 to review the video. Press button 8,10o to save the image, video to album.

3.2 Scanning preparation

3.2.1 Animal information

Choose livestock type in part (2) by pressing the part. See Figure 3-2.

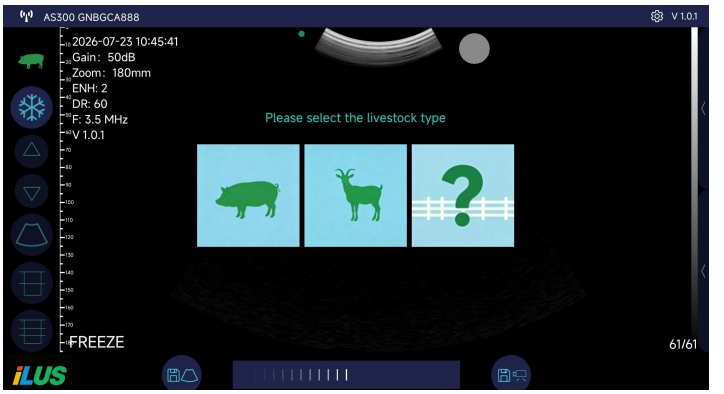


Figure 3-2 Animal Information

Animal spicy can be changed by clicking the animal picture. The picture will be shown in part(2) after chosen.

3.2.2 Presettings

Before scanning, preset the system parameters if needed. It is defaulted if it is not set.Press part(13) the setting button to preset the system parameters. See Figure 3-3.

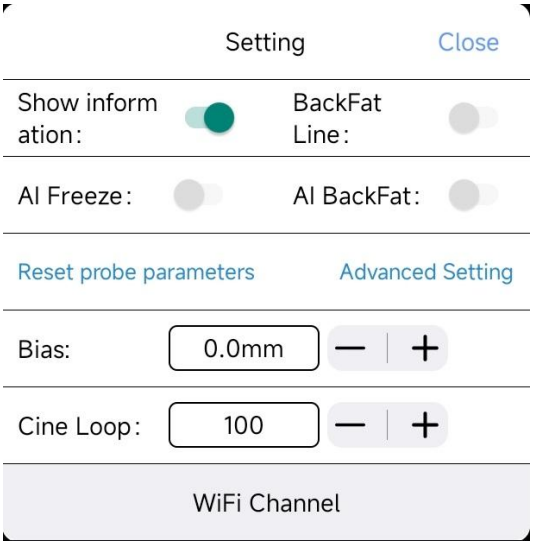


Figure 3-3 Presetting

-Show information is defaulted on, information is shown in part(14).

-Backfat line/AI Freeze/AI backfat is defaulted on in backfat measure mode. Swipe it left to turn it off when needed.

-Bias is suggested to be changed only with profession needs.

-Cine loop is defaulted to 100, change it only when needed.

-Wifi channel is defaulted to 5G channel 36. Change it when needed.

3.2.3 Scanning settings



Figure 3-4 Scanning setting

While scanning, the settings can be changed by pressing part(15). Press the arrow, settings will be shown. See Figure 3-4.

Focus set from 1-3.

Dynamic range from 40-110.

Harmonic set from 3.5MHz to 5Mhz.

Enhance from 1 to 4.

8 section gain set.

3.3 Scanning

When all is ready to scan, press freeze/live or the switch on the probe to run the probe, “LIVE” status is shown in the down left corner of screen and image is shown in the middle of screen. When you get the good image, press the button again , “FREEZE” status is shown and a cineloop of 100 frames is generated, number of frames is shown in part(11).Swipe button(9), the cineloop index bar left right to review the frames from 1 to 100.

3.3.1 Pregcheck

Press part(5) to start pregcheck. Unfreeze the probe, image will be shown in the centre of screen. Put probe to the right place to get abdominal image, when it recognizes the right image, the part(12) will show the hint of the pregnancy result. Hint stays grey for not pregnant

and turns green for pregnant. See Figure 3-5.

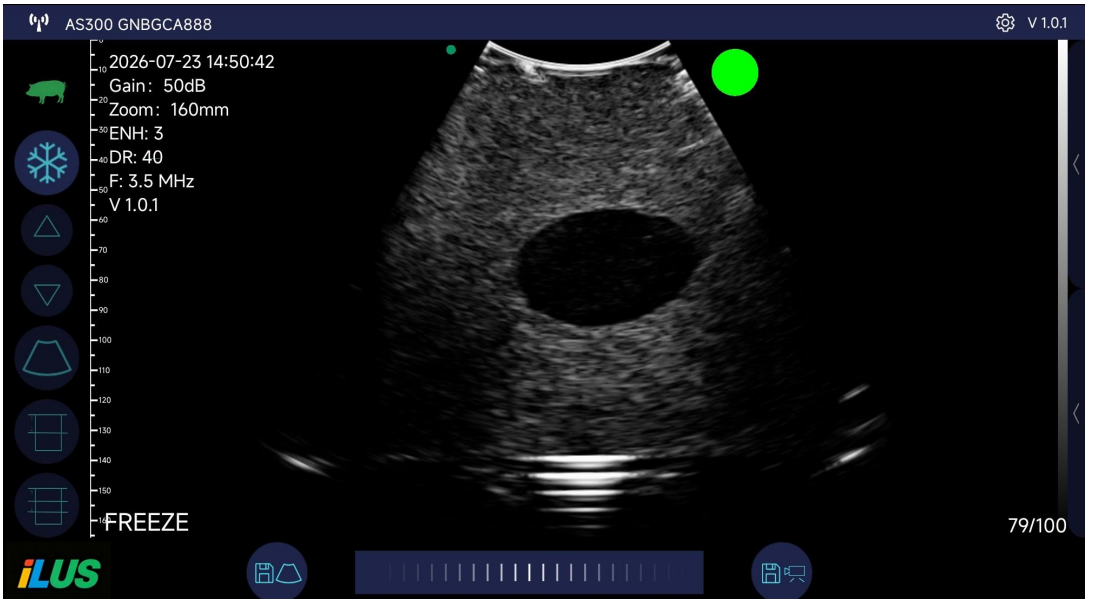


Figure 3-5 Pregnancy hint

3.3.2 Backfat measure

Press part(6) to start backfat measurement. In this mode backfat line,AI Freeze and AI backfat is defaulted to be on. Apply probe to the right place and get a good image, when it recognizes the right image, the part(12) will show the hint of the result.Hint stays grey for not incorrect backfat image and turns green for correct. At the same time, backfat measurement shows on the left part of screen. See Figure 3-6.

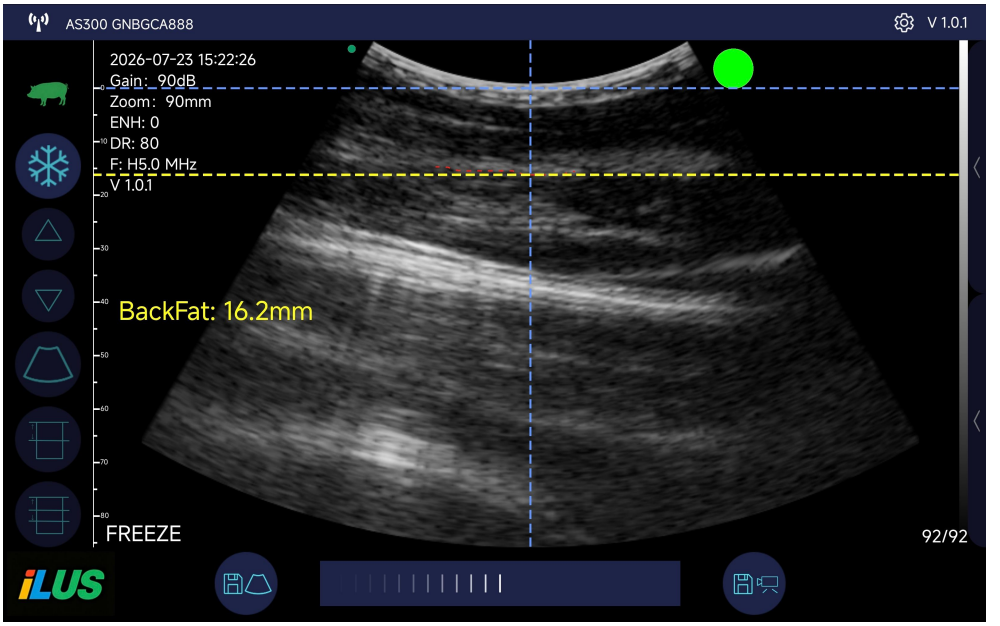


Figure 3-6 Backfat measure

3.3.2 Loin and Lean measure

In Loin and lean measure mode, no AI function is provided. Press part(7) to start the mode, run the probe. Get the good image by applying the probe to the right part, when user gets the good image, freeze the probe, the backfat, loin and lean measurement shows on the left part of screen. User should move the lines by dragging it to get precise measurements. See Figure 3-7.

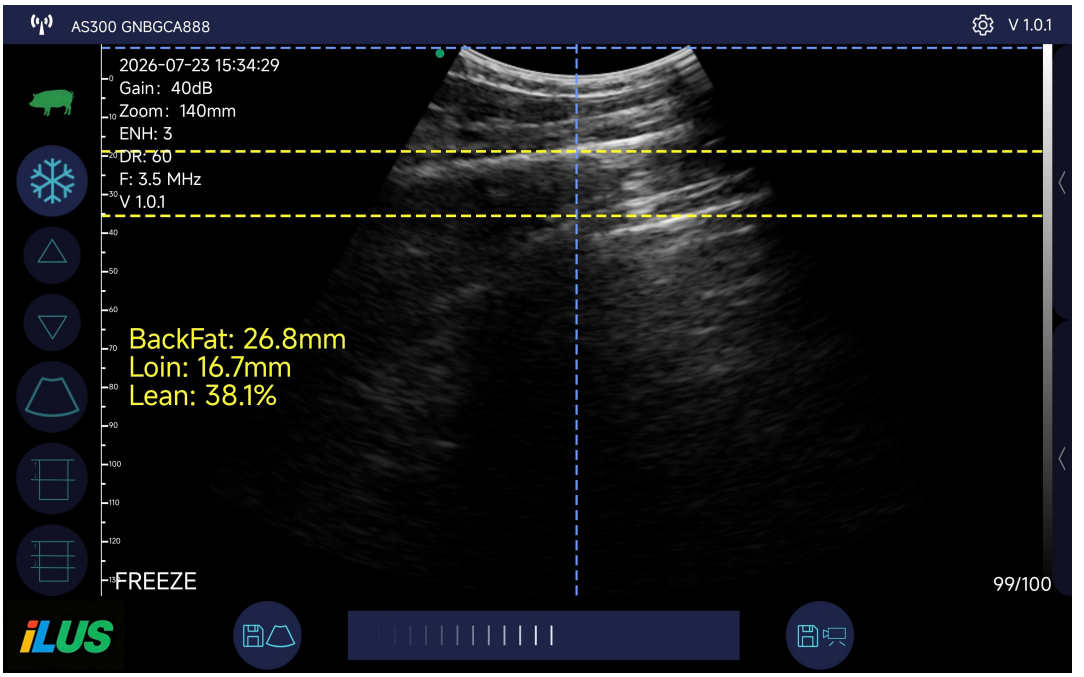


Figure 3-7 Loin and lean measure

3.4 Save image and video

After all is processed, save the image to album by pressing button(8). Images saved can be browsed in album of mobile device.

Save the video, cineloop to album by pressing button(10), videos saved can be browsed in album of mobile device.

4 MAINTANCE

4.1 Probe charging

When probe is at low battery, it needs to be charged.The system offers two charging methods, USB charging and wireless charging. Find the USB cable in the packing box, open charging socket on the tail of probe to charge it with any functioning charger. Wireless charging is an optional choice from Sonoptek, people can buy wireless charger to charge the probe. Charging position is the back of the probe in the middle. See Figure 4-1.



Figure 4-1 Probe charging

If four grids all light and the indicator not blinking means the battery is fully charged. Unplug the USB cable and the insertion should be carefully plugged to make the probe able to keep out water.

4.2 WATERPROOF IPAD

A waterproof bag is provided by local repository. Users can use it to protect the iPad when it is used in humidity or dirty fields.

4.3 CLEANING

Periodic cleaning of the probe is all that is usually required. The probe can be cleaned by soft cloth or paper or water directly at the head. The probe with the waterproof level of IPX5 can be washed using clean water but users should NOT soak the probe in water.

4.4 STORAGE

When not in use, it is recommended that the equipment should be put in the case. While stored the equipment should be protected from temperature extremes.

Warnings: TO REDUCE THE EFFECTS OF ELECTORNIC WAVES, PLS USE PROPERLY.