



# AS-200 Vet Scanner

**USERS** Manual

### Section 1 INTRODUCTION

AS-200 Wireless Scanners is the new generation instruments for veterinary ultrasonography with the outstanding feature of wireless.

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-200 Scanners. The probe of a AS-200 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-200 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-200 Veterinary scanner

## 1.1 SPECIALIST

Display:	iOS/Android Device	
Scan:	Sector Scan, 80 $^\circ$	
Probe:	3.5MHz Transducer	
Depth:	200mm	
Display Mode:	B-Mode	
Gray Scale:	256 levels	
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-200 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.

ITEM	INCLUDED
Scanner probe	$\checkmark$
USB Charger cable	$\checkmark$
Wrist stripe	$\checkmark$

Table 2-1Items List for AS-200 Wireless Scanner

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 SmartVUS App is not installed in your iPad, open the App Store and search "SmartVUS ", when the App comes, it is free to install the App.

# 2.3 Starting probe



Figure 2-1 AS-200 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, take iPad as example, 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 SmartVus App, after the connection from the app to the probe is confirmed, SSID is shown on the left-up side, it is ready for scanning.

# **3 APP APPLICATIONS**

3.1 Scanning Screen



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. Press button 13 to review the video. Press button 7,8 o

to save the image, video to album, or press button 9 to save the scanning case.

# 3.2 Scanning preparation

#### 3.2.1 Animal information

Key in animal information 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. Press OK to use the ID with all information and press NEW to start a new ID.

### 3.2.2 Channel setting

Channel is defaulted to 13. In normal cases, channel is no need to be changed. In case it is needed to be changed, press part(1), the SSID number, change the channel by swiping up and down the channel numbers. See Figure 3-3.



Figure 3-3 Channel setting

### 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(13).Swipe button(10), the cineloop index bar left right to review the frames from 1 to 100.

### 3.4 Save image, video and case

After all is processed, save the image to album by pressing button(7). Images saved can be browsed in album of mobile device.

Save the video, cineloop to album by pressing button(8), videos saved can be browsed in album of mobile device.

Save the case by pressing button (9), pregnant status is required in this process, see Figure 3-4. Press YES or NO to save the whole scanning case.



Figure 3-4 Pregnant Status

All information like ID, EID, scanning time, and image is saved in this process. The saved information can be re-edit afterwards.

Attention: ID is required when save case.

400 cases can be saved, move saving case will cover the previous save ones.

## 3.5 Case browse &re-edit.

Press button (12) to browse the saved cases, all cases are listed up. See Figure 3-5.



Figure 3-5 Case browse

Swipe the case to left, the edit buttons appears, press Edit to re-edit the case, and press delete to delete the case.

Press Remove All to delete all saved cases.

## 3.6. Export file

#### 3.6.1 Export file.

Press Button(12) to browse the saved cases. Press Export file to export the file to "csv" format. Name of the file is current date. Press button 11 to view the file. See Figure 3-6.





#### 3.6.2 Export file to PC for IOS

Connect the iPad with PC, open iTunes, click the iPad

symbol to get connected via iTunes. See Figure 3-7.

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Figure 3-7 iTunes connection

Click APPs to show SmartVus on the right. See Figure 3-8. Click SmartVus to showed the exported files listed on the right. Choose the files need to be exported to PC, click "Save to" to save it with chosen path on PC.



Figure 3-9 Export file to PC

#### 3.6.4. Export file to PC for Android

Connect Android device to PC and find out the files in the

file folder, copy the file to PC with chosen path.

## **4 MAINTANCE**

### 4.1 Probe charging

When probe is at low battery, it need 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.