

### **TT-OTS100**

### **Smart Veterinary Otoscope**





Contents	
Device information	3
Safety information	5
Symbol Description	7
Introduction	9
Features	10
Specifications	11
Check the Package Contents	13
Product Overview	14
Operational Interface	16
Basic Operations	18
Battery charging	19
Safety Warnings	20
Troubleshooting	22



### **Device Information**

#### 1.1 General Description

The Smart Veterinary Otoscope is a battery-powered and digital hand-held device with WiFi function, used in conjunction with mobile apps, supporting iOS and Android platforms. The high-definition camera is equipped with 6 LED lights, which can present photos or videos on the mobile APP.

#### 1.2 Intended Purpose

The Smart Veterinary Otoscope is intended for the examination of the external ear canal and tympanic membrane of animal patients. It can also be used for general illumination of oral and nasal cavity and image capture.

#### 1.3 Intended User

Veterinarians and Related Professionals

#### 1.4 Intended patient population

**Animals** 

#### 1.5 Contraindications

No contraindication.

#### 1.6 Working principle

The otoscope is equipped with a high-resolution camera at the front of the lens. When inserted into the ear canal, the camera captures images of the ear canal, eardrum and potential abnormalities. The built-in LED lighting system illuminates the ear canal and ensures that the camera captures high-quality



images. The captured images can be transmitted to the display in real time via wired or Wifi, and can be viewed and analyzed via a dedicated APP.



### Safety Information

**Warning:** Fire and explosion hazard. Do not operate the device in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide; in oxygen-enriched environments; or in any other potentially explosive environment.

**Warning:** Risk of injury to animal patients and operators .Use only

compatible accessories approved by the manufacturer and follow the

instructions for use in strict accordance with the instructions for use.

Connect only the components specified by the device system. Failure to do so may compromise patient and operator safety, reduce product

performance and accuracy, and void the product warranty.

**Warning:** Animal patient injury risk. Do not shine otoscope inpatient eyes as this can cause eye injury.

**Warning:** Animal patient injury risk. Do not use otoscope without attaching a speculum as this can cause ear injury or cross-contamination.

**Warning:** Cross-contamination risk. The speculumis reusable. Before and after reuse, cleaning and disinfection are necessary. Otherwise, it

may spread contamination from one patient to another patient.

Warning: Do not use the otoscope in an MRI environment.



Warning: Do not use this otoscope to examine the eye.

**Caution:** The otoscope is a diagnostic tool and should be used by aqualified veterinarian inappropriate contexts. If there is any diagnostic doubt, a comprehensive evaluation in combination with other diagnostic methods is recommended.

**Caution:** If the patient has symptoms such as abnormal ear canal discharge, bleeding, fever, tinnitus or severe earache, further diagnosis and treatment are recommended.



## Symbol Description

Symbols	Description
444	Manufacturer
<b>(3)</b>	The operation guide must be read
	CE mark: indicate the device complies with
C€	EU 2017/745
	Date of manufacture
SN	Serial number
ł	Temperature limit
<u> </u>	Humidity limitation
<b>*</b>	Atmospheric pressure limitation
A	ENVIRONMENT PROTECTION - Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice



	Recycling
UDI	Unique device identifier



### Introduction

TT-OTS100 is an easy-to-use handheld smart video otoscope designed for capturing images and videos of animal's ear canal, throat, nasal cavity, skin, etc. Featuring interchangeable accessories, it can be used to capture images and videos of the ear and other natural cavities.





### **Features**

- · 1.85-inch high-definition screen display with 360\*360 resolution.
- $\cdot$  Detachable lens or accessories for easy assembly and storage.
- Supports photo and video capture with touch of a button.
   Supports TYPE-C charging and data transfer.
- · Supports app operation with Wi-Fi, comes with real time video via WIFI streaming capability.



## Specifications

Monitor	Screen Type	1.85-inch IPS LCD Screen
	Screen Resolution	360*360
	Image Resolution	720*720
	Video Resolution	720*720
	Screen Material	Tempered Glass
	Port	Type-C
	Lightness adjustment	Bright/medium bright/ slightly bright/ off
	Magnification	1.0~1.5x

	Diameter of Lens	3.9mm
	Camera Megapixel	1MegaPixel
	Field of View	78°
Camera	Focal Length	10-50mm
Gumora	Camera Lights	6 LED lights
	Surface and edges	Free of pores, cracks, and remainders of tooling agents
	Water resistance	The inside of otoscope can withstand a positive pressure of 22kPa for more than 1 minute without air leakage



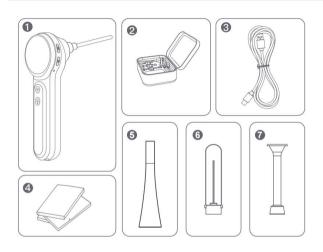
## Specifications

Others	Working Voltage	3.7V
	Charging Voltage	DC 5V
	Storage Capacity	Built-in 8GB Memory
	Battery Capacity	1380mAh Lithium Polymer Battery
	Video format	AVI
Network	Image and video display	APP, WIFI
	Network standard	IEEE802.11b/g/n
	Antenna	Built-in IPEX antenna
	Operating frequency	2.4GHZ
	Data rate	802.11a/b/g/n

Working condition	Temperature: 0~45℃ (32~113℉)
Transportation and storage condition	Temperature: -20°C~50°C
	Humidity: 15%~95%
	Atmospheric pressure: 50kPa~106kPa
Service life	5 years



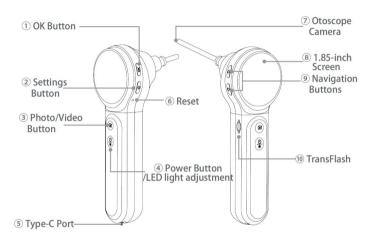
### Check the Package Contents



- 1. TT-OTS100 Veterinary Otoscope
- 2. Portable case
- 3. USB Cable
- 4. User Manual
- 5. Earmuff Accessories
- 6. Spatula Accessories
- 7. Skin Examination Accessories



### **Product Overview**



Control Button Descriptions	
<b>A</b>	Press to scroll upwards in the menus Zoom 1.0~1.5x
•	Press to scroll downwards in the menus Left/Right Ear Switch
ok	Confirm Operation Play and Pause in Photo/Video mode



Short Press: Enter Device Settings/Delete Image or Video in Album
Long Press: Turn On/Off Wi-Fi
- Home Page Status
Short Press: Take a Photo Long Press: Start/End a Video Recording
- Non-Home Page Status
Short Press: Back to Home Page
Short Press: Adjust the Camera Lights
By default, the lowest brightness level is used when turning on the device.
When looking at ears, be sure to use the lowest brightness level to avoid burning ears.
Long Press: Power On/Off

Reset: short press to reboot the system



## **Operation Interface**



Settings	Description
Playback	View captured photos and videos
Language	English, German, French, Italian, Spanish, Russian, Japanese, Chinese
Wi-Fi	Turn On/Off the Wi-Fi
Date Stamp	Turn On/Off the Date Stamp

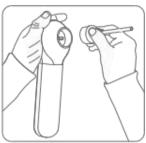


Date/Time	Setting the Date and Time
Format	Formatting the files stored in the TF card (Note: Formatting will delete all files on the TF card, please proceed with caution.)
Auto Powe	Close — 5mins — 10mins
гастогу	Restore all device settings to factory defaults with one click
Version	View device model and version information



### **Basic Operations**

1. Install and connect the otoscope lens or the accessory you need to use.



2. Long press the power button to turn on the device for further use.





### **Battery charging**

Use a conventional 5V/1A or 5V/2A USB interface power supply to charge the device. The charging connection diagram is as follows





### Safety Warnings

- 1. Brightness setting The LED light of this device supports high/medium/low brightness adjustment, and the low-level brightness mode is automatically enabled by default when the boot is turned on: When the ear canal is examined, please use the default low-level brightness mode throughout the whole process to ensure the best detection comfort.
- 2. Precautions for brightness adjustment If you need to temporarily switch to high brightness mode, please turn the brightness back to low after use, let it stand for 1 minute, and then continue to operate after the device returns to the standard working state.
- Keep away from damp and exposed environments. Avoid contact with sharp objects.
- Do not use alcohol, detergents, or other organic cleaning agents to clean the lens. It is recommended to use a soft cloth dampened with water.
- Do not pierce the product shell with nails or other sharp objects.
   Do not hammer or step on the product.
- Avoid using the product near heat sources or under extreme heat conditions.
- · Do not disassemble the product in anyway.



### Warranty Service

- 1.Warranty period
- · Within 12 months from the date of purchase.

### 2. Warranty Coverage

The free warranty service covers the following situations:

- · Equipment performance failure caused by raw material defects or manufacturing process defects.
- Non-man-made damaged parts confirmed by our company can be repaired or replaced free of charge.

#### 3. Disclaimer of Warranties

The following situations are not covered by the free warranty:

- Failure caused by improper operation by the user (failure to properly maintain and use in accordance with the instructions for use).
- Damage caused by disassembly, modification or use of nonoriginal parts without official authorization. Normal wear and tear of the appearance of the product or natural aging of consumable accessories such as batteries.
- ·The final interpretation of these terms is reserved by our company.



### **Trouble Shooting**

#### Unable to Power On

- . Check if the device has power. Please charge your device.
- . Press the reset button to force a reset.

#### System Crash, Unable to Operate

. Press the reset button on the device to force a reset.

#### No Response When Charging

- Ensure the charging port is free of dirt, foreign objects, moisture, etc.
- . Try unplugging and plugging back in the charging cable.
- . Try using a new charging cable.

### No Response When Connected to the Computer

- . The device needs to be turned on to enter USB mode when connected to a computer.
- . Make sure the data cable interface is free of dirt, foreign objects,moisture, etc.
- . Try unplugging and plugging back in the data cable (including the computer's USB side).
- Try restarting the device or computer (sometimes the computer's USB may not be recognized).
- . Try using a new data cable.

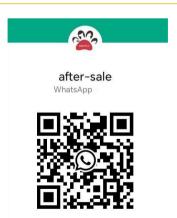




Please follow the following guidelines.

# Otherwise, lit may cause damage to the environment or equipment.

- when removing the device from the environment with the highest storage temperature for use, it should be left in the working environment for at least 30 minutes for cooling.
- when removing the device from the lowest storage temperature environment for use, place it in the working environment for at least 30 minutes for preheating.



Please contact our engineer by scanning the QR above.