



# TT-OTS100

## Smart Veterinary Otoscope





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## 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 speculum is 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 a qualified veterinarian in appropriate 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                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Manufacturer                                                                                                                                                                                               |
|    | The operation guide must be read                                                                                                                                                                           |
|    | CE mark: indicate the device complies with EU 2017/745                                                                                                                                                     |
|    | Date of manufacture                                                                                                                                                                                        |
|    | Serial number                                                                                                                                                                                              |
|    | Temperature limit                                                                                                                                                                                          |
|    | Humidity limitation                                                                                                                                                                                        |
|   | Atmospheric pressure limitation                                                                                                                                                                            |
|  | 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                |
|  | 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.
- 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

|                |                      |                                            |
|----------------|----------------------|--------------------------------------------|
| <b>Monitor</b> | 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                                   |

|               |                   |                                                                                                              |
|---------------|-------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Camera</b> | Diameter of Lens  | 3.9mm                                                                                                        |
|               | Camera Megapixel  | 1MegaPixel                                                                                                   |
|               | Field of View     | 78°                                                                                                          |
|               | Focal Length      | 10-50mm                                                                                                      |
|               | 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 |



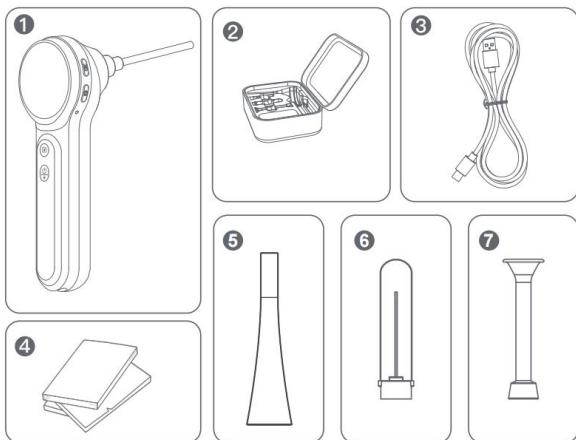
## Specifications

|                |                         |                                 |
|----------------|-------------------------|---------------------------------|
| <b>Others</b>  | Working Voltage         | 3.7V                            |
|                | Charging Voltage        | DC 5V                           |
|                | Storage Capacity        | Built-in 8GB Memory             |
|                | Battery Capacity        | 1380mAh Lithium Polymer Battery |
|                | Video format            | AVI                             |
| <b>Network</b> | 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°F)      |
| Transportation and storage condition | Temperature: -20℃~50℃              |
|                                      | Humidity: 15%~95%                  |
|                                      | Atmospheric pressure: 50kPa~106kPa |
| Service life                         | 5 years                            |



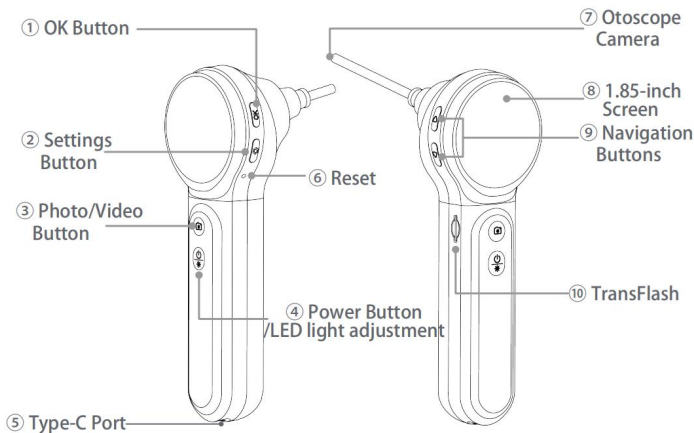
## Check the Package Contents



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



## Product Overview



### Control Button Descriptions

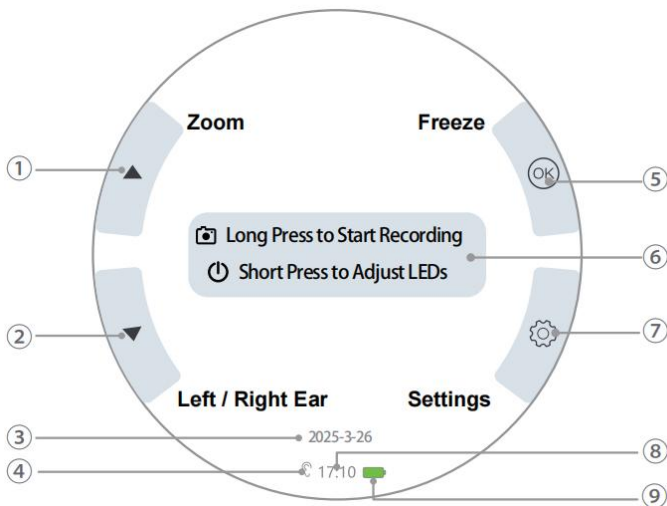
|    |                                                                                         |
|----|-----------------------------------------------------------------------------------------|
|    | Press to scroll upwards in the menus Zoom 1.0~1.5x                                      |
|    | Press to scroll downwards in the menus Left/Right Ear Switch                            |
| ok | Confirm Operation<br>Play and Pause in Photo/Video mode<br>Long Press: Enter/Exit Album |



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

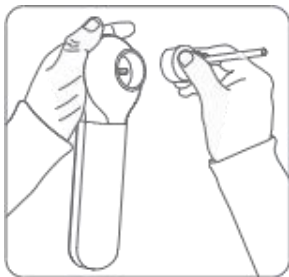


|                       |                                                                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Date/Time</b>      | Setting the Date and Time                                                                                                           |
| <b>Format</b>         | Formatting the files stored in the TF card<br>(Note: Formatting will delete all files on the TF card, please proceed with caution.) |
| <b>Auto Power Off</b> | Close — 5mins — 10mins                                                                                                              |
| <b>Factory Reset</b>  | Restore all device settings to factory defaults with one click                                                                      |
| <b>Version</b>        | View device model and version information                                                                                           |

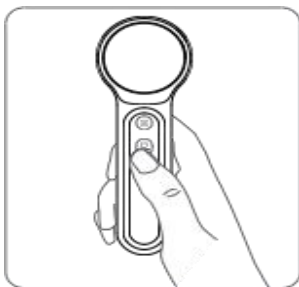


## Basic Operations

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



Charging cable



charging status  
In power on



Charging status  
in power off



## 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 non-original 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, it 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.



**after-sale**

WhatsApp



Please contact our engineer by scanning the QR above.