OtoPet-USA Deluxe Video VetDock System Operating Instructions
# Table of Contents

Correct Handling of VetDock Handset__________________________________________ 3

Introduction to the OtoPet-USA Video VetDock System__________________________ 4

System Components and Accessories__________________________________________ 5

Attachments for the OtoPet-USA VetDock Camera and Vet Probe__________________ 7

Assembly and Installation____________________________________________________ 8

Instructions for Attaching/Disconnecting Fiber Optic Cable______________________ 9

Using the Deluxe Hand Held Camera Probe____________________________________ 9

VetDock Wiring Instructions__________________________________________________ 10

VetDock Wiring Diagram____________________________________________________ 11

Flat Screen Extension & Bracket for Cart_______________________________________ 12

Operating Instructions for Using the OtoPet-USA Video VetDock System___________ 13

Care and Maintenance________________________________________________________ 14

Veterinary Otoscope Disinfections____________________________________________ 14

OtoPet-USA Video VetDock Handset Technical Specifications______________________ 15

OtoPet-USA Video VetDock System Technical Specifications_______________________ 16

VetDock Operating Basics____________________________________________________ 17

Transportation and Storage____________________________________________________ 18

Trouble Shooting Guide______________________________________________________ 19

Limited Warranty____________________________________________________________ 20

---

**ELECTRICAL GROUNDING INSTRUCTIONS**

This apparatus is equipped with a three-prong (grounding) plug for your protection against shock hazard and must be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove grounding prong from this plug.
Correct Handling of VetDock Handset

**WARNING**

Breakage of the light cable because of incorrect handling will not be warranted.

INCORRECT HANDLING

CORRECT HANDLING
Introduction to the OtoPet-USA Video VetDock System

The Deluxe Video VetDock System:

- OtoPet-USA Autoclavable VetScope Probe with 2mm Channel
- VetDock Light Source Station
- OtoPet-USA VetDock Camera
- Flat Screen Monitor
- Color Photo Printer
- Stop Action Foot Pedal
- OtoPet-USA Custom Digital Storage w/ Keyboard
- Medical Grade Cart w/ Accessory Drawer
- OtoPet-USA Earigator System
- Full Image Lens
- Track Ball Mouse
- Microscope Adapter
- Cleaning Brush
- Biopsy Tool
- Stainless Curette
- All necessary Cables
- One-Year Warranty

Options:

- Endo-Coupler
- Full Range of Eyepiece Adapters for Flexible Scope Attachment
- Full Range of Flexible Endoscopes Instruments
- Extended Warranty

COMPONENTS MAY CHANGE
System Components and Accessories

Camera/Probe Assembly
This hand held assembly part includes the custom designed and patented optical probe and high resolution color video camera. These are the key components to the system. The camera operates on 12V DC provided from the light source.

Light Source with Camera Controller
The camera/probe assembly on the VetDock plugs into the front of the dock station, composite “out/cam out” connection from rear of light source to “RCA In” on USB Capture Device. This high quality 75-watt variable intensity light source is designed to provide a small spot of high intensity light which enhances the quality of the image. A fiber optic cable transfers the light from the light source to the probe. A 3/4 rotation of the dial is usually appropriate. However, some adjustment may be necessary for optimum image clarity.

Mobile Cart
The cart allows for storage, interoffice mobility, and an easily viewed screen. The cart is 17” wide, 22” deep, and comes with two shelves, a storage drawer, and a power strip. For stability of the system it is recommended that the cart be pulled rather than pushed.

Color Monitor
The high-resolution video monitor has multiple video input jacks. VGA is our preferred method of video input. S-Video and Composite can be used to display information from another video source such as a digital storage drive or VCR.

Color Photo Printer
The printer digitally reproduces the image viewed by the camera/probe assembly. This image is a valuable and informative tool to help educate your client.

Digitizer (See Digital VetDock Software Manual for more information)
The Digitizer hooks to any video source, like ultrasound, endoscopes or digital cameras. Included in the package are a fully functional trackball and keyboard. The Digitizer allows you to instantly store images in the database, USB flash drivers or CD-RW disks. It can store and play back short video clips. The database allows you to enter client information and recall images in four different search fields. The Digitizer is also network capable.

Earigator
The Earigator is invaluable when performing outer and middle ear flushes. It can be used through the VetDock working channel via a catheter or as a stand-alone unit.

Foot Switch
The foot switch is a convenient way to control image capture function. It allows for hands free operation of the image freeze. The remote foot switch must be plugged into the trackball.
Microscope Adapter
Connects directly to the video camera and slides over the eyepiece of the microscope. This allows you to view slides on the color monitor and print hard copy color photos of them.

Full Image Lens
The full image lens connects to the camera and has IRIS and focus adjustments, which allows for pictures of the skin, full animal, x-ray and records. The full image lens will focus from ½” to infinity.

Biopsy Tool
Used through the Vet Dock’s 2mm working channel facilitates taking biopsy samples as well as removal of foreign matter.

Optional Accessory

35mm Endo-Coupler Accessory
OtoPet-USA supplies a full range of eyepiece and C-mount adapters to attach rigid and flexible endoscopes to the video platform.
Attachments for the OtoPet-USA VetDock Camera and Vet Probe

- **Microscope Adapter**
  - 3 Sizes Available

- **Vet Probe Otoscope**

- **Light Cable**

- **35mm Coupler**
  - for Rigid Scopes
  - (Optional)

- **Endoscopic Tool**

- **Curette**

- **Cleaning Brush**

- **Full Image Lens**

- **Camera**
Installation Instructions

Although no specific order is required for connecting the Video VetDock System, it is sometimes helpful to understand the flow of the signal from the camera to the monitor.

After unpacking all individual components the camera cassette plugs into front of the light source w/ camera control. (VetDock Station)

The printer, monitor, and light source power plugs need to be plugged into the power strip.

Caution: Take care to avoid the following circumstances that could cause extensive damage to your fiber optic cable:

Do not roll chairs or carts over the cable.

Do not allow animals to bite or chew cables.

References:

Vet Dock wiring instructions are on page 10.

Photo of current equipment with wiring diagram is on page 11.
Instructions for Attaching/Disconnecting Fiber Optic Cable

To Connect
Push the connector end into the probe as shown.

To Disconnect
With thumb and forefinger holding the ACMI quick-disconnect snap gently pull the probe away from the connector.

Using the Deluxe Hand Held Camera Probe

CAUTION: The deluxe hand held camera probe/assembly is only to be used by a person qualified in the use of a VetDock. Misuse can cause a patient pain and possible injury.

Prior to insertion, the probe should be held within 1/4" of a known object, such as your finger, to check the quality of the image. Sometimes the lens is smeared with cerumen or other matter and will need to be vigorously cleaned with an alcohol wipe in order to provide a clear image. Camera should be white balanced by setting light to desired intensity. Hold probe 1/2 “ from white piece of paper and press the “white balance” button.

The monitor should be observed as the probe is inserted into the animal. Once the desired image is obtained, press the foot pedal to freeze the image for further study. Once an acceptable frozen image is displayed on the system monitor, clicking on the print icon while in the view mode will automatically print the image being viewed.

Practice is essential to achieving optimum picture quality. Cerumen and/or fog on the lens tip most often cause fuzzy video images. You can correct or prevent either condition by using an alcohol wipe on the lens tip before and after each use.
VetDock Wiring Instructions
Connecting the OtoPet-USA Image System

Main Equipment, Cables and Accessories

1. (1) VGA to VGA Cable
2. (1) DVI Adapter
3. (1) BNC to RCA Cable
4. (1) USB Cable
5. (1) USB Capture Device
6. (1) Keyboard
7. (1) Track Ball Mouse
8. (1) Foot Pedal
9. (1) VetDock
10. (1) Digitizer (mini computer)
11. (1) Flat Screen Monitor
12. (1) Color Photo Printer (optional)

NOTE: Accessories may vary

Wiring Instructions:

1. Plug BNC to RCA Cable from “Composite Out” on VetDock to yellow connection on USB Capture Device.
2. Plug USB Cable from USB Capture Device into any USB port on the Digitizer.
3. Plug DVI Adapter into “DVI Out” on Digitizer
4. Plug other end of VGA to VGA Cable into the DVI Adapter you just connected.
5. Plug USB Cable from USB Capture Device into any USB port on the Digitizer.
6. Plug Keyboard into any USB port on the Digitizer.
7. Plug Track Ball Mouse into any USB port on the Digitizer.
8. Plug USB Cable from USB Capture Device into any USB port on the Digitizer.
9. If have a Color Photo Printer plug the included USB Cable from the printer into any USB port on the Digitizer.
10. Plug all power cords into the power strip.
NOTE: Accessories may vary
1. Connect monitor bracket to back of monitor using the four provided screws first.
2. Remove cover cap from pole you are going to use for the extension.
3. Place black sleeve of extension pole into pole you just uncovered.
4. Place monitor bracket, with monitor attached, on top of extension pole.
   NOTE: Monitor is heavy. Get assistance lifting it.
Operating Instructions for Using the OtoPet-USA VetDock System

Turning On The Video VetDock System

**Master Switch**
The master switch is located on the power strip. The power strip is mounted under top shelf of the cart. If not using cart, suggest you plug all equipment into a surge protected power strip.

**Video Monitor**
The video monitor power switch is located on the monitor. An indicator light on the front of the monitor turns blue when the power is on.

**Printer**
The printer power switch is located on the printer. An indicator light turns green when the power is on and the printer is ready to print.

**VetDock Station Light Source**
The light source intensity is controlled by rotating a knob located on the front of the light box. The light source should be turned to full intensity. Once the probe is in the animal, you may need to adjust the intensity control to achieve an optimum picture. When in the standby mode, leave the light on but turn the intensity down to the lowest setting. **Let bulb cool down before turning off completely.** This will increase the life of the bulb. You may turn the light on/off by pushing in the knob.

**Digitizer (See Digital VetDock Software Manual for more information)**
Power button is on the front right side.

**Camera**
The camera power switch is located on the front of the VetDock light source. An indicator light turns green when the power is on. If no picture is showing, check to see that the monitor is turned on and that all connections are correct.

**Suggested Operating Procedure**
- Leave the monitor, camera, and the printer in the on position and control all pieces of equipment with the master switch on a power strip.
- **NOTE:** Shut down Digitizer through the start menu before shutting down entire unit.
- The VetDock light source can be left on for long periods of time, but the lamp intensity should be turned down except when being used. Following this guideline will greatly extend the bulb life, which is estimated to be about 250 hours. We suggest you keep a spare bulb on hand at all times.
- It will be necessary to press the power on button for the digitizer each time the main power switch is turned on.
- The Earigator should be kept off until needed.
Care and Maintenance

Your OtoPet-USA Video VetDock has been designed to provide years of trouble-free service. Do not remove or open the cover of any equipment. As there are no user serviceable components inside. Doing so will make any Warranty obsolete.

Cleaning

To keep your system looking new, wipe the exterior of components with a soft cloth. Stubborn stains may be removed using a cloth moistened with water and mild detergent.

Do not allow debris or fluid to enter the components.

Use an alcohol wipe to clean the lens on the end of the VetDock probe, or a common disinfectant.

Operational Tips

When using the camera, be sure camera is in the upright position so you can read the horizontal writing on the side. This helps orientation of the UP/DOWN on video screen

When taking a Biopsy always avoid pulling the specimen through the working channel to prevent risk of contamination.

THE PROBE TIP COVER SHOULD BE RETAINED AND USED FOR ADDITIONAL TRANSPORTATION PROTECTION OF THE VIDEO SCOPE OPTICS WHILE IN OR OUT OF THE FOAM CASE.

OtoPet-USA SUGGESTS THAT AFTER USING THE VETDOCK LIGHT SOURCE TO REDUCE LIGHT INTENSITY DIMMER TO LOWEST POINT TO ALLOW THE BULB TO COOL FOR 1-2 MINUTES PRIOR TO TURNING UNIT OFF

Since the Veterinary Otoscope incorporates glass lenses for image transmission and fibers for illumination, it is breakable. Although the tip is tapered to improve durability, any impact or crushing to the tip may cause serious damaged to the instrument.

Veterinary Otoscope Disinfections

The Veterinary Otoscope is sealed so that it may be wiped with the following surface cleaners to disinfect.

- 75% Alcohol
- Chlorhexiderm
- Cidex
- Nolvasan
- Parvocide
- Parvosol
- Roccal
- Synphenol
# OtoPet-USA Video VetDock Handset Technical Specifications

The handset consists of two primary components, the video camera and the probe.

## Video Camera
- 1/3 inch pick-up element
- 420K pixels
- Horizontal resolution 420 TV lines
- 5 lux minimum illumination interchangeable to a 3 lux
- CS lens mount
- 153 grams total weight
- Adjustable white balance
- -10° to +40°C operating temperature
- 42mm (W) x42mm (H)x 53mm (L)
- BNC video output socket
- 12V DC +/- 10% voltage requirement

## Deluxe Probe
- Autoclavable / ETO
- Field of view 60 degree + 10-5 degree
- Focal plane from tip .25" (+/- .125")
- 360 degree glass fiber light at tip
- Conventional optical elements, color corrected
- Minimum intensity 750 FC at 1" 
- Working length 1.125" from shoulder
- Tip diameter 5mm
- Tapered tip
- Stainless steel body
- Integral glare reduction filter
- 50 grams total weight
- 2mm working channel
- Normal erect image orientation
- Overall length 3.22"
- Body diameter .7"
- Maximum diameter 1.225" dia.
- Swivel mount
- FFA.OS fiber optic socket
- CS mount
- Impervious to alcohol cleaning

**Note:** The camera and probe are sold as a matched system with OtoPet-USA proprietary coupling and focusing techniques. Should either the camera or probe become defective either part can be replaced; however, the process must be accomplished at the OtoPet-USA USA manufacturing facility. Neither the probe nor the camera can be sold separately.

**Comment:** While system specifications may serve some benefit in comparing various products, discretion must be used in determining overall system performance. It is suggested that a logical system test might involve the comparison of color printouts of the same subject, such as a known ear canal, using various systems. The OtoPet-USA system has been optimized with respect to each specified component. Claims of specifications of individual components do not reflect the overall optimization of the system as will be evidenced through such a test. System optimization provides the end user with the best value for the investment. That is the OtoPet-USA commitment.
OtoPet-USA Video VetDock System Technical Specifications

**Color Photo Printer** (currently)
- Multiple pictures on one sheet capability
- UL-1950 safety standard
- Universal serial BUS USB output
- Other specifications change due to model changes

**Flat Screen LCD TV** (currently)
- AC 100 to 120 V, 50/60 Hz
- Screen Size 19” (currently)
- Wide aspect ratio (1440 X 900) res.
- Specifications change due to model change

**Fiber Optic Light Source w/ Camera Control**
- 75 watt.
- Infinitely variable
- Thermal overload protected
- Fan cooled
- 3 amp circuit breaker
- EPA or EKE reflector lamp
- 115 VA. or 220 VA. (Special)
- 9-1/2” long, 4-3/4” wide, 6-1/4” high
- On/off switch incorporated in intensity control

**Handset (Camera/Probe)**
- High grade lens elements
- Anti-reflective coatings
- 60 degree field of view
- High resolution color camera
- 0-3” dept of field
- 203 gram total weight, balanced design 7 ¼” total length
- Tapered conical SS probe for durability

**Mobile Cart**
- Sturdy construction, 300lb. + capacity
- Two shelf standard
- Three shelf optional
- 42 pounds shipping weight
- Six outlet power strip installed
- Rolling/lockable castors
- 35” high, 17” wide, 22” deep
- Storage drawer with foam padding
- 15” extension tube
- Monitor mount

**Additional System Features Include:**
- Foot switch
- Alcohol swabs
- Printer/monitor bridge cable
- Microscope adapter
  - Endoscope’s adapter (optional)
- Full image lens
- Biopsy tool
- 1.8mm flexible curette
- Earigator
- Track Ball
- Key Board
- 9 Volt AC Adaptor
- Digital VetDock Software Operating Manual
**VetDock Operating Basics**

1. Main power for VetDock Station is the green switch located on the left front panel, and will illuminate in the “On” position.
2. Main power for Digital Storage System (Digitizer) is located on the front panel.
3. Main power for the monitor is located on the monitor.
4. Push VetDock camera in slot located in the front right of the VetDock. This will turn on light source and video camera.
5. Foot pedal must be plugged into the back of Track Ball Mouse.
6. There are two buttons on the controller end of the VetDock camera. “L/M” button is for live and memory. This operates the same as the foot switch. The “AWB” is for auto white balance, which auto adjusts the iris of the VetDock camera.
7. The black knob located on the front of VetDock station is used to adjust the light intensity. The VetDock should be used at maximum light intensity and white balanced anytime light intensity is changed.
8. To turn off the light, simply Press the knob once, Press again to turn on.
9. To auto white balance hold down the “AWB” button until the green light beside the button illuminates and then goes out. The black protective tip should be placed on the end of the probe during this procedure for maximum adjustment, or hold the end of the otoscope ½” off white paper. This will correct color.
10. Before turning system off completely, turn light down to lowest intensity to allow the bulb to cool. This will increase the life of the bulb.

**Transportation and Storage**

When transporting or storing your video VetDock, it is best to use the original packing case or similar packaging.

Store the system in a cool, dry location and do not place your system in direct sunlight.

Care must be taken to protect the system from shock, moisture damage and mishandling.

Do not place heavy objects on any of the system's components.

Remove batteries from any wireless remote controls if they are not going to be used for extended periods of time.

To assure proper operation and warranty protection, use manufacturer’s replacement components only.

For proper care of the video monitor and printer, please refer to the appropriate operator's manual (included in the original packaging).
# Trouble Shooting Guide for VetDock

<table>
<thead>
<tr>
<th>Problem</th>
<th>Main Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuzzy or out of focus picture</td>
<td>Extra sizing ring</td>
<td>Remove extra sizing ring</td>
</tr>
<tr>
<td></td>
<td>Damaged probe or dirty probe tip (dried cerumen). When changing adapters on camera, make sure space ring is removed with adapters.</td>
<td>Vigorously clean probe tip with an alcohol wipe</td>
</tr>
<tr>
<td>No picture on flat screen monitor</td>
<td>Short in VGA cable. Monitor not set to correct video input. Monitor not turned on.</td>
<td>Replace VGA cable. Push source button on monitor to correct video input.</td>
</tr>
<tr>
<td>No input signal</td>
<td>Camera/Control source not turned on.</td>
<td>Check all connections</td>
</tr>
<tr>
<td>Can't freeze picture</td>
<td>Printer not on Foot switch not plugged in</td>
<td>Turn on printer (Plug in foot switch)</td>
</tr>
<tr>
<td>No light from probe tip</td>
<td>Light source not on Bulb burnt out Reastadt switch on VetDock turned off.</td>
<td>Turn on light source (Replace bulb) Push in reastadt button</td>
</tr>
<tr>
<td>Picture is dark</td>
<td>Switch on back of camera in wrong position (old generation) Light source too low Camera is not white balanced</td>
<td>Move camera shutter switch to off position Turn up intensity of light source Press white balance button</td>
</tr>
<tr>
<td>Printer alarm constantly on</td>
<td>Mechanical failure</td>
<td>Call OtoPet-USA for service</td>
</tr>
<tr>
<td>Can't clean probe</td>
<td>Probe dropped and physically damaged</td>
<td>Call OtoPet-USA for service</td>
</tr>
<tr>
<td>Blue Screen</td>
<td>Camera not turned on. RCA-Video In not hooked up Twin lead cable not connected</td>
<td>Check power to camera and all connections</td>
</tr>
<tr>
<td>Dark Screen</td>
<td>VGA cable not plugged in. Monitor not set to correct video input selection. Monitor not turned on. Digitizer not turned on.</td>
<td>Check all connections</td>
</tr>
</tbody>
</table>

**Note:** Refer to Wiring Diagram For Placement Locations
This guide was designed to assist you in diagnosing minor problems. Should service be needed, please call OtoPet-USA for Technical Support Monday-Friday, EST 9:00 a.m.-5:00 p.m. at 301-365-0192.

**Limited Warranty**

OtoPet-USA, Inc. warrants the OtoPet-USA Video VetDock System to be free from defects in material and workmanship for one year from the time of purchase. If this system fails to perform as specified during this period, the purchaser is responsible for calling OtoPet-USA at (301) 365-0192. The company’s representative will advise the owner to either return specific components or the entire system to:

OtoPet-USA  
8909 Iverleigh Court  
Potomac, MD  20854

OtoPet-USA will repair or replace any defective parts, fully test and calibrate the system and/or components and ship the system promptly back to the owner. There is no cost for this warranty service, provided the system is one year old or less and has not been misused, abused, or damaged. Such damage includes, but is not limited to, dropping, exposure to excessive heat (greater than 100 degrees F), and water/liquid damage. Repair or replacement of the system as provided under this warranty is the sole and exclusive remedy of the purchaser. OtoPet-USA shall not be liable for any consequential or incidental damages, or for breach of any express or implied warranty. Except to the extent of applicable law, any implied warranty, merchantability or fitness of this product is limited to the duration of this warranty.

**OtoPet-USA will, at its discretion, service and repair out of warranty components at the purchaser's request, charging for parts and labor as necessary.**
Additional Support Is Available Via Our Customer Support Line 301-365-0192 and at tech@otopet-usa.com