

# Vividia® Ablescope® Digital Articulating Inspection Camera Borescopes

## User Manual

### Models:

VA-400 v5 USB Digital **Rigid** Articulating Borescope

VA-400R USB Rotational Rigid Articulating Borescope

VA-400i Bundle: Direct Connection to iPhone iPad with U2i box

VA-400W Bundle: Wireless Connection to iPhone iPad with W03B wifi box

VA-980 v5 USB Digital **Semi-Rigid** Long Articulating Borescope

VA-800R USB Rotational **Flexible** Articulating Borescope

### Optional Accessories:

W03B WiFi Wireless Box for USB to iPhone iPad Android devices

U2i Direct Box for USB to iPhone iPad Android

VA-400 v5 Rigid  
VA-400R



VA-800 v5; VA-800R  
VA-980 v5



W03B WiFi Box



U2i Conversion Box



Metal Package Box

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### Message from Vividia Technologies and Ablescope:

Dear Customer, thank you for your business. You can find product details, software, APPs, user's guides, how-to videos and more related information on our website, [www.vividia-tech.com](http://www.vividia-tech.com), and our YouTube channel. Please read this user guide carefully before you use Vividia Ablescope Inspection Camera Borescopes Videoscopes Endoscopes. We highly recommend you watch our short how-to videos on **YouTube** before you use these carefully crafted borescopes. You can call us to get technical support. We also offer custom design and manufacturing for borescopes. Please contact us if you have special needs or unique requirements for inspection cameras.

\*Some details of products may be changed slightly for improvement without notice.



## 1. Introduction of Vividia® Ablescope® Digital Articulating Borescopes

**Vividia® Ablescope®** USB Digital Articulating Borescope Inspection Camera Videoscopes are designed for visual inspection jobs where the area to be inspected is inaccessible by other means. The borescope uses a miniature video camera at the end of long tube. The end of the probe camera has bright white LED lights which makes it possible to get a very clear view, take good quality photos or capture videos deep within equipment, engines, cylinders or other dark inside spaces.

There are many applications for Vividia® Ablescope borescope inspection cameras. Here are some of them:

- Aviation airplane engine maintenance/inspection
- Gas cylinder/tank inspection
- Tube and pipe inspection
- Air conditioner and vacuum systems inspection
- Safer and locker inspection
- Instrument, mechanical and equipment repairs
- Automotive, boat, truck, motorcycle engine inspection
- Music instrument inspection and repair, like violin, cello, piano, horn etc.
- Electronics and electric equipment inspection and repairs

### Models and Bundles

- |  |           |
|--|-----------|
| 1. <b>VA-400 version 5 (2022)</b>                              | VA-400 v5 |
| 2. VA-400i Bundle for iPhone iPad Android direction connection | VA-400i   |
| 3. VA-400W Bundle for iPhone iPad Android wireless connection  | VA-400W   |
| 4. <b>VA-400R Rotational model</b>                             | VA-400R   |
| 5. VA-800 version 5 (2022)                                     | VA-800 v5 |
| 6. <b>VA-980 version 5 (2022)</b>                              | VA-980 v5 |
| 7. VA-800R (2022)  | VA-800R   |

## 2. Vividia Ablescope USB Borescopes and Bundles



### 2.1 Features of Vividia Ablescope Digital Articulating Borescopes

1. Articulation bendable angle: 0° to 180° adjustable continuously
2. Very easy operation by one hand hold and just pushing down the release button by bending the thumb to adjust the articulation angle
3. The articulation angle can be locked/unlocked at any degree by open/close the locker
4. Very small bending radius

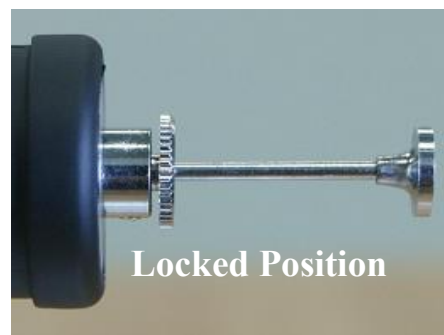
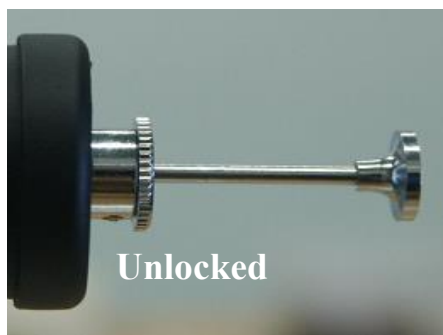


5. High brightness LED illumination
6. Long depth of field from 5mm to 4000mm
7. Work with: Windows XP, 7, 8, 10, 11, Mac, Chromebook, Android plug & play
8. High temperature protection by auto shutting down @ 150°F or above.
9. With a Wi-Fi box, one can connect the borescopes to iPhone, iPad, Android devices.
10. With a U2i box, one can use VA-400 v5 and VA-980 v5 on iPhone iPad by direct connection.

## 2.2 Bendable Articulation Operations

Watch our how-to videos on YouTube by searching “Vividia Ablescope”

1. How to bend the articulation see right photo: The release button and the locker are worked together. Just push down the release button by the thumb to bend the articulation to a proper angle from 0° to the 180° back and forth.
2. How to lock the articulation angle, (**Note:** we have improved borescope design and removed locking functions to avoid unnecessary damages). There is a locker at the down place of the release button you can see the knurling on the round edge. Turn the locker anticlockwise to open the function. Push down the locker and turn the locker clockwise to close the function. **Some models do not have the locking feature. (No-locker versions)**
3. Portrait of the image: The direction of the USB cable indicates the portrait position of the image
4. At the end of the borescope there are 6 high light white LED around the lens to provide illumination. To adjust the light user can turn the wheel on the dimmer on USB cable. The LED lights will be hot after a while. Please do not



touch the camera end by fingers.

## 2.3 Take pictures, videos and control the LED lights brightness

After connecting a Vividia Ablescope Borescope to a PC or suitable Android or Windows tablet, you can pre-view videos and do inspection. One can take pictures either by using software/APP or by pressing the snap button on the control unit. One needs to use software or APP to record videos. Long press the button to

change the LED lights brightness, and short press the button to take a picture with the appropriate software.



## 2.4 Software download, Installation, and Use

Vividia™ Ablescope® USB Articulating Borescopes can be used on Windows, Mac, Linux computers, also can be used on Android devices through OTG connection.

### 2.4.1 For Windows (XP/Vista/7/8/10/11) Users:

Visit our web pages, [www.vividia-tech.com](http://www.vividia-tech.com); and/or [www.oasisscientific.com](http://www.oasisscientific.com) to download the software and menu: Many other USB camera software can be used.

App software for PC: **Vividia Ablescope** (with measurement), **Digital viewer**

Menu: Quick use guide of ehe1.exe or oasis.exe

Menu: User Guide Vividia™ Ablescope® Articulating Borescope

Note: Vividia Ablescope Borescopes are UVC cameras and can be used by many other software of UVC digital cameras

### 2.4.2 For Mac Users:

You can use **Photo Booth** or other Mac USB webcam software, such as “**digital viewer**” for Mac, “**Quick Camera**” (free to try). Find more information from our website [www.vividia-tech.com](http://www.vividia-tech.com) and [www.oasisscientific.com](http://www.oasisscientific.com) to download related software.

### 2.4.3 APPs for Android devices connected with OTG cable:

Download and install **USB Camera, OTG View, CameraFi, or MScopes for USB Camera / Webcam, or Endoscope Camera** from Google Play Store or [www.pureapk.com](http://www.pureapk.com).

Note: Some new models of Android phones need **MScopes app**.

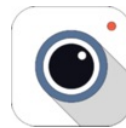
Menu: Connecting to Android Devices through OTG Adaptor



#### 2.4.4 For iPad, iPhone and Android phones and tablets users through WiFi Box (Sold separately, WiFi Converter)

Download and install right app from Apple' s APP Store for the WiFi box model. For Android devices, download the same APP from Google Play Store or our website [www.vividia-tech.com](http://www.vividia-tech.com) and [www.oasisscientific.com](http://www.oasisscientific.com).

**Connect iPad iPhone through WiFi Box: Vividia Ablescope WiFi Converter** for iPads and iPhones is designed for customers who want to use our Vividia™ Ablescope® articulating borescopes (Models: VA-400, UV-400, VA-800, VA-920, VA-980 and VA-9150) and microscopes (Model: V1-PS, V2, and V2-S) with their iPhone and or iPad. It works with UVC (USB Video Camera) that has MJPEG format output. **WiFi Box** convert the USB camera signals into a WiFi hot point, and iPad, iPhone or Android devices with WiFi functions can connect to and one can use our free APPs ( "AirBox -Vividia Ablescope" , or "WiFi image" ) to see preview live images, take pictures and record videos.



#### 2.4.5 VA-400i and VA-980i Bundle for direct iPhone iPad and Android phones and tablets through USB cables



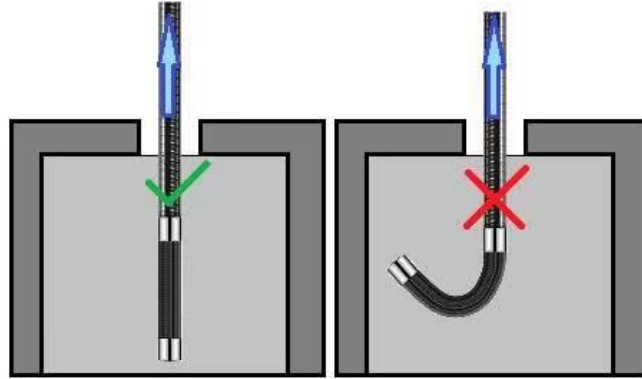
VA-400i and VA-980i are the bundles of U2i box and Ablescopes. One can directly connect VA-400i and VA-980i to iPhone iPad with "USee" app, which can be downloaded from Apple app store.

Download and install the app, "**USee**" , from Apple' s APP Store for the VA-400i and VA-980i model. Make sure the U2i box is fully charged. Connect the borescope and the U2i box and your iPhone or Android phone. Turn on the U2i box, and open the "**USee**" app.

#### 2.5 Very Important Notice

Warning: Please do not **bend the camera tip by force** and at **high temperature**.

When a user finishes inspection and take the bended borescope out from a small opening, user needs to make sure the articulation part is at the straight position. DO NOT take the scope out by force and it would damage the articulation assembly. Product quality warranty will not cover the damages caused by misuse, abuse and impropriate use. You can watch the application video on YouTube, search "Vividia Ablescope" .



Do not use the borescope at temperatures higher than 140°F. If the temperature is higher than 140°F, the borescope will shut down automatically and the LED lights will flash. You need to take the probe out and cool the camera before you can use the camera again.

## 2.6 General Notes & Safety Precaution

1. The borescope should be used under 60°C (140°F). High temperature can increase video noise, even damage the camera sensors and electronics.
2. Do not immerse the cable camera in oils, water, gasoline, or other fluids.
3. Pull out the borescope slowly and carefully, remember to unlock the cable camera first. Brunt force can break the bending camera.
4. Clean the lens with clean, soft fabric and/or Q-tips with alcohol. Dirty lens glass can greatly affect image quality.
5. Caution: Never use force to bend the articulating camera. Unlock the articulating camera by pressing the locking wheel and turn clockwise.
6. Use high quality OTG cable and USB extension cable when needed. And make sure the connection is tight and secure. This will affect the image quality.
7. A phone/tablet case could affect OTG cable connection in some cases. Please remove the case if needed.
8. Do not disassemble the borescope, especially the camera, articulation assembly and handle.



9. Avoid moisty environment, temperature shock and extreme temperatures. Dry surroundings help the life of the products.
10. Avoid dropping, violent vibrations, strong collision, or distortion.
11. Keep the device away from chemicals, explosive substances, and fire hazards.

### 3. Troubleshooting & FAQ

**Question 1: “The borescope is stuck; I cannot bend the camera. What should I do?”**

Answer: Please do not use force to bend or articulate the camera. You simply need to unlock the camera probe by pressing down the locking wheel under the shutter release cable pin can. Watch our YouTube videos on this by search “Vividia Ablescope” on YouTube website.

**Question 2: “What software should I use with Windows system (Windows 7/8/10/11 etc.)?”**

Answer: For Windows system, the most convenient app is the built-in Windows “camera” . We also have free software “ehe1.exe” or “oasis.exe” . You can download the software from our website, [www.vividia-tech.com](http://www.vividia-tech.com). You can also use other free USB webcam software, like “Digital Viewer” , “Smart Camera” etc. You can find more information from [www.oasisscientific.com/downloads](http://www.oasisscientific.com/downloads).

**Question 3: “Can I use Vividia Ablescope borescopes in water, oil or gasoline?”**

Answer: No. The Vividia Ablescope borescopes are not designed to be immersed in water, oil, gasoline or other liquids or mixtures of fluids. The camera could be damaged.

**Question 4: “Can I use Vividia Ablescope Borescopes for high temperature applications?”**

Answer: The working temperature of Vividia Ablescope borescopes is from 0°C to 60°C. Please do not use the borescope to hot engines or other high temperature environments. The high temperature can increase video noise, and damage the camera sensor and electronics.

**Question 5: “Is my Android phone or tablet compatible with Vividia Ablescope borescopes through OTG cable connection?”**

Answer: Not all Android phones and tablets can be used with Vividia Ablescope borescopes with OTG cable connection. You can find a list of compatible and non-compatible devices on our website [www.vividia-tech.com](http://www.vividia-tech.com). (We cannot guarantee the Android devices will work with our borescopes since they are many models, and each model can have internal changes very quickly by manufacturers. We found that many cheap small tablets do not work with USB borescopes due to lacking of OTG video function). We can guarantee that the Phone and Tablets we supply will work with Vividia Ablescope borescopes. With a WiFi box, you can connect Vividia Ablescope borescopes to more

smart phones and tablets, including both Android and iOS (iPhones, iPads) systems.

**Question 6: “Can I use Vividia Ablescope borescopes with my iPhone and iPad?”**

Answer: No and yes. One cannot directly connect Vividia Ablescope Inspection Cameras to an iPhone or iPad through a cable. But with our WiFi box (Model: **W03 wifi box**) or **U2i** conversion box, you can link Vividia Ablescope borescopes to iOS devices, like iPhones and iPad. You need to download free APP “WiFi Image” or “USee – Camera” from Apple’ s app store. Visit our website [www.vividia-tech](http://www.vividia-tech) to find out details. One potential issue with WiFi connection is that the video data transfer rate is limited depending on the wireless environments, which may cause slow video refresh rate. The problem of the direct wire connection with U2i box is that there are several wires to make connections.

**Question 7: “Can I zoom in on my subject?”**

Answer: Depending on the software or APPs you use, you can digitally zoom in. There is no optical zoom for Vividia Ablescope borescopes. Usually when you move borescope close to an abject, you will see larger and clearer image in certain focus range.

**Question 8: “How do I clean my scope?”**

Answer: Use clean and soft fabric with alcohol or lens cleaning fluid. The protective rubber sleeve can be changed if it is dirty or broken.

**Question 9: “Does this work on Amazon Kindle Fire or other types of non-Android tablets?”**

Answer: Vividia Ablescope borescopes do not work on Amazon Kindle Fire. Borescopes work on Windows tablets. Please visit our website, [www.vividia-tech.com](http://www.vividia-tech.com), for more information.

#### **4. Warranty**

There is limited product quality warranty of one year since the purchase date from the manufacturer. Product accessories and spare parts are not in warranty.

#### **5. About Vividia Tech and Ablescope**

Vividia Technologies and Ablescope are dedicated to developing and marketing innovative, affordable products to meet the needs of our customers.

### **Vividia Technologies**

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Greenville, SC

USA

**6. Distributor Information:**

Distributor Name:

Distributor Contact information:

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