VIVIDIA VA-980

Vividia Ablescope VA-980 USB Digital Inspection Camera Borescope User Manual

Model: VA-980

1. INTRODUCTION AND OVERVIEW

The Vividia Ablescope VA-980 is a semi-flexible USB digital inspection camera borescope designed for detailed visual inspection in hard-to-reach areas. It features a unique 180-degree articulating probe, allowing for versatile viewing angles. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your VA-980 borescope.

Figure 1: The Vividia Ablescope VA-980 borescope with its semi-flexible probe.

2. PRODUCT FEATURES

- **180-Degree Articulation:** The probe offers a continuously adjustable bendable angle from 0° to 180°, which can be locked at any desired angle. This allows for easy adjustment by pushing down a release button with the thumb.

- **Semi-Rigid Probe:** The flexible cable length is 75cm (29.5 inches) and is semi-rigid, allowing it to be bent and shaped for specific inspection requirements.

- **Compact Probe Diameter:** The probe has an 8.5mm diameter, suitable for accessing small openings like spark plug holes.

- **Integrated LED Illumination:** Equipped with 6 white LED lights for bright illumination in dark environments.

- **Fixed Focus:** The focal distance ranges from 3cm to 40cm.

- **High-Quality Sensor:** Features a CMOS sensor with a resolution of 640x480 pixels and an optical lens view angle of 60°.

- **Versatile Connectivity:** Connects to PCs, Macs, and Android devices via USB. An OTG cable is included for Android micro USB ports. For iPhones/iPads, a separate WiFi adapter is required.

- **Operating Temperature:** Designed to operate in temperatures ranging from 10° to 50°C.

- **USB Cable Length:** The main USB cable is 200cm long.

Depress with thumb to adjust viewing angle from 0-degrees to 180-degrees.

Turn wheel to lock and unlock the viewing angle.

Viewing angle adjusts from 0-degrees to 180-degrees.

Figure 2: Demonstrating the 180-degree articulation feature of the probe.

3. SETUP INSTRUCTIONS

3.1 Connecting to a Computer (PC/Mac)

1. Download the necessary viewing software for your operating system. Refer to the manufacturer's website for the latest software.
2. Plug the borescope's USB connector directly into an available USB port on your computer.
3. Launch the downloaded software. The borescope's video feed should appear.

3.2 Connecting to an Android Device

1. Ensure your Android device supports OTG (On-The-Go) functionality.

2. Download a compatible USB camera application from the Google Play Store.

3. Use the included OTG cable to connect the borescope to your Android device's micro USB port.

4. Open the camera application. The borescope's video feed should be displayed.

3.3 Connecting to an iPhone/iPad

To connect the VA-980 to an iPhone or iPad, a separate WiFi adapter (sold separately or as part of a bundle) is required. Follow the instructions provided with the WiFi adapter for setup and connection.

Figure 3: Borescope connected to an Android smartphone for live viewing.

4. OPERATING INSTRUCTIONS

4.1 Adjusting the Articulating Probe

1. To bend the probe's tip, locate the release button on the handle.
2. Push down the release button with your thumb to adjust the viewing angle from 0 to 180 degrees.
3. To lock the viewing angle, turn the wheel located near the release button. Turn it in the opposite direction to unlock.

4.2 Shaping the Semi-Rigid Probe

The borescope's probe is semi-rigid. You can manually bend and shape it to navigate around obstacles or to achieve specific angles for inspection. Once shaped, it will retain its form during use.

4.3 Adjusting LED Brightness

The 6 white LED lights at the probe tip provide illumination. The brightness and intensity of these lights can be adjusted using the control dial or buttons on the borescope handle or through the connected software/app, depending on the model and software version.

4.4 Capturing Photos and Videos

Most compatible software and applications allow you to capture still images and record video footage. Look for a dedicated button on the borescope handle or within the software interface to initiate photo or video capture. These files can be saved for record-keeping or sharing.

Video 1: An official product video demonstrating the features and operation of the Vividia Ablescope VA-980, including articulation, connectivity, and image capture.

5. MAINTENANCE

5.1 Cleaning the Probe and Lens

- After each use, especially in dirty or oily environments, gently wipe the probe and camera lens with a soft, lint-free cloth.
- For stubborn grime, dampen the cloth with a small amount of isopropyl alcohol. Avoid harsh chemicals or abrasive materials that could damage the lens or probe.
- Ensure the probe is completely dry before storage.

5.2 Storage

- Store the borescope in its original case or a protective pouch to prevent damage.
- Avoid kinking or sharply bending the semi-rigid probe during storage. Gently coil it if necessary.
- Store in a cool, dry place away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

6.1 No Image Displayed

- **Check Connections:** Ensure the USB cable is securely connected to both the borescope and your device/computer.
- **Software/App:** Verify that the correct viewing software or application is installed and running. For Android, try different compatible USB camera apps if the recommended one does not work.
- **Device Compatibility:** Confirm your device (PC, Mac, Android) meets the minimum system requirements and supports USB camera input. For Android, ensure OTG functionality is enabled.

6.2 Poor Image Quality

- **Clean Lens:** A dirty lens is a common cause of blurry images. Refer to the Maintenance section for cleaning instructions.
- **Adjust Lighting:** Increase the LED brightness if the inspection area is too dark.
- **Focal Distance:** The borescope has a fixed focus range of 3cm to 40cm. Ensure the object being inspected is within this range for a clear image.
- **Resolution:** The native resolution is 640x480 pixels. While some viewing software might upscale, the optical resolution remains 640x480.

6.3 Articulation Mechanism Not Working Smoothly

- **Check for Obstructions:** Ensure no debris or foreign objects are impeding the articulation mechanism.
- **Gentle Operation:** Operate the articulation button and wheel gently. Avoid forcing the mechanism.

7. SPECIFICATIONS

Model Number	VA-980
Probe Diameter	8.5mm
Flexible Cable Length	75cm (29.5 inches)
Articulation Angle	0° to 180° (continuously adjustable)
Bending Radius	30mm
Illumination	6 white LED lights (adjustable brightness)
Focal Distance	3cm – 40cm (fixed focus)
Sensor Type	High-quality CMOS sensor
Resolution	640x480 pixels
Optical Lens View Angle	60°
Power Supply	Via PC USB port or Android smartphone via OTG cable
Working Temperature	10° to 50°C
USB Cable Length	200cm
Item Weight	3.89 pounds
Package Dimensions	15.3 x 12.1 x 4.6 inches
Manufacturer	Oasis

8. WARRANTY AND SUPPORT

For warranty information and technical support, please contact the seller or the manufacturer, VIVIDIA. It is recommended to retain your proof of purchase for any warranty claims. Some users have reported varying experiences with customer service; direct communication with the seller is often the most effective first step for support inquiries.