

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



WIFI VIDEO BORESCOPE

UNPACKING

After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. If any damage is observed, a shipping damage claim must be filed with carrier. Do not use Video Borescope if broken, bent, cracked or damaged parts (including labels) are noted. Any Video Borescope that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the Video Borescope was subjected to a shock load (a load that was dropped suddenly, unexpectedly, etc.) immediately discontinue use until it has been checked by a factory authorized service center.



WARNING

The following safety information is provided as guidelines to help you operate your Video Borescope under the safest possible conditions. Any tool or piece of equipment can be potentially dangerous to use when safety or safe handling instructions are not known or not followed. The following safety instructions are to provide the user with the information necessary for safe use and operation. Please read and retain these instructions for the continued safe use of your service system. Failure to follow instructions listed below may result in serious injury. In addition, make certain that anyone that uses the equipment understands and follows these safety instructions as well.



WIFI VIDEO BORESCOPE

Thank you very much for choosing an OEMTOOLS Product!

For future reference, please complete the owner's record below:

Model: _____ **Purchase Date:** _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it. This machine is designed for certain applications only. OEMTOOLS cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted OEMTOOLS to determine if it can or should be performed on the product.



IMPORTANT INSTRUCTIONS AND SAFETY RULES

1. Know your tool. Read this manual carefully. Learn the tool's applications and limitations, as well as, potential hazards specific to it.
2. Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
3. Keep children away. All children should be kept away from the work area. Never let a child handle a tool without strict adult supervision.
4. Do not operate this tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to operate.
5. Use safety equipment. Eye protection should be worn at all times when operating this tool. Use ANSI approved safety glasses. Everyday eyeglasses are NOT safety glasses. Dust mask, non-skid safety shoes, hard hat or hearing protection should be used in appropriate conditions.
6. Wear proper apparel. Loose clothing, gloves, neckties, rings, bracelets or other jewelry may present a potential hazard when operating this tool. Keep all apparel clear of the tool.
7. Don't overreach. Keep proper footing and balance at all times when operating this tool.
8. Check for damage. Check your tool regularly. If part of the tool is damaged it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.
9. Keep away from flammables. Do not attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.
10. Store idle tools out of the reach of children and untrained persons. Tools may be dangerous in the hands of untrained users.
 - Maintain tools with care.
 - Keep tools dry and clean.
 - Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
 - Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation.
 - If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
 - Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
 - Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
 - When servicing a tool, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
 - Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use this product in a damp or wet location.
 - Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEM for a replacement.
 - Keep the handle dry, clean, and free from brake fluid, oil, and grease.
 - Before use, read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's service manual. It is beyond



WiFi Video Borescope

the scope of this manual to properly describe the correct procedure and test data for each vehicle.

- Always perform vehicle service in a properly ventilated area. Never run an engine without proper ventilation for its exhaust. Stop work and take necessary steps to improve ventilation in the work area if you develop momentary eye, nose, or throat irritation as this indicates inadequate ventilation.
- Engine parts that are in motion and unexpected movement of a vehicle can injure or kill. When working near moving engine parts, wear snug fit clothing and keep hands and fingers away from moving parts. Keep hoses and tools clear of moving parts. Always stay clear of moving engine parts. Hoses and tools can be thrown through the air if not kept clear of moving engine parts. The unexpected movement of a vehicle can injure or kill. When working on vehicles always set the parking brake or block the wheels.
- Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
- The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
- For safety purposes and the prevention of damage to expensive components it is advised that the user have an understanding of basic automotive repair and a working knowledge of automotive systems.
- We believe the information contained herein to be reliable. However, general technical information is given by us without charge and the user shall employ such information at his own discretion and risk. We assume no responsibility for results or damages incurred from the use of such information in whole or in part. Always refer to specific instructions and technical information supplied by vehicle manufacturer.
- The manufacturer declines any and all responsibility for damage to vehicles or components if said damage is the result of unskillful handling by the operator or of failure to observe the basic safety rules set forth in the instruction manual.

DISPOSAL

At the end of the useful life of the Video Borescope, dispose of the components according to all state, federal, and local regulations

PURPOSE

The OEM Tools WiFi Video Borescope is a unique instrument that wirelessly streams high-quality video from a camera at the tip of a 3-foot long probe to the screen of a nearby iPhone®, iPad® or Android™ smartphone or tablet computer or iPod touch® device. Typical applications include inspection of hard-to-reach or hard-to-see areas like crowded engine compartments, equipment enclosures and HVAC ductwork.

To receive the video, an iPhone, iPad or iPod touch must install and run a free app called Videoscope2, downloadable from the iTunes® App Store. Similarly, an Android device must install and run the Android version of the same free app (called Videoscope) after downloading it from the Google Play Store.

Soft buttons on each app allow the user to record inspection video clips, take snapshots of the video stream, and store and view the media files on the iPhone, iPad, iPod touch or Android device. Saved files can be viewed immediately. All transfers between the WiFi Video Borescope and the iPhone/iPad/iPod touch or Android device are wireless, via a local WiFi hot spot without Internet access generated by the instrument.

Includes three useful probe tip accessories (a 45° mirror, a pickup hook and a magnetic pickup)



WIFI VIDEO BORESCOPE

PRODUCT SPECIFICATIONS

Compatible With	iPad, iPad2, iPad3, iPad Air, iPad Mini, iPhone3GS, iPhone4, iPhone 4S, iPhone5S, iPhone5C, iPod touch (3rd, 4th, 5th generation) running iOS4.0 or higher; any device running Android 2.3 or higher
WiFi Attributes	IEEE802.11b/g @ 54Mbps or higher throughput
WiFi Range	60 ft. (18m), max (unobstructed)
Camera Lighting	4 white LEDs
Probe Diameter	0.28 in. (7.2mm)
Camera Head Diameter	0.35 in. (9mm)
Camera Depth of Field	0.5 in. to 5 ft. (13mm to 1.52m)
Probe Length	36 in.
Dust/Water/Oil Resistance Rating	IP67
Operating Temperature	32° to 104°F (0° to 40°C)
Power Source	(4) "AA" Alkaline batteries (not included)
Camera Field of View	38° vertical, 50° horizontal

iTunes®, iPhone®, iPad®, iPod® and iPod touch® are trademarks of Apple, Inc., registered in the U.S. and other countries. Android™ is a trademark of Google Inc.



WIFI VIDEO BORESCOPE

Figure	Description
1	(Snapshot) button
2	^ button. Increases brightness of four camera lighting LEDs
3	V button. Decreases brightness of four camera lighting LEDs
4	WiFi status LED. Flickers blue when Videoscope is transmitting probe video to appenabled device
5	ON/OFF switch (on left side)
6	Power on LED. Glows solid red when Videoscope is powered by adequately charged batteries. Begins flashing red when batteries' charge drops below 3.5VDC.
7	Battery compartment (on back)
8	Grip
9	Camera-tipped Probe
10	Camera Head

NOTE

Not all components of the Video Borescope are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.

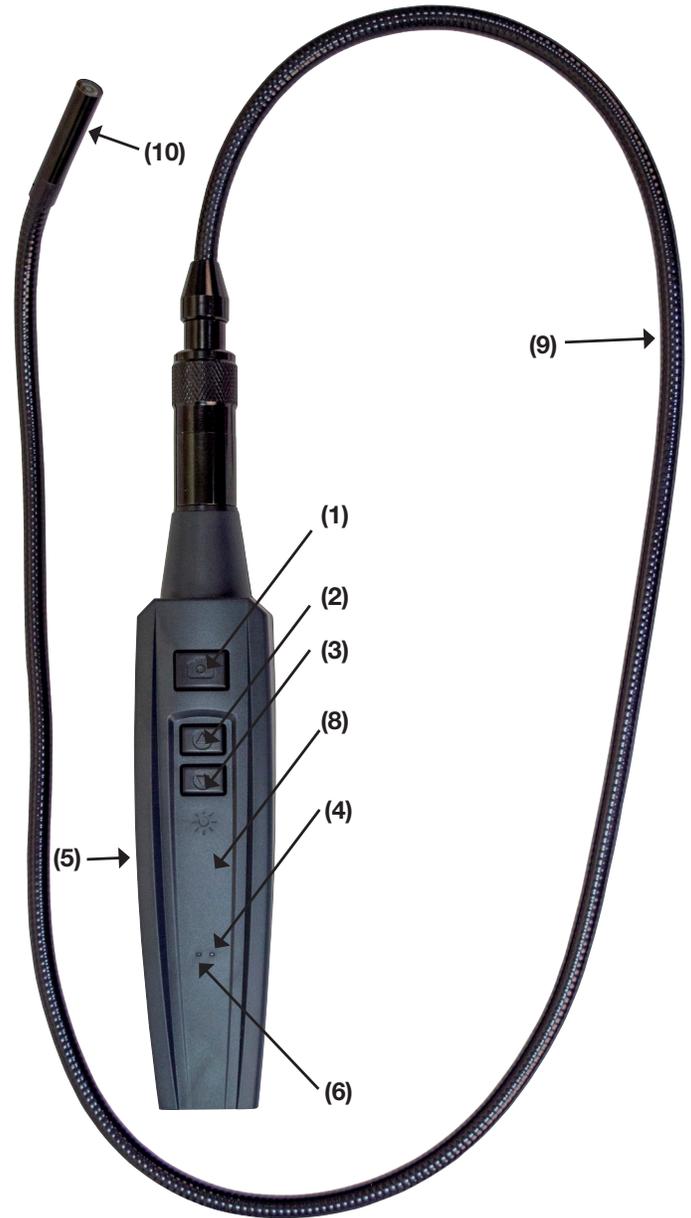
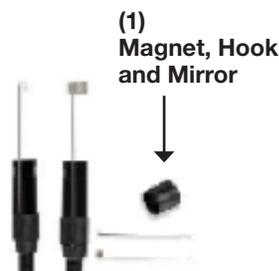


Figure	Description	Quantity
1	Magnet, Hook and Mirror	1
2	Manual (Not Shown)	1

NOTE

Not all components of the Video Borescope are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.





WIFI VIDEO BORESCOPE

⚠ WARNING

Always wear safety glasses and gloves!

OPERATING INSTRUCTIONS

⚠ WARNING

- Never insert probe into a space known or suspected to contain live electric wiring.
- The Video Borescope is intended for industrial applications only. Do not use it for personal or medical use in any way.
- Never insert an attached probe into any flammable gas or liquid including in any storage container or fuel tank designed to store flammable gas or liquid.
- Do Not disassemble the instrument. Doing so creates a potentially fatal electrical hazard (and voids the warranty as well).
- Do Not expose the tool to rain or wet conditions. Water entering the tool will increase the risk of electric shock.
- Keep cord away from heat, oil, sharp edges or moving parts.

ACCESSORIES INSTALLATION

The three accessories include magnet, hook and mirror. All are attached to the imager head in the same manner. Hold the accessory and the imager head and slip the end of the accessory over the tip of the imager head.

Each accessory has a specific purpose:

- The 45° mirror lets the probe see around corners.
- The pickup hook lets you retrieve otherwise inaccessible items seen by the probe—for example, a wedding ring accidentally dropped down a sink drain.
- The magnetic pickup lets you retrieve lost or dropped metal objects—nuts and bolts, for example—located by the probe.

BASIC OPERATION

IMPORTANT: Always wear safety eye protection to protect your eyes against dirt and other objects. Follow operation instructions to reduce the risk of injury from electric shock, entanglement and other causes.

FOR WALLS: For inspecting the inside walls, be sure to shut off the circuit breaker to the whole house before using the Video Borescope.

FOR PIPES: If you suspect a metal pipe could contain an electric charge, have a qualified electrician to check the pipe before using.

FOR AUTOMOBILES: Be sure the automobile is not running during inspection. Metal and liquid under the hood may be hot. Don't get oil or gas on the imager head.

Set up the Video Borescope and work area according to these procedures to reduce the risk of injury from electric shock, entanglement, and other causes and prevent Video Borescope damage.



WIFI VIDEO BORESCOPE

1. Check work area for:

- a. Sufficient lighting.
- b. Do not work in area until flammable sources have been identified and corrected. The Video Borescope is not explosion proof and can cause sparks.
- c. Do not use the Video Borescope while standing in water.

2. Check the area and determine if the Video Borescope is the correct Video Borescope for the job.

- a. Check the access points to the area.
- b. Check if there is any electric power supplied to the area to be inspected.
- c. Check if the any liquids will be occurred during the inspection. The Image head and cable were waterproof to a depth of 10'. Greater depths may cause leakage into the imager head and cable and cause electric shock or damage the Video Borescope. The display unit is not waterproof and should not be exposed to wet conditions.
- d. Check if any chemicals are present, especially in the case of drains. Chemicals may damage the Video Borescope.
- e. Check the temperature of the area. The working temperature of the Video Borescope is between 32°F and 113°F.
- f. Check if any moving parts are present in the area.

3. Make sure the Video Borescope has been properly inspected.

4. Install the correct accessories for use in the appropriate application.

OPERATING PRECAUTIONS

1. Use the Video Borescope only as directed. Do not operate the Video Borescope unless the user's manual has been read thoroughly and proper training has been completed.
2. Do not immerse the Video Borescope.
3. Do not use excessive force to insert or withdraw the imager head and cable. This may result in damage to the Video Borescope or inspection area.
4. Do not use the imager head and cable to move items, clear pathways or clogged areas.
5. Do not eat or smoke while operating the Video Borescope. Use hot, soapy water to wash hands and other body parts exposed to drain contents after using the Video Borescope to inspect drains and other areas that may contain chemicals or bacteria, which will help prevent contamination with toxic or infectious material.
6. When the inspection is completed, carefully withdraw the imager head and cable from the inspection area, and take out the 4 AA dry batteries.
7. Maintain the Video Borescope with care. A properly maintained Video Borescope is less likely to cause injury.
8. Do not drop the Video Borescope. If the Video Borescope is dropped accidentally, check for damage and any other condition that may affect its operation.
9. Dry your hands before operating the Video Borescope or charging the battery.
10. Use appropriate personal protective equipment while handling and using the Video Borescope. Appropriate personal protective equipment always includes safety glasses and gloves, and may include latex or rubber gloves, face shields, goggles, protective clothing, respirators and steel toed footwear.
11. Protect against excessive heat. Keep the Video Borescope away from heat sources such as radiators, stoves or others that produce heat. Do not use the Video Borescope near moving machinery or areas where the temperature will exceed 113°F.



WIFI VIDEO BORESCOPE

12. Store the Video Borescope and all cables in a locked area out of the reach of children and people unfamiliar with Video Borescope.

SETUP INSTRUCTIONS

Note: App and Borescope instructions are subject to change without notice

Attach Probe

The Video Borescope's camera-tipped probe must be attached to the grip for the system to function.

To attach the probe:

1. Slide the metal collar of the probe's coupling back to expose the probe connector.
2. Line up the alignment key on the grip connector with the flat on the coupling.
3. Push the two ends together until they mate.
4. Tighten the connection by sliding the metal collar toward the grip and tightening it.

Install Batteries

The battery compartment is accessible from the lower back of the grip

To install batteries:

1. Use a Phillips-head screwdriver to loosen the single screw securing the battery compartment cover. Set the screw aside and take care not to lose it.
2. Lift the tab at the bottom of the cover to open the compartment. Set the cover aside.
3. Install four "AA" batteries in the compartment, using the polarity markings inside it as a guide.
4. Replace the battery compartment cover, snap it shut, and secure it by reinstalling and tightening the Phillips-head screw.

Downloading software / App

To download the free WiFi Borescope App that allows the use of the WiFi Borescope WiFi, enter your Apple App Store (For iPhone, iPad) or Google Play Store (For Android devices). Go into search and type "Videoscope 2" in apple store for apple device, Go into search and type "Videoscope" in Google play store for android phone. The App should be listed near the top. Click on App to download and install. If you do not have an account with Google or Apple please follow their instructions for signing up.



OPERATION

Viewing Video

1. Turn on the WiFi Borescope by moving the ON/OFF switch on the left side of the grip. The Power on LED on the top of the grip will glow solid red—unless the batteries are low on charge, in which case the LED will flash red. If the LED flashes red, change the batteries. Once the Power on LED begins glowing solid red, wait up to 30 seconds while the WiFi Borescope prepares to generate an ad hoc WiFi hotspot (without Internet connectivity).
2. On your WiFi networks screen the WiFi Borescope hot spot should appear in the list of available networks. The hot spot is named CAM XXXXX (XXXXX can be any number or letter). Touching the WiFi Borescope connects the device to the network, enabling wireless sync of video to a nearby iPhone, iPad, or any Android device (60ft range) running the WiFi Borescope App. Once connected to the WiFi Borescope network your device will no longer be connected to the internet until user disconnects it from the WiFi Borescope network. The first time you try to connect to the network, you will be prompted to enter the App's password (the default password is 123456789). Thereafter, you will not be asked for a password; the WiFi Borescope line will already have a check mark.
3. Click the Home button.
4. Locate the VIDEOSCOPE2 (for Apple/Google system) or VIDEOSCOPE (for Android system) icon among your Apps and touch it, the App will launch soon after.
5. To begin viewing live feed press the VIDEO icon in the bottom left corner.

TAKING PHOTOS, RECORDING VIDEO AND PLAYBACK

1. After enabling VIDEO, three icons will be enabled, SNAP-SHOT, RECORD, AND PLAYBACK, These buttons allow you to take photos, videos and view video playback. Videos and photos will automatically save to your smartphone or tablet device.



WIFI VIDEO BORESCOPE

2. To take photos press the SNAP-SHOT icon. Images will be saved directly to your device. To view images go to your device's image/photo gallery.
3. To take videos press the RECORD icon to start recording, press the STOP icon to end video recording. Videos will be saved directly to your device.
4. To view recorded video immediately press the PLAYBACK icon and select from a list of previous video recordings.
5. Since your device is connected to the Videscope network it will not have internet access. Therefore, to send short videos or photos immediately please do so via text message. Once disconnected from the Videscope network and user has reestablished internet connection; email can be used to send photos or videos.

CONTROL LAYOUT

Video and Network Settings

1. To adjust the WiFi Borescope App settings press the SETTING icon to gain access to the advance settings.
2. The WiFi Borescope WiFi Service Set Identifier (SSID) or password can be changed from this menu. The default WiFi SSID for the unit is WiFi Borescope and the default WiFi password is 123456789. You can change either one to any combination of letters and numbers that is at least eight digits long. Enter the new value in the appropriate field and click Apply. To restore to default value, click the Restore button. Also, video setting can be adjusted from this menu such as brightness, contrast, hue or saturation. To adjust move the slider left or right to make changes.

Using the Probe

You can insert a Borescope probe into an orifice (a hole in a wall or an engine's cylinder, for example) or into an inaccessible or hazardous area (the back of an equipment rack or an engine compartment, for example) to view components or environments that would otherwise be invisible. Insert the flexible-obedient probe head-on into an orifice or area as a first step. Then pull the probe out and adjust its bend one or more times until the camera in the tip is pointing directly at the target or area of interest. With the probe inserted, you can turn it until video appears right-side up.

NOTE: When in operation, the cable can be bent into a certain shape. (Do not kink the cable) This may help you operate the cable in confined areas.

Do not bend the probe more than 90° anywhere along its length.

Do not bend it more than 70° within 1 to 2 inches (25 to 50mm) of its camera tip.

Do not bundle the probe into a tight circle to store it.

MAINTENANCE

1. Make sure the power is OFF.
2. Clean any oil, grease or dirt from the Video Borescope. This helps prevent the Video Borescope from slipping from your hands.
3. Inspect the imager head lens for condensation. To avoid damaging the Video Borescope, do not use the Video Borescope if condensation forms inside the imager head. Let the water evaporate before using again.
4. Inspect the full length of the cable for cracks or damage. A damaged cable could allow water to enter the Video Borescope and increase the risk of electric shock.
5. Make sure the connections between the display unit and imager head and cable are tight. All connections must be properly assembled for the cable to be waterproof.
6. Turn on the power and make sure the splash screen and then the live screen are displayed
7. If the Video Borescope does not work properly after being turned on, please have the Video Borescope checked by a qualified technician. Any Video Borescope that cannot be controlled with the power button is dangerous and must be repaired.
8. Always store the Video Borescope in a well-protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements.
9. When maintaining, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.
10. Do not use acetone to clean the Video Borescope. Instead, use an alcohol swab.
11. Do not disassemble the tool beyond what is shown in the manual. Doing so will void your warranty.