Teslong TD300-8.5mm-1.5m

Teslong Two-Way Articulating Borescope (Model: TD300-8.5mm-1.5m) Instruction Manual

Comprehensive guide for setting up, operating, and maintaining your Teslong USB-C Endoscope Inspection Camera with 5FT Semi-Rigid Probe.

Product Overview	Setup	Operation	Maintenance	Troubleshooting	Specifications	Support

1. PRODUCT OVERVIEW

The Teslong Two-Way Articulating Borescope is a versatile inspection camera designed for detailed visual examination in hard-to-reach areas. It features a flexible probe with a camera tip that can articulate up to 210° in two directions, providing comprehensive viewing angles. The device connects directly to compatible USB-C mobile devices (iPhone 15/16, USB-C iPads, Android 8.0+ phones with OTG) for real-time viewing and recording via a dedicated app. Equipped with 1.0MP 1080p resolution and 8 adjustable LED lights, it delivers clear imaging in various environments. The 5-foot semi-rigid gooseneck cable offers both flexibility and stability for precise positioning. This tool is suitable for home repair, automotive diagnostics, HVAC, plumbing, and other professional or DIY inspection tasks.

Figure 1: Teslong Two-Way Articulating Borescope connected to a smartphone.

Your browser does not support the video tag.

Video 1: Official product demonstration of the Teslong USB-C Two-Way Articulating Borescope with Light, showcasing its features and ease of use.

2. SETUP GUIDE

2.1 Device Compatibility

The Teslong Two-Way Articulating Borescope is designed for direct connection to USB-C mobile devices. Ensure your device meets the following requirements:

- **iPhone:** iPhone 15/16 series and above.
- **iPad:** USB-C enabled iPad models.
- **Android:** Android 8.0+ phones with OTG (On-The-Go) functionality enabled.

Important: This device is NOT compatible with Lightning port-based iPhones/iPads, Windows PCs, or MacBooks.

Figure 2: Visual guide to USB-C device compatibility for the borescope.

2.2 App Installation

1. **Download the App:** Search for "Smart Endoscope" by Grus IoT in your device's app store (App Store for iOS, Google Play Store for Android) or scan the QR code provided in the product packaging.
2. **Install:** Follow the on-screen instructions to install the application.
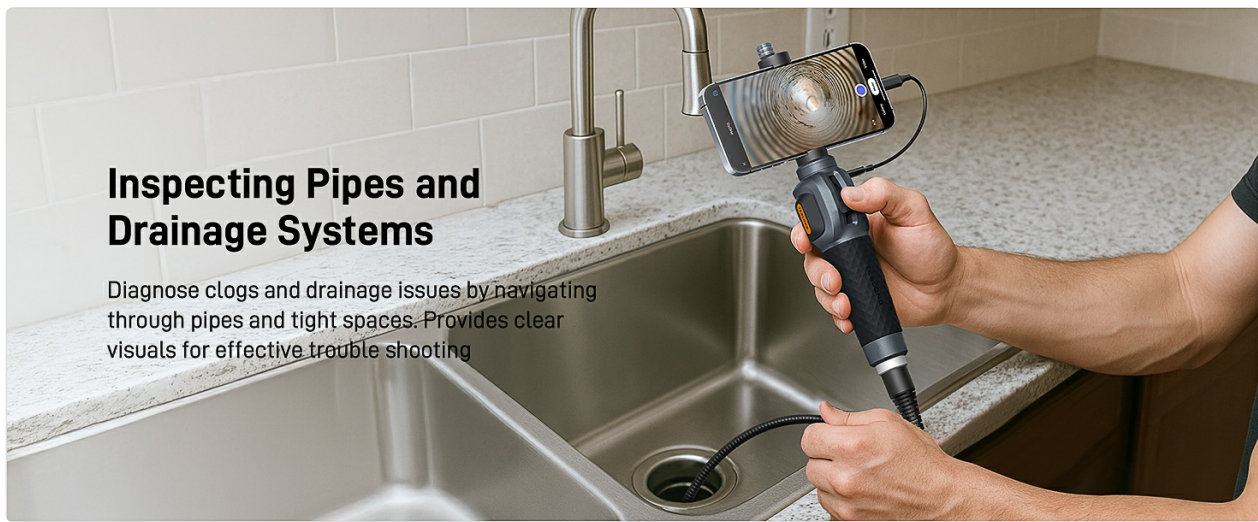
Figure 3: Step-by-step guide for app download and initial connection. For direct download, visit gto.so/smart-endoscope.

2.3 Connecting the Borescope

1. **Mount Phone:** Securely place your USB-C compatible smartphone into the adjustable phone holder on the borescope handle.

2. **Connect Cable:** Use the provided USB-C adapter cable to connect the borescope handle to your smartphone's USB-C port.

3. **Launch App:** Open the "Smart Endoscope" app.

4. **Grant Permissions:** If prompted, allow the app to access your device's camera and storage. Select "TD300" from the app's device list to establish the connection.

Figure 4: The borescope handle with a smartphone mounted and connected via USB-C, ready for use.

3. OPERATING INSTRUCTIONS

3.1 Articulating Probe Control

The borescope features a two-way articulating probe that allows for precise navigation and viewing. Use the joystick on the handle to control the direction of the camera tip. The tip can bend up to 210° in two directions, enabling inspection around corners and in confined spaces.

2-Way Articulation
Precision Inspection from Every Angle

0.33 inch

0.60 - 4.0 inch
Depth of Field

1.30 inch

0.53 inch

Maximum 210°
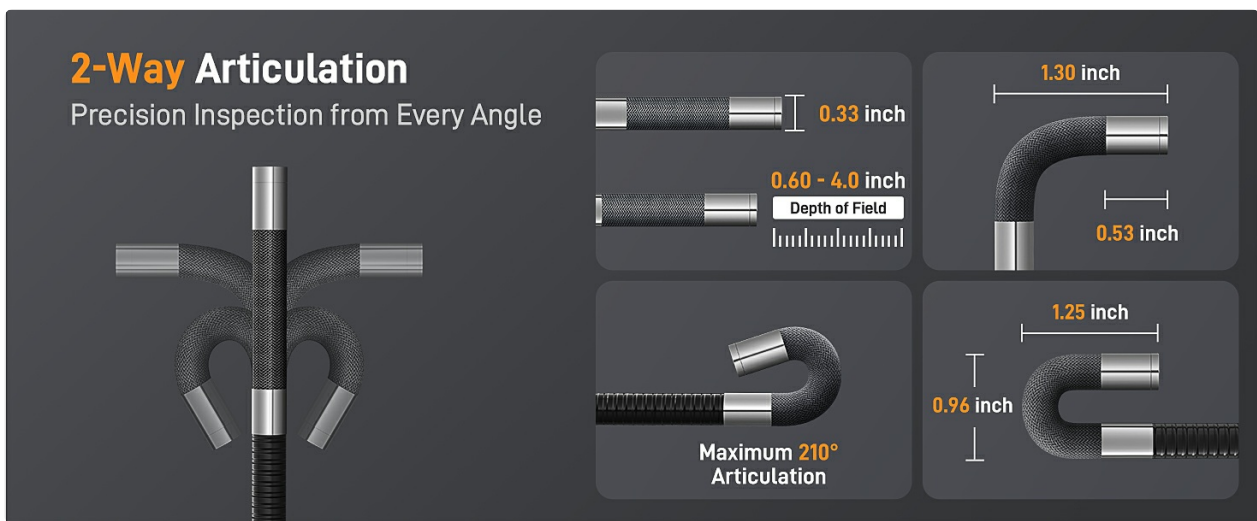Articulation

1.25 inch

0.96 inch

Figure 5: Illustration of the borescope's 2-way articulation capability, allowing the probe tip to bend up to 210 degrees for comprehensive inspection.

Effortless Control
Every Angle Uncovered

2-Way Articulation

Figure 6: The articulating probe navigating within a confined space, demonstrating its flexibility.

3.2 Adjustable Lighting

The camera tip is equipped with 8 brightness-adjustable LED lights to illuminate dark inspection areas. To adjust the brightness, long-press the shutter button on the handle. This action cycles through three brightness levels and an off state.

Figure 7: The borescope's camera tip showing the 8 adjustable LED lights and the IP67 waterproof rating.

3.3 Photo and Video Capture

Once the borescope is connected and the app is running, you can capture high-definition photos and videos directly to your connected smartphone. Press the photo button on the handle to take a still image. Use the video recording function within the app to capture live footage.

Figure 8: User operating the borescope, with the smartphone displaying a clear image from the camera tip.

3.4 Applications

The Teslong borescope is suitable for a variety of inspection tasks:
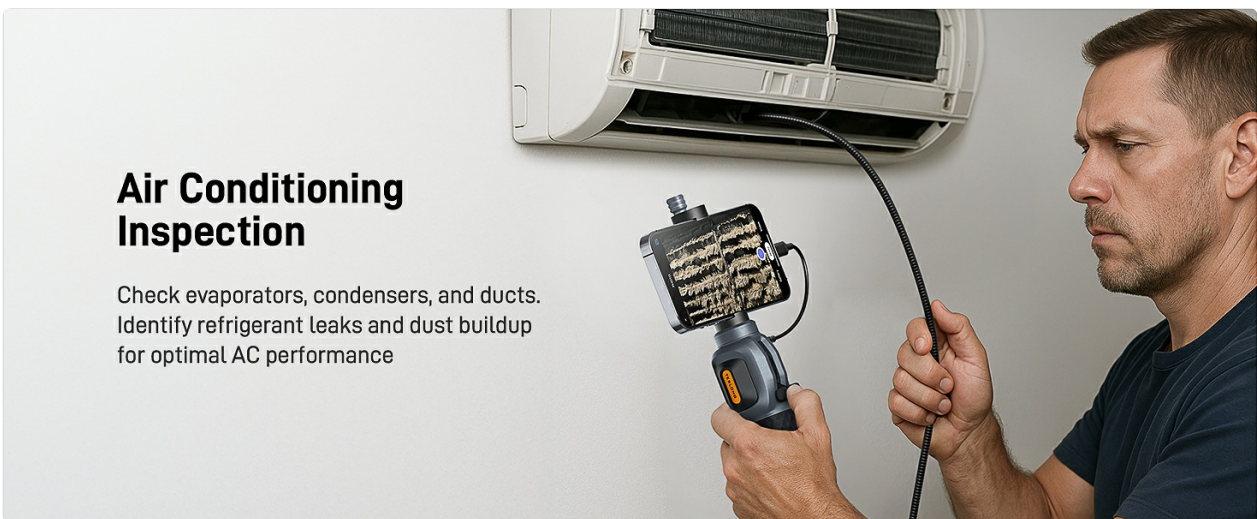
- **Automotive Repair:** Inspect engine cylinders, fuel tanks, and other vehicle components for wear, damage, or blockages.
- **Air Conditioning Inspection:** Examine evaporators, condensers, and ducts for refrigerant leaks or dust buildup.
- **Wall Inspection:** Check behind walls for wiring, plumbing, pests, or structural issues without invasive procedures.
- **Home Maintenance:** Troubleshoot plumbing clogs, inspect HVAC systems, or locate lost items in inaccessible areas.

Figure 9: Borescope in use for automotive engine inspection.

Figure 10: Borescope in use for air conditioning system inspection.
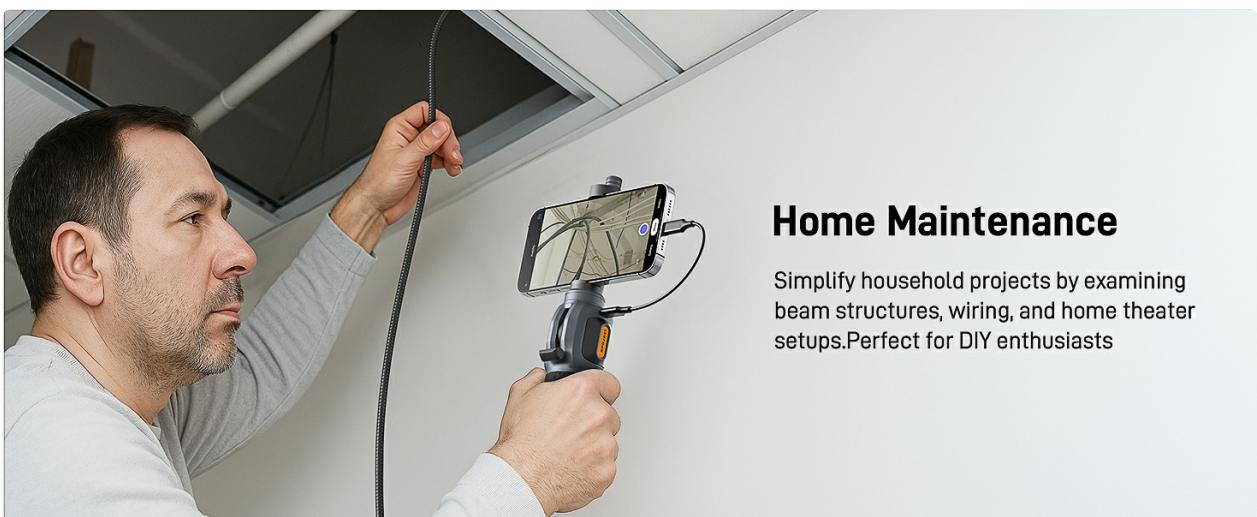
Figure 11: Borescope in use for inspecting pipes and drainage systems.

4. MAINTENANCE

4.1 Cleaning the Probe

The borescope probe is IP67 waterproof, allowing it to be used in wet environments. After use, especially in dirty or oily conditions, gently wipe the camera lens and probe with a soft, damp cloth. Avoid using abrasive

cleaners or solvents that could damage the lens or cable material.

Figure 12: The borescope's waterproof camera tip in a wet environment.

4.2 Storage

Store the borescope in a clean, dry place away from extreme temperatures and direct sunlight. Ensure the probe is coiled loosely to prevent kinking or damage to the internal wiring.
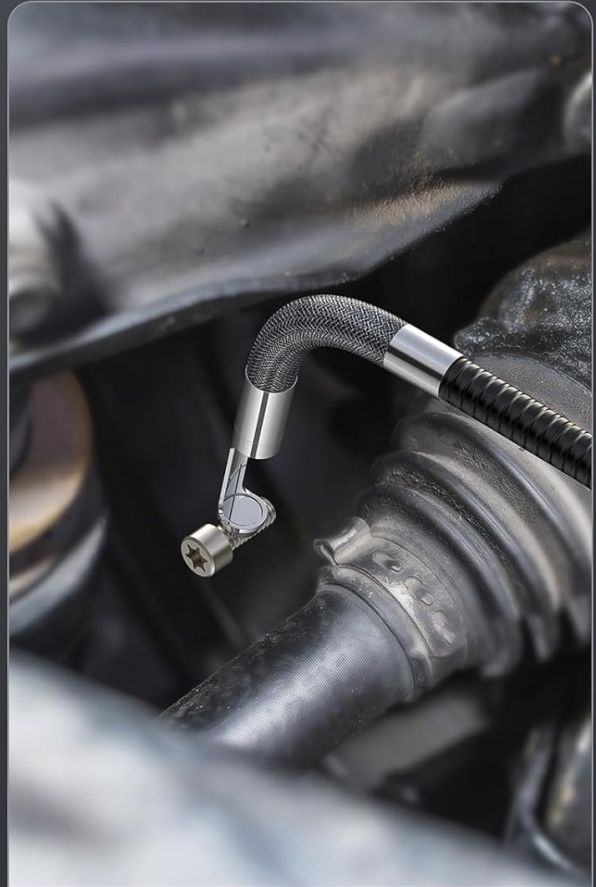
4.3 Accessories

The borescope includes useful accessories such as a magnet and a hook, which can be attached to the camera tip for retrieving small metallic objects or navigating obstacles.

Figure 13: The magnet and hook accessories for the borescope, useful for various tasks.

5. TROUBLESHOOTING

Problem	Possible Cause	Solution
No image on screen / Device not recognized.	- Incorrect device compatibility. - USB-C connection is loose or faulty. - OTG function not enabled on Android. - App not installed or permissions denied.	- Verify your smartphone/tablet is USB-C compatible (iPhone 15/16, USB-C iPad, Android 8.0+ with OTG). - Ensure the USB-C cable is securely connected to both the borescope and your device. - For Android, check your device settings to enable OTG. - Install the "Smart Endoscope" app and grant all necessary permissions.

Problem	Possible Cause	Solution
Image is dark or unclear.	○ Insufficient lighting. ○ Dirty camera lens. ○ Incorrect focus distance.	○ Long-press the shutter button to adjust LED brightness. ○ Clean the camera lens with a soft, damp cloth. ○ Ensure the object is within the borescope's optimal focal range (0.60 - 4.0 inches).
Probe articulation is stiff or unresponsive.	○ Mechanical obstruction. ○ Cable kinked or damaged.	○ Carefully retract the probe and check for any obstructions. ○ Inspect the cable for visible kinks or damage. Avoid forcing the articulation.

6. PRODUCT SPECIFICATIONS

Feature	Detail
Model Number	TD300-8.5mm-1.5m
Probe Diameter	8.5mm (0.33 inches)
Probe Length	5 feet (1.5 meters)
Articulation Angle	Up to 210° (Two-Way)
Camera Resolution	1.0 Megapixel (1080p HD)
Depth of Field	0.60 - 4.0 inches
Lighting	8 Adjustable LED Lights
Waterproof Rating	IP67 (Probe)
Connectivity	USB-C Direct Connection
Compatible Devices	iPhone 15/16 series, USB-C iPads, Android 8.0+ with OTG
Item Weight	1.98 pounds
Color	Black

7. WARRANTY AND SUPPORT

7.1 Warranty Information

Teslong products are designed for durability and performance. For specific warranty details, please refer to the warranty card included with your product or visit the official Teslong website. Keep your purchase receipt as proof of purchase for any warranty claims.
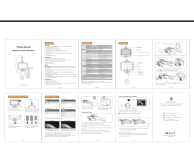
7.2 Customer Support

If you encounter any issues or have questions regarding your Teslong Two-Way Articulating Borescope, please contact Teslong customer support. You can find contact information on the official Teslong website or through the retailer where you purchased the product.

For more information and resources, visit the Teslong Store on Amazon.

Related Documents - TD300-8.5mm-1.5m

	[Teslong TD450S Articulating Borescope User Manual](#) User manual for the Teslong TD450S articulating borescope, providing detailed instructions on its use, features, specifications, and maintenance. Ideal for automotive and professional inspections.
	[Teslong MS450-NTC Inspection Camera User Manual](#) This user manual guides users through the operation of the Teslong MS450-NTC inspection camera, a 4.5-inch HD endoscope. It covers product functions, safety, maintenance, battery, language settings, and specifications for effective visual inspection.
	[Teslong TD450S Articulating Borescope User Manual](#) User manual for the Teslong TD450S articulating borescope, detailing its features, specifications, operation, and maintenance. This borescope is designed for inspecting narrow spaces in automotive and other applications.
	[Teslong NTS300 Inspection Camera User Manual and Guide](#) Comprehensive user manual for the Teslong NTS300 inspection camera, detailing features, specifications, operating instructions, settings, and customer support.
	[Teslong NTG100 Rifle Borescope User Manual	Inspection Camera Guide](#) Comprehensive user manual for the Teslong NTG100 Rifle Borescope. Learn how to connect, operate, and use the inspection camera on Windows, Mac, and Android devices. Includes specifications and troubleshooting tips.
	[Teslong TD100 Borescope Manual: Features, Instructions, and Safety](#) Comprehensive manual for the Teslong TD100 automotive borescope. Learn about its features, installation, operation, safety guidelines, and technical specifications for effective use in automotive diagnostics and maintenance.