VEVOR Sewer Camera with 512Hz Locator

VEVOR Sewer Camera with 512Hz Locator User Manual

Model: Sewer Camera with 512Hz Locator
Brand: VEVOR

Introduction

This user manual provides comprehensive instructions for the safe and effective operation, maintenance, and troubleshooting of your VEVOR Sewer Camera with 512Hz Locator. Please read this manual thoroughly before using the product to ensure proper functionality and to prevent damage or injury.

Figure 1: VEVOR Sewer Camera System Overview

Safety Information

- Always wear appropriate personal protective equipment (PPE) when operating the camera, especially when dealing with sewage or hazardous materials.
- Ensure the camera and all connections are dry before use to prevent electrical hazards. The camera head is IP68 waterproof, but the main unit is not.
- Do not force the camera cable into pipes. If resistance is met, investigate the obstruction.
- Keep the equipment away from extreme temperatures, direct sunlight, and corrosive substances.
- Store the unit in its original case in a dry, secure location when not in use.
- Only use the provided power adapter for charging.

Package Contents

Verify that all items are present and in good condition upon unpacking:

- VEVOR Sewer Camera Main Unit (with 7-inch LCD monitor)
- Camera Head with Cable (100 ft/30 m)
- 512Hz Locator
- 512Hz Transmitter (integrated into camera head)
- Power Adapter/Charger
- 16GB SD Card
- 2 x Guide Wheels (for different pipe sizes)
- Screwdriver
- User Manual (this document)

Figure 2: System Components and Dimensions

Product Overview

The VEVOR Sewer Camera system is designed for inspecting pipelines, drains, ducts, and other hard-to-reach areas. It features a high-resolution camera, a clear display, DVR functionality, and a 512Hz locator for precise problem identification.

Key Features:

- **7-inch 480p LCD Screen:** Provides clear visual feedback during inspections.
- **1000TVL Camera:** Offers a 130° inspection angle for wide views.
- **IP68 Waterproof Camera Head:** Constructed from 303 stainless steel with a sapphire lens for durability in wet environments.
- **12 Adjustable LED Lights:** Ensures adequate illumination in dark pipes.
- **DVR Function & 16GB SD Card:** Allows for video recording and photo capture for later review.
- **512Hz Locator & Transmitter:** Enables precise location of the camera head within the pipe.
- **100 ft/30 m Semi-Rigid Cable:** Features length markings for distance estimation and a steel bearing for easy coiling.

Figure 3: Ultra-Clear Screen Display

Figure 4: Waterproof Camera with Adjustable LEDs

Setup

1. Preparing the 512Hz Locator Receiver:

1. Open the battery compartment on the locator receiver.
2. Insert the required batteries (refer to the battery type indicated inside the compartment, typically AA or AAA). Ensure correct polarity.
3. Close the battery compartment securely.
4. Connect the antenna to the top of the locator receiver by screwing it into place until firm.
5. Long press the power button on the receiver to turn it on. A sound will indicate it's active.

2. Preparing the 512Hz Transmitter:

1. The 512Hz transmitter is integrated into the camera head. To activate it, insert the required battery (typically AAA) into the designated slot within the camera head assembly.
2. Tighten the cap securely to ensure the transmitter is waterproof and functional.

3. Setting up the Main Unit:

1. Open the aluminum case. The 7-inch LCD monitor is integrated into the lid.
2. Connect the camera cable to the designated port on the main unit.
3. Ensure the 16GB SD card is inserted into the SD card slot on the monitor for recording and photo functions.
4. If the battery is low, connect the power adapter to charge the unit. The unit can be operated while charging.

Operating Instructions

1. Performing a Visual Inspection:

- Carefully feed the camera head and cable into the pipe or area to be inspected. The semi-rigid cable allows for easy navigation.
- Observe the live feed on the 7-inch LCD screen.
- Use the adjustable LED lights on the camera head to illuminate dark areas. Adjust brightness as needed for optimal visibility.
- Utilize the length markings on the cable to estimate the distance the camera has traveled into the pipe.
- For pipes with varying diameters, attach the appropriate guide wheel to the camera head to center it and prevent snagging.

Figure 5: One-Handed Cable Operation

Figure 6: Camera Diameter Options for Different Pipes

2. Using DVR Function (Recording & Photos):

- Ensure the 16GB SD card is properly inserted into the monitor.
- To record video, press the **REC** button on the monitor. Press again to stop recording.
- To take a still photo, press the **SNAP** button.
- Recorded videos and photos are saved directly to the SD card.
- To review media, navigate to the playback menu on the monitor.
- To transfer files to a computer, remove the SD card from the monitor and insert it into a computer's SD card reader.

3. Using the 512Hz Locator:

The 512Hz locator helps pinpoint the exact location of the camera head within the pipe, which is crucial for identifying problem areas for repair or further investigation.

- Ensure the 512Hz transmitter in the camera head is activated (battery inserted).

- Turn on the locator receiver (as described in the Setup section).
- Hold the locator parallel to the ground, at hip/waist length.
- The locator has "Far" and "Near" modes, indicated on the screen.
- **"Far" Mode (Detect distance: 6m/20ft):**
    - Walk around the suspected area, paying attention to the signal strength ("S" column) on the locator's screen.
    - When the signal column "S" reaches 9 bars (peak value), the direction indicated by the antenna points to the transmitter's orientation.
    - Adjust the "D" value (distance sensitivity) using the "-" button to reduce it to 8. If the signal "S" is still at 9 bars, move the receiver towards the transmitter until the signal reaches full 9 bars again. Continue decreasing "D" and moving closer.
- **"Near" Mode:**
    - Once you are close to the transmitter (e.g., "D" is in 4, and "S" is at peak value, indicating about 2m away), switch the locator to "Near" mode.
    - In "Near" mode, use the "+" button to increase the "D" value to 9. The signal "S" should also be at full scale (peak value).
    - Continue to adjust the "D" value downwards (e.g., to 8, 7, 6, 5, 4, and 3) using the "-" button, moving the receiver towards the signal peak value direction indicated by the antenna.
    - When "D" is in "1" and the signal "S" is at peak value, you have precisely located the 512Hz transmitter.

Figure 7: Locating the Camera Probe

Figure 8: 512Hz Locator in Action

Maintenance

- **Cleaning:** After each use, especially in dirty environments, clean the camera head and cable with a damp cloth. Avoid harsh chemicals. Ensure the camera head is thoroughly cleaned to maintain clear visibility.
- **Storage:** Always coil the cable neatly back into the case. Store the entire system in its original aluminum case in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Battery Care:** For optimal battery life, fully charge the main unit after each use. If storing for extended periods, charge the battery every 3 months to prevent deep discharge. Remove batteries from the locator receiver and transmitter if not used for a long time.
- **Inspection:** Periodically inspect the camera cable for any signs of wear, cuts, or damage. Check all connections for corrosion or looseness.

Troubleshooting

Problem	Possible Cause	Solution
No image on screen.	Loose camera connection, low battery, damaged cable/camera.	Check camera cable connection. Charge the main unit. Inspect cable for damage.
Image is blurry or dark.	Dirty camera lens, insufficient LED illumination.	Clean the camera lens. Adjust LED brightness.
Cannot record video or take photos.	SD card not inserted, SD card full, SD card corrupted.	Ensure SD card is inserted correctly. Delete old files or use a new SD card. Format the SD card (backup data first).
Locator not detecting transmitter.	Transmitter battery low/dead, locator battery low/dead, incorrect locator settings.	Replace batteries in transmitter and locator. Ensure locator is turned on and in the correct mode ("Far" or "Near"). Adjust "D" setting.
Cable difficult to feed or retrieve.	Obstruction in pipe, cable tangled, incorrect guide wheel.	Do not force. Investigate obstruction. Ensure cable is not tangled. Use appropriate guide wheel.

Specifications

- **Product Dimensions:** 15 x 11.4 x 5.9 inches
- **Item Model Number:** Sewer Camera with 512Hz Locator
- **Manufacturer:** VEVOR
- **Exposure Control Type:** Automatic Manual
- **Color:** 7" (referring to screen size)
- **Media Type:** SD Card
- **Zoom Type:** No Zoom
- **Water Resistance Level (Camera Head):** IP68 Waterproof
- **Camera Pixels:** 1000TVL
- **View Angle:** 130 Degree
- **Cable Length:** 100 ft / 30 m
- **Camera Diameter:** 0.98 in / 25 mm (with options for 1.5 in/38mm with protective cover and 3.5 in/90mm with wheel)
- **Camera Length:** 5.3 in / 135 mm
- **Battery Capacity:** 4500 mAh
- **Battery Work Time:** 6 hours
- **Camera LED Light:** 12 PCS, Adjustable
- **Compatible Pipe Diameters:** Straight Pipes: 1.18-7.87 inch (30 - 200 mm); Right Angle Pipes: 1.97-7.87 inch (50 - 200 mm)

Warranty and Support

VEVOR products are designed and manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the official VEVOR website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.
For additional resources, you may visit the VEVOR Store on Amazon.