

Rothenberger TF3006X



ROTHENBERGER TF3006X Industrial Endoscope Camera User Manual

Model: 1500000059

1. INTRODUCTION

The ROTHENBERGER TF3006X Industrial Endoscope Camera is designed for inspecting hard-to-reach areas in various applications, from professional craftsmanship to home use. This high-quality endoscope camera features a waterproof gooseneck and a mini color camera with adjustable LED illumination, making it suitable for use in aqueous liquids. The integrated TFT monitor displays the camera's image, and a video output is available for additional image transmission.

2. SAFETY INSTRUCTIONS

- **General Safety:** Always operate the device in accordance with these instructions. Do not attempt to modify or repair the device yourself.
- **Battery Safety:** Use only the specified AA batteries. Ensure correct polarity when inserting. Do not mix old and new batteries or different types of batteries. Remove batteries if the device will not be used for an extended period.
- **Environmental Conditions:** Operate the camera within the specified temperature range of 0°C to 40°C. While the camera head and gooseneck are waterproof (IP67), the main unit is not. Avoid exposing the main unit to moisture or liquids.
- **Camera Head and Gooseneck:** Handle the gooseneck and camera head carefully. Avoid sharp bends or excessive force that could damage the cable or camera.
- **LED Illumination:** The camera's LED illumination is classified as risk group 0 according to EN 62471. Avoid direct, prolonged eye exposure to the LEDs.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- ROTHENBERGER TF3006X Endoscope Camera Unit
- 4 x AA Batteries
- User Manual

4. PRODUCT OVERVIEW

The TF3006X consists of a main display unit and a flexible gooseneck with an integrated camera head.



Image: The ROTHENBERGER TF3006X Industrial Endoscope Camera, showing the main unit with integrated screen and the flexible gooseneck with camera head.

Main Unit

- **TFT Monitor:** 2.4" / 6.1 cm display for live viewing.
- **Control Buttons:** For power, LED brightness adjustment, and menu navigation (if applicable).
- **Battery Compartment:** Located on the back for 4 AA batteries.
- **Video Output:** For connecting to an external display.

Gooseneck and Camera Head

- **Gooseneck Length:** Approximately 180 cm (1.8 meters) for extended reach.
- **Camera Head Diameter:** 8 mm, allowing access into narrow openings.
- **LED Illumination:** 4 white LEDs with adjustable intensity for clear viewing in dark environments.
- **Waterproof Rating:** IP67 for the camera head and gooseneck, protecting against dust and temporary immersion in water.

5. SETUP

5.1 Battery Installation

1. Locate the battery compartment on the back of the main unit.
2. Open the battery compartment cover.

3. Insert 4 AA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Close the battery compartment cover securely.

5.2 Initial Power On

Press and hold the power button (usually marked with a \mathcal{E} icon) on the main unit until the TFT monitor illuminates.

6. OPERATING

6.1 Power On/Off

- **To Power On:** Press and hold the power button until the screen turns on.
- **To Power Off:** Press and hold the power button until the screen turns off.

6.2 Adjusting LED Brightness

Use the dedicated LED brightness control button(s) or dial on the main unit to increase or decrease the illumination from the camera head. Adjust as needed for optimal visibility in the inspection area.

6.3 Viewing and Maneuvering

- Gently insert the camera head and gooseneck into the area to be inspected.
- Observe the live image on the TFT monitor.
- Carefully maneuver the flexible gooseneck to navigate around obstacles and view different angles.

6.4 Using Video Output

Connect a compatible video cable (not included) from the device's video output port to an external monitor or recording device to view or record the inspection footage on a larger screen.

7. MAINTENANCE

7.1 Cleaning

- **Camera Head and Gooseneck:** After use, especially in dirty or wet environments, clean the waterproof camera head and gooseneck with a damp cloth. For stubborn dirt, a mild detergent can be used, followed by rinsing with clean water. Ensure the camera head is dry before storage.
- **Main Unit:** Wipe the main unit and TFT monitor with a soft, dry, lint-free cloth. Do not use abrasive cleaners or solvents.

7.2 Storage

- Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.
- If the device will not be used for an extended period, remove the batteries to prevent leakage.
- Avoid coiling the gooseneck too tightly to prevent damage to the internal wiring.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly inserted batteries.	Check battery polarity. Replace with fresh AA batteries.

Problem	Possible Cause	Solution
No image on the TFT monitor.	Camera not connected properly; device malfunction.	Ensure the gooseneck is securely connected (if detachable). Power cycle the device. If problem persists, contact support.
Poor image quality (dark, blurry).	Insufficient LED illumination; dirty camera lens.	Adjust LED brightness. Clean the camera lens with a soft cloth.
LEDs are not working.	LED control setting; internal fault.	Check LED brightness setting. If still not working, contact support.

9. SPECIFICATIONS

Feature	Specification
TFT Monitor	2.4" / 6.1 cm
Screen Resolution	480 x 234 pixels
Camera Viewing Angle	54° (max)
Video Format	PAL
Camera Illumination	4 white LEDs, adjustable intensity
Power Supply	6 V DC (4 x AA batteries)
Operating Temperature	0°C - 40°C
Gooseneck Length	Approx. 180 cm
Camera Head Diameter	8 mm
Protection Class (Camera Head/Gooseneck)	IP67
Video Recording Resolution	480p
Connectivity	USB (for data transfer, if applicable)
Focus Type	Fixed Focus
Optical Sensor Technology	CMOS
Country of Origin	China

10. WARRANTY AND SUPPORT

This product is manufactured by Rothenberger Industrial. For warranty information, technical support, or service inquiries, please refer to the warranty card included with your purchase or contact Rothenberger Industrial directly through their official website or customer service channels. Please have your model number (1500000059) and purchase date available when contacting support.

