User Guide

HAWKEYE®

X-PLOR

HD VIDEO BORESCOPES

Revision 2.0 | October 2026

Hawkeye® X-PLOR HD Video Borescope

User Guide, Revision 2.0 — October 2026

Models: HXVB-3915, HXVB-3915D, HXVB-6015

Firmware covered: XPLOR2026-001

Read this guide before you use the X-PLOR. It contains safety information and instructions for correct use. Keep the guide with the instrument.

Revision History

Revision	Date	Changes
1.1	January 2026	Original release.
2.0	October 2026	Updated for firmware changes, stand accessory, and dual-view information.

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Specifications and features are subject to change without notice.

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1. Safety Information

Read all safety information before you use the X-PLOR. The warnings in this chapter apply at all times. Warnings for specific tasks also appear in the sections that describe those tasks.

1.1 General Safety

WARNING	**Not for medical or veterinary use.** Never insert the probe into a person or an animal.
WARNING	**Fire and explosion hazard.** The X-PLOR is not rated for hazardous locations. Do not use or store it where flammable gases, vapors, or dust may be present.
WARNING	**Electric shock hazard.** The insertion tube is metal and conducts electricity. Turn off and lock out power to equipment before you inspect it. Never let the probe touch live electrical parts.
WARNING	**Moving parts.** Shut down and lock out engines, turbines, and machinery before you insert the probe. Moving parts can catch the probe, damage it, and pull it from your hand.
WARNING	**Lithium-ion battery.** Use only the supplied battery and charger. Do not crush, puncture, short-circuit, or heat the battery. Stop using a battery that is swollen, leaking, or hot. Recycle used batteries; do not put them in household trash.
CAUTION	**Bright light.** Do not look directly into the LEDs at the probe tip when they are on.
CAUTION	**Hot surfaces.** Do not insert the probe into areas hotter than 158 °F (70 °C). Let engines and equipment cool before inspection.

NOTICE	**Protect the insertion tube.** Bend the insertion tube only in gentle, rounded curves. Never fold, kink, crush, twist, or stretch it, and never force it around a sharp corner. If the tube does not spring back to its original shape when you let go, it has been bent too far and may be permanently damaged. Do not force the tip past an obstruction. If the joystick or probe suddenly resists, stop and back out gently. Center the joystick so the tip is straight before you withdraw the probe. Never pull a bent tip out of an opening.

NOTICE	**Fluids and water.** The insertion tube is waterproof (IP67) and resists the fluids listed under Chemical Compatibility (Section 6.2). The display unit and handle are splash-resistant only (IP54). Do not submerge them or spray fluids on them.

NOTICE	**Foreign object damage (FOD).** After each inspection, check that the probe tip is complete and that nothing has been left inside the equipment.

1.2 Service and Modification

NOTICE	The X-PLOR has no user-serviceable parts except the battery. Do not open, modify, or repair the unit. Doing so voids the warranty. For service, contact Gradient Lens Corporation (Chapter 9).

2. Product Overview

2.1 About the X-PLOR

The Hawkeye® X-PLOR is a handheld HD video borescope with a joystick-controlled, 4-way articulating tip, a 5-inch display, and built-in photo and video recording. You can view the image on the X-PLOR, on an external monitor over HDMI, or on an Android phone or tablet over Wi-Fi.

The included stand holds the X-PLOR upright for hands-free work. A magnet in the base lets you attach the stand to a steel cabinet or toolbox.

This guide covers three models:

- **HXVB-3915** — 3.9 mm insertion tube, forward view
- **HXVB-3915D** — 3.9 mm insertion tube, dual view (forward and side cameras)
- **HXVB-6015** — 6.0 mm insertion tube, forward view

On the dual-view model you can switch between the forward and side cameras during an inspection (Section 4.7).

2.2 Specifications

Models	HXVB-3915, HXVB-3915D (dual view), HXVB-6015
Display	5.0 in HD LCD
Cameras	Forward view; HXVB-3915D: forward and side view
Articulation	4-way joystick, steerable in any direction (360°); 170° ± 10° up, down, left, and right from straight ahead
Insertion tube	Multi-layer stainless steel braid, 1.5 m (4.9 ft) long; 3.9 mm (0.15 in) diameter (HXVB-3915, HXVB-3915D) or 6.0 mm (0.24 in) diameter (HXVB-6015)
Field of view	90° diagonal
Depth of field	8–150 mm (0.3–5.9 in)
Illumination	LEDs at the tip, 9 levels (0–8)
Zoom	Digital, 1X to 5X
Photo / video format	JPEG / MOV
Recording resolution	1920×1080, 1280×720, or 960×720
Storage	microSD card, 32 GB included, up to 128 GB supported
Connections	USB-C (charging and file transfer), HDMI out, AUX headset jack (audio recording and playback)
Wireless	Wi-Fi, for the Hawkeye X-PLOR WiFi Viewer app
Ingress protection	Insertion tube IP67; display unit and handle IP54
Battery	Rechargeable, replaceable 26650 lithium-ion, 3.7 V, 5000 mAh
Battery life	Up to 4 hours (LED level and Wi-Fi streaming affect run time)
Charging	USB-C; adapter output 5 V DC, 3 A

Weight	1.8 lb (0.8 kg) or less with battery; less than 2.5 lb (1.2 kg) with stand
Languages	English, German, Korean, Italian, Spanish, Russian, Japanese, Finnish, Ukrainian, Polish, Portuguese (Brazil), Turkish, Traditional Chinese, Simplified Chinese

2.3 Operating and Storage Environment

Display unit and handle, operating	14 to 122 °F (–10 to 50 °C)
Insertion tube, operating	–4 to 158 °F (–20 to 70 °C)
Storage	–4 to 140 °F (–20 to 60 °C)
Relative humidity	90% maximum, non-condensing

2.4 What's Included

Item	Description	Qty
1	X-PLOR HD video borescope (display unit, handle, and insertion tube)	1
2	X-PLOR stand with magnetic base	1
3	26650 rechargeable lithium-ion battery	1
4	USB-C charging adapter	1
5	USB-C cable	1
6	HDMI cable	1
7	microSD card, 32 GB	1
8	microSD card reader	1
9	Neck strap	1
10	Carrying and storage case	1
11	User guide	1

Optional accessory: Spare battery kit, with an external charger and a spare 26650 battery. The spare battery charges in less than 4 hours, so you can keep working while it charges. Contact your reseller or Gradient Lens Corporation to order.

Figure 1. Kit packed in the carrying case. Numbers match the table above; the microSD card is in the X-PLOR, and the insertion tube lies in the track around the cutouts.

2.5 Controls and Connections

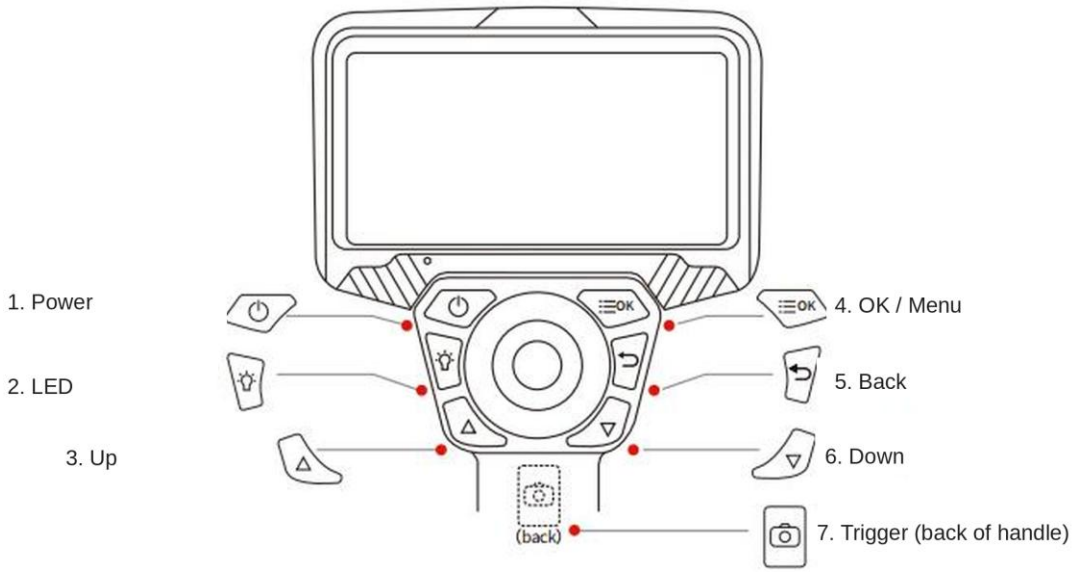

Figure 2. Keypad and trigger

1. **Power** — Hold to turn the X-PLOR on or off. In live view, press briefly to freeze the image.
2. **LED** — Steps the tip lights through levels 0–8. In the file browser, deletes files.
3. **Up** — Flips the image. Hold to switch cameras on dual-view models. Moves up in menus.
4. **OK / Menu** — Opens the Settings menu from live view. Selects or confirms in menus.
5. **Back** — Opens the file browser from live view. Returns to the previous screen.
6. **Down** — Zooms the image. Hold to hide or show on-screen indicators. Moves down in menus.
7. **Trigger** (on the handle) — Takes photos and starts and stops video recording.

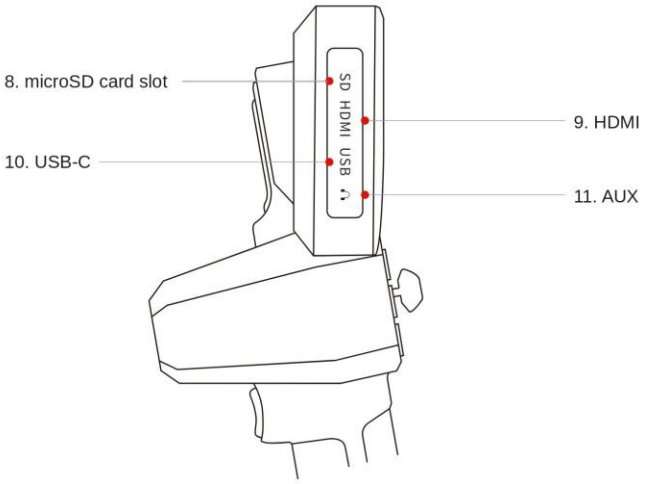

Figure 3. Connection panel on the side of the display unit

8. **microSD card slot** — Holds the card that stores photos and videos (up to 128 GB).
9. **HDMI** — Connects an external monitor or TV.
10. **USB-C** — Charges the battery and transfers files to a computer.
11. **AUX** — Headset jack. With a headset plugged in, the X-PLOR records your voice with video and plays the audio back through the headset.

Figure 4. Probe tip and articulation section (dual-view model shown)

The **insertion tube** is the long braided cable. The **articulation section** is the flexible part just behind the tip that bends when you move the joystick. The **tip** holds the camera and LEDs.

3. Quick Start

Follow these steps the first time you use the X-PLOR. Each step links to a section with details.

1. Unpack the case and check the contents against Section 2.4.
2. Install the battery if it is not already installed (Section 4.1).
3. Charge the battery (Section 4.1).
4. Insert the microSD card into the card slot until it clicks (Section 4.8).
5. Hold **Power** to turn on the X-PLOR. Live view appears.
6. Set the date, time, and language in the Settings menu (Chapter 5).
7. Place the X-PLOR on the stand, or hold it by the handle (Section 4.3).
8. Insert the probe and steer the tip with the joystick (Section 4.4).
9. Press the trigger to take photos; hold it to record video (Section 4.8).
10. When you finish, center the joystick, withdraw the probe, turn off the X-PLOR, and pack it in the case on its stand (Section 6.4).

4. Operation

4.1 Battery and Charging

Removing and installing the battery

The battery is in the bottom of the handle.

1. Turn off the X-PLOR.
2. Remove the four Phillips screws from the battery cover at the bottom of the handle.
3. Remove the cover and slide the battery out.
4. Insert the new battery with the positive (+) end toward the cover.
5. Replace the cover and screws. Tighten the screws snugly; do not overtighten.

Figure 5. Battery cover screws (left) and removing the battery (right)

Charging

Connect the USB-C cable to the charging adapter and to the USB-C port on the X-PLOR. You can use the X-PLOR while it charges.

For long jobs, the optional spare battery kit lets you swap in a charged battery while the other one charges in the external charger (less than 4 hours).

The indicator light below the screen is **red** while the X-PLOR is plugged in and charging. It is **green** when the X-PLOR is on and the battery has enough charge. A red lightning bolt also appears in the battery icon on the screen while the battery charges.

Note: The X-PLOR does not have a charge-complete indicator.

Figure 6. Indicator light below the screen: green when the X-PLOR is on with enough charge (left), red when plugged in and charging (right)

Figure 7. Charging symbol (red lightning bolt) in the battery icon

Battery level

The battery icon in the upper-right corner of the screen shows the remaining charge. When the battery is very low, the battery icon turns red and the tip LEDs turn off. Charge the battery or install a charged spare.

Figure 8. Battery icon: full, partly charged, low, and very low

4.2 Separating and Reattaching the Display

The display unit can be separated from the handle.

- **To separate:** Hold the handle firmly and pull the display unit straight up.
- **To reattach:** Align the display unit with the slot on the handle and press down firmly until it seats.

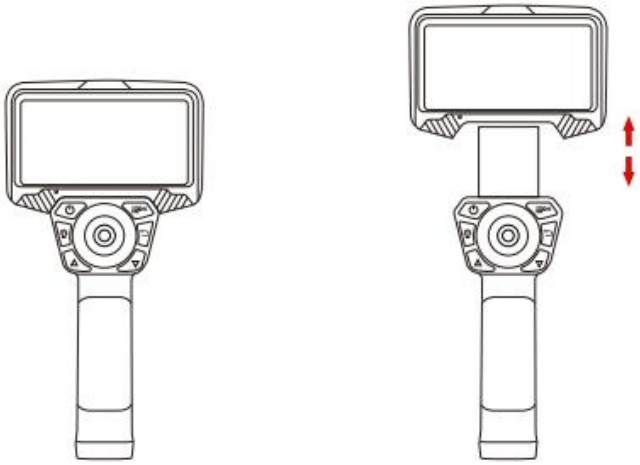

Figure 9. Separating the display unit from the handle

4.3 Using the X-PLOR Stand

The stand holds the X-PLOR upright for hands-free viewing, protects the probe tip, and attaches magnetically to steel surfaces such as a tool cabinet. Most users leave the X-PLOR on the stand while they work.

Figure 10. Parts of the stand. The eye bolt (E) holds the magnet on the bottom of the base.

Attaching the stand to a steel surface

The eye bolt in the base holds a strong magnet on the bottom face of the stand. Place the bottom of the stand flat against any clean steel surface, such as the side or door of a tool cabinet. The magnet holds

the stand and the X-PLOR on vertical surfaces as well as on a bench. Before you let go, check that the stand holds firmly.

Figure 11. X-PLOR on its stand, attached to the side of a steel cabinet

Mounting the X-PLOR on the stand

1. Place the stand on a level surface or attach it to a steel surface.
2. Loosen the retaining screw.
3. Slide the X-PLOR into the stand from the right side. Guide the insertion tube through the cutout so you do not have to thread it through the stand.
4. Seat the handle in the base and rest the back of the display unit in the cradle.
5. Tighten the retaining screw firmly by hand (finger-tight). No tool is needed.
6. Check that the X-PLOR is seated in the stand. A slight amount of movement is normal.

Figure 12. Sliding the X-PLOR into the stand from the right

Protecting the tip with the tip channels

When you are not inspecting, press the rigid tip and the articulation section into one of the channels in the stand. The channel holds the tip off the bench, away from debris, where it cannot be crushed.

Figure 13. Tip and articulation section held in a stand channel

Removing the X-PLOR from the stand

1. Lift the tip and articulation section out of the tip channel.
2. Loosen (disengage) the retaining screw.
3. Slide the X-PLOR out to the right. The insertion tube passes out through the cutout, so you do not have to pull it through the stand.

Carrying the X-PLOR

To carry the X-PLOR, with or without the stand attached, hold it by the battery housing (the extended section of the handle body that holds the battery). Do not carry it by the display or the insertion tube. Keep the tip in a tip channel and the insertion tube loosely coiled so it does not snag.

4.4 Inserting and Steering the Probe

1. Turn on the X-PLOR and set the LED level so you can see the area (Section 4.7).
2. Keep the insertion tube as straight as possible and center the joystick.
3. Gently feed the tip into the opening.
4. Steer the tip with the joystick. The tip bends in the direction you push the joystick: up, down, left, right, or any direction in between.
5. When you finish, return the joystick to center so the tip is straight, then slowly withdraw the probe. No force should be needed.

NOTICE	If the joystick or probe suddenly resists, or the X-PLOR behaves abnormally, stop. Center the joystick and withdraw the probe slowly.

4.5 Buttons by Screen

Each button does different things depending on the screen you are on. “Press” means a short press; “hold” means press and hold for about 1 second.

Control	Live view	File browser	Video playback	Settings menu
Power	Press: freeze / unfreeze image. Hold: turn off	Hold: turn off	Hold: turn off	Hold: turn off
LED	Press: LED level 0–8	Delete file	Delete file	—
Up	Press: flip image (4-step cycle). Hold: switch camera (dual view)	Previous file	Fast forward	Move up / increase value
OK / Menu	Open Settings menu	Open folder or file	Play / pause	Select / confirm
Back	Open file browser	Back	Back	Back
Down	Press: zoom 1X–5X. Hold: hide / show indicators	Next file	Rewind	Move down / decrease value
Trigger	Press: photo. Hold: start / stop video	Exit to live view	Exit to live view	Exit to live view
Joystick	Steers the tip up, down, left, right, or any direction in between			

Tip: From any menu, submenu, or the file browser, press the **trigger** to go straight back to live view.

4.6 The Live View Screen

Live view appears when you turn on the X-PLOR. Status indicators run across the top of the screen; the date and time appear at the bottom.

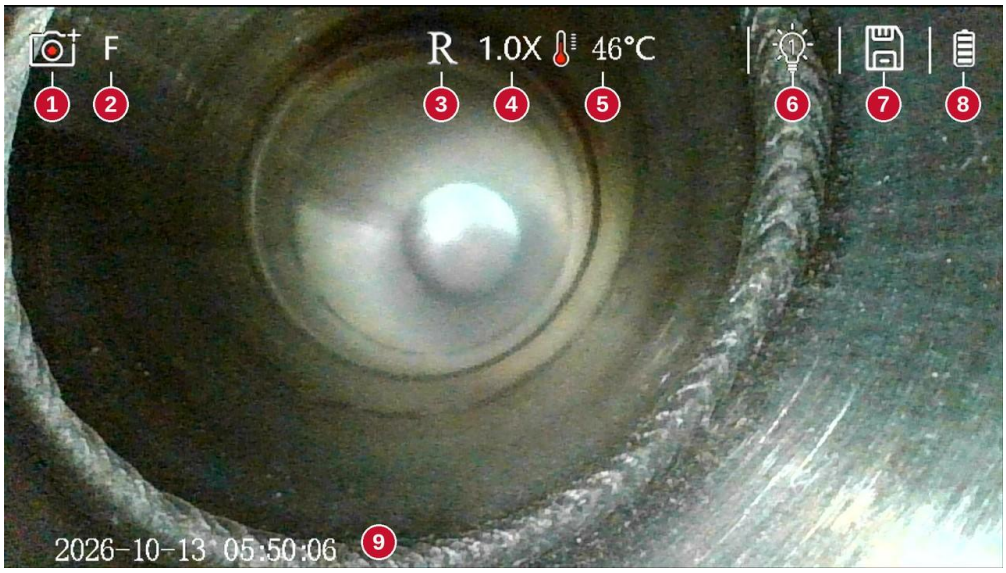

Figure 14. Live view indicators (dual-view unit, forward camera)

#	Indicator	Meaning
1	Mode	Camera icon: photo mode. Video camera icon: video mode.
2	Camera (dual-view models)	**F** = forward-view camera; **S** = side-view camera.
3	Image flip (R)	Shows the current flip setting (Section 4.7).
—	LOCK (lower right)	Image is frozen; press **Power** briefly to return to live view (Section 4.7).
4	Zoom	Current zoom level, 1.0X to 5.0X.
5	Temperature	Temperature at the probe tip, in °C.
—	Wi-Fi	Appears between the temperature and LED icons when Wi-Fi is on.
6	LED level	The number in the bulb is the tip light level, 0–8.
7	microSD card	A red mark means no card is inserted.
8	Battery	Remaining charge; shows a charging symbol while charging.
9	Date and time	Shown on screen, and stamped on files when Date label is on (Section 5.4).

Hiding the indicators

Hold **Down** to hide most indicators for an uncluttered view. The temperature and camera (F/S) indicators stay on screen. Hold **Down** again to show all indicators.

Figure 15. Live view with indicators hidden: only the camera (F) and temperature remain

4.7 Adjusting the Image

LED brightness

The X-PLOR turns on with the tip LEDs at level 1. Press **LED** to step the brightness up one level at a time, from 0 (off) to 8 (brightest). After level 8, the next press returns to 0. The current level appears in the status bar.

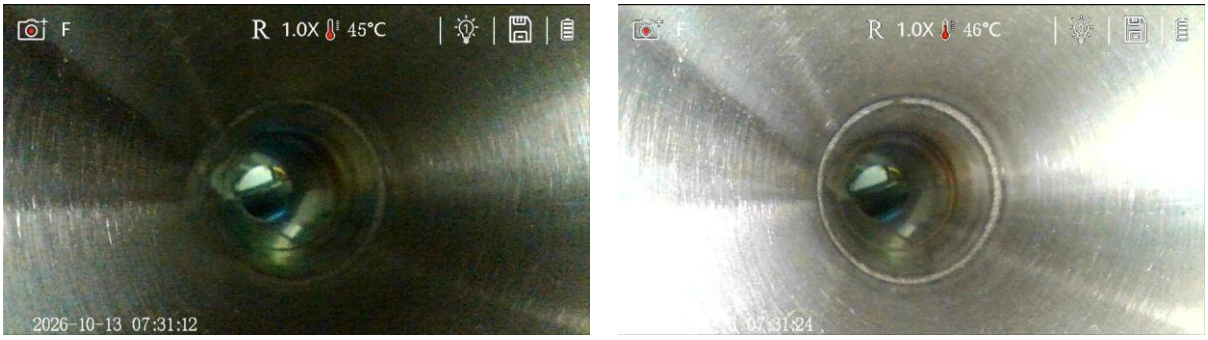

Figure 16. LED level 1 at power-on (left) and level 8 (right); the number in the bulb icon shows the level

Zoom

In live view, press **Down** to zoom in. Each press steps up one level: 1.0X, 2.0X, 3.0X, 4.0X, 5.0X. The next press returns to 1.0X. The zoom level shows in the status bar.

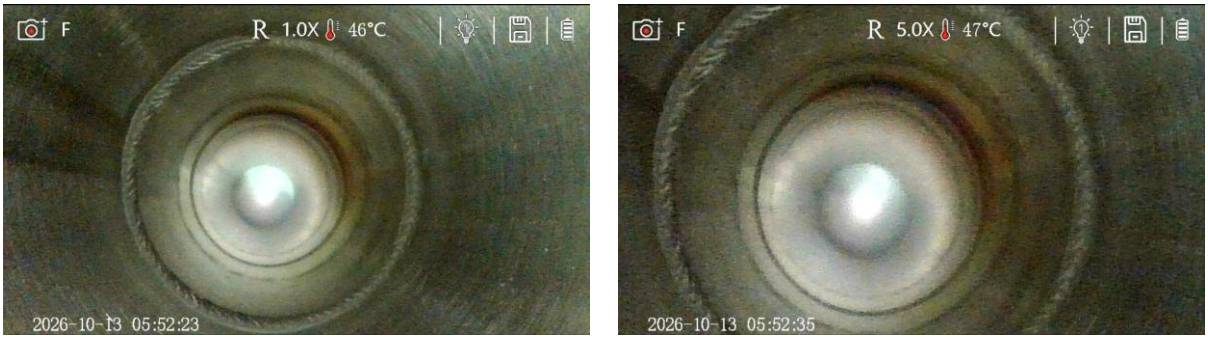

Figure 17. Zoom at 1.0X (left) and 5.0X (right)

Flip

Press **Up** to flip the image. Each press steps to the next view:

1. Flipped horizontally (mirror image)
2. Flipped horizontally and vertically
3. Flipped vertically
4. Standard view

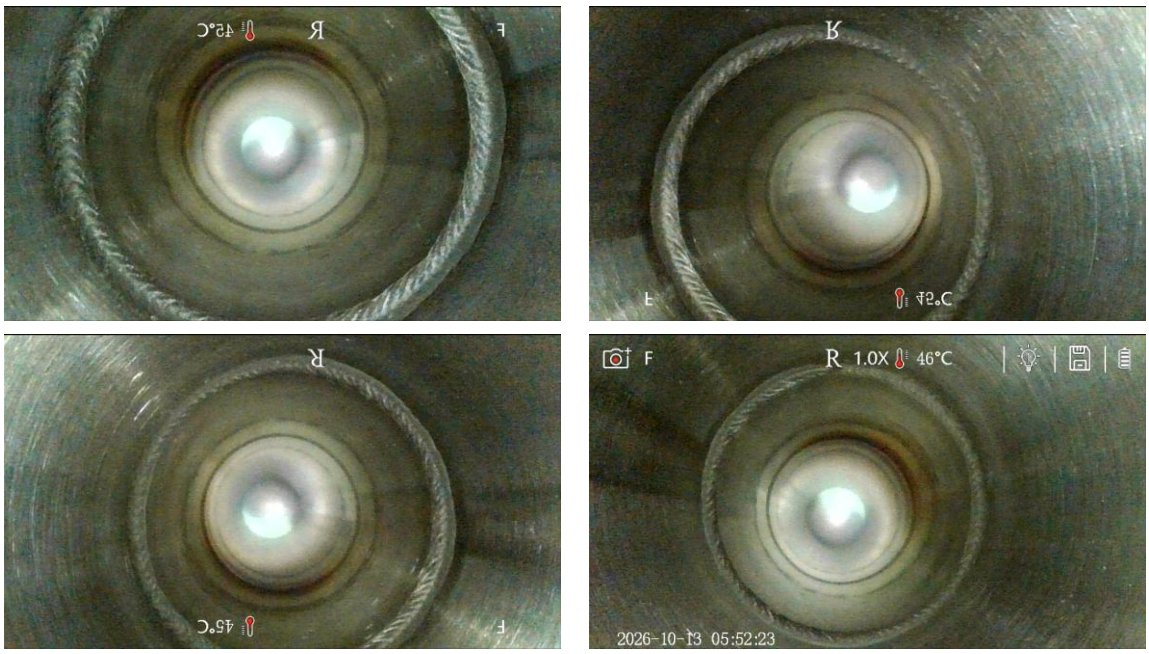

Figure 18. Image flip sequence: (1) horizontal, (2) horizontal and vertical, (3) vertical, (4) standard

Freeze

Press **Power** briefly to freeze the image so you can study it. A red **LOCK** symbol appears in the lower-right corner while the image is frozen. Press **Power** briefly again to return to live view; the LOCK symbol disappears.

Figure 19. Frozen image with the LOCK symbol

Switching cameras (dual-view models)

Hold **Up** to switch between the forward-view and side-view cameras. The camera indicator shows **F** for forward view or **S** for side view.

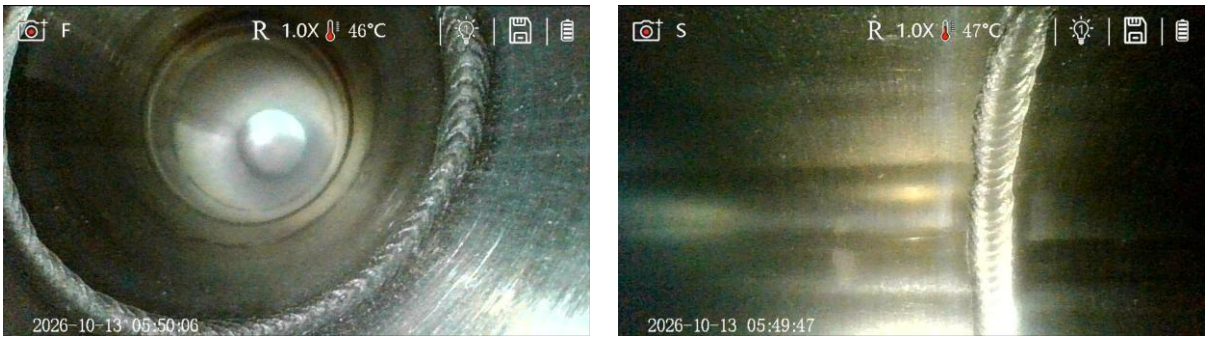

Figure 20. Forward camera, F (left), and side camera, S (right)

4.8 Taking Photos and Recording Video

microSD card

Photos and videos are saved to the microSD card. Insert the card into the card slot, label side down (gold contacts facing up, toward the screen), until it clicks. To remove it, push it in and release. If no card is inserted, the X-PLOR shows **Please insert SD card** when you try to take a photo or video, and a red mark appears on the card icon.

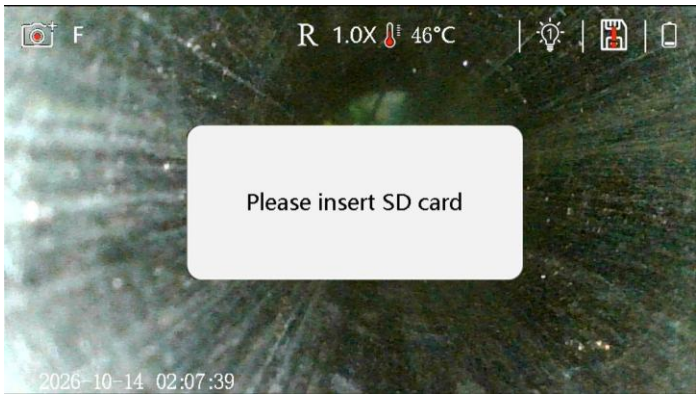

Figure 21. No microSD card: message and red mark on the card icon

Photos

Press the **trigger** to take a photo. The image is saved as a JPEG file.

Video

1. Hold the **trigger** to start recording. The mode icon changes to a video camera and a red timer counts the recording time.
2. While recording, press the **trigger** to take a still photo without stopping the video.
3. Hold the **trigger** again to stop recording and save the video as a MOV file.

Recording audio: Plug a headset with a microphone into the AUX jack before you start recording. Your voice is recorded with the video, and you can hear it during playback through the headset.

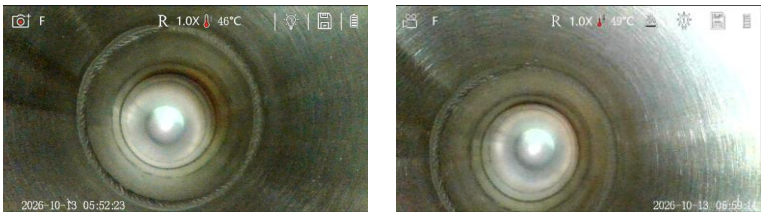

Figure 22. Photo mode icon (left) and video mode icon (right)

4.9 Reviewing Photos and Videos

1. In live view, press **Back** to open the file browser. It has a PHOTO folder and a VIDEO folder.
2. Use **Up** and **Down** to select a folder, then press **OK** to open it.
3. Select a file and press **OK** to view it full screen.
4. In full-screen view, use **Up** and **Down** to go to the previous or next file.
5. For a video, press **OK** to play or pause. During playback, press **Up** to fast forward or **Down** to rewind. Speed (for example, X2) shows in the center of the screen.
6. Press **Back** to return to the file list, and again to return to live view. Or press the **trigger** to go straight to live view.

Figure 23. File browser: the VIDEO and PHOTO folders (left), photo thumbnails (center), and video thumbnails (right). The white frame marks the selected item.

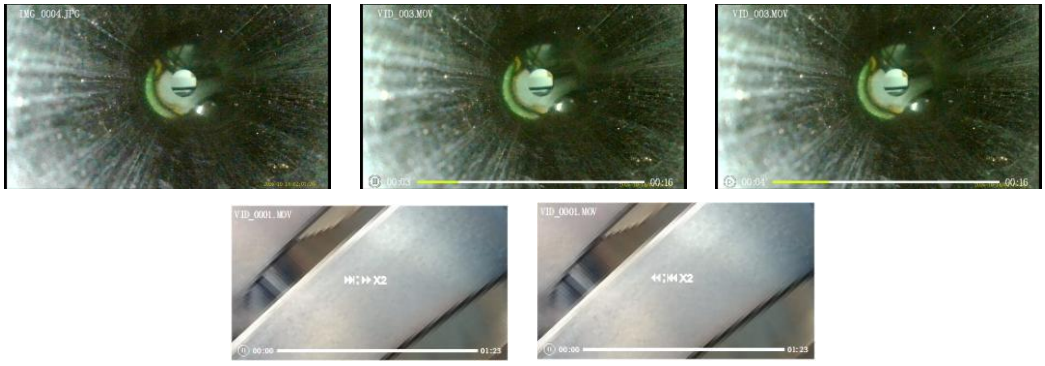

Figure 24. Top: photo, video playing, video paused. Bottom: video fast forward and rewind.

Deleting files

Deleting the file you are viewing: In full-screen view, press **LED**. Use **Up** and **Down** to choose **Delete the current** (deletes this file), **Delete all** (deletes all files in the folder), or **Cancel**, then press **OK**.

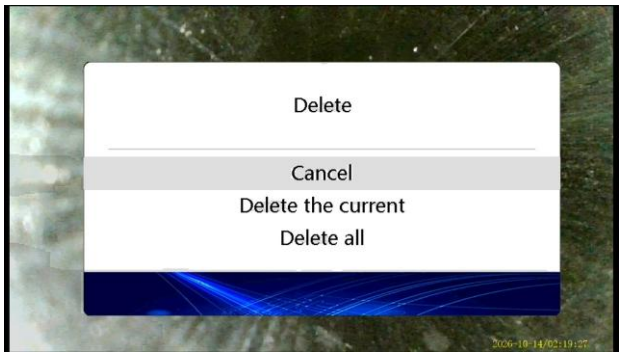

Figure 25. Delete menu in full-screen view

Deleting several files at once:

1. Open the PHOTO or VIDEO folder so the thumbnails show.
2. Press **LED**. A circle appears on each thumbnail.
3. Use **Up** and **Down** to move to a file, and press **OK** to mark it. A yellow check mark appears. Repeat for each file you want to delete.
4. Press **LED** again. At the **Delete current files** prompt, choose **Confirm** to delete the marked files, or **Cancel** to keep them.

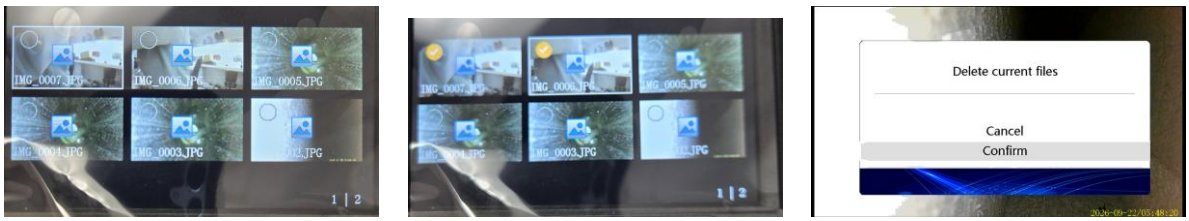

Figure 26. Deleting several files: selection circles (left), two files marked (center), and the confirmation prompt (right)

NOTICE	Deleted files cannot be recovered. Copy files you want to keep to a computer first (Section 4.10).

4.10 Transferring Files to a Computer

Photos are in the PHOTO folder and videos are in the VIDEO folder on the microSD card. MOV videos play in VLC, QuickTime, or most video players.

Method 1: microSD card reader

1. Turn off the X-PLOR and remove the microSD card.
2. Insert the card into the card reader and plug the reader into a USB port on the computer.
3. Open the card in File Explorer (Windows) or Finder (Mac) and copy the files.

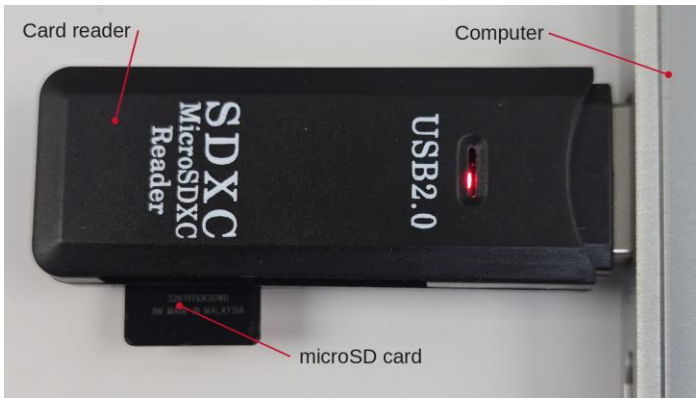

Figure 27. microSD card in the card reader, plugged into a computer

Method 2: USB-C cable

1. Turn off the X-PLOR.
2. Connect the X-PLOR to the computer with the USB-C cable.
3. Turn on the X-PLOR. The X-PLOR screen shows a USB storage symbol, and the X-PLOR appears on the computer as a removable drive.
4. Copy the files. Do not remove the card or disconnect the cable while files are copying; this can corrupt the files.

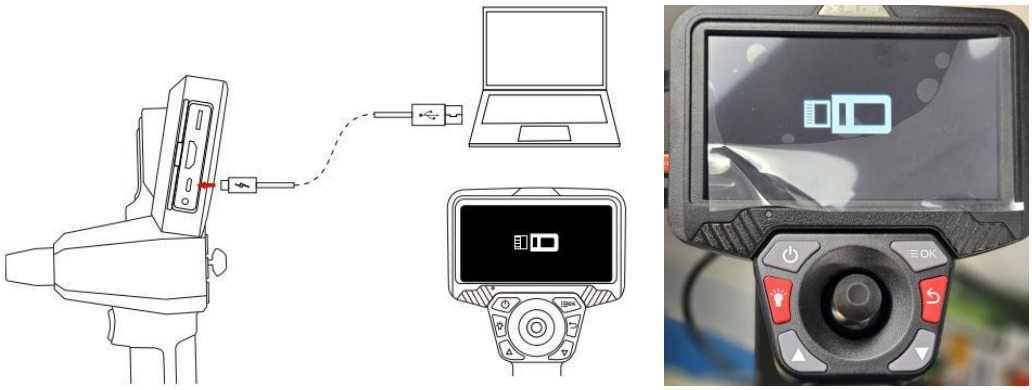

Figure 28. USB-C connection to a computer (left) and the USB storage symbol on the X-PLOR screen (right)

4.11 Using an External Monitor (HDMI)

Connect the HDMI cable from the HDMI port on the X-PLOR to a monitor or TV, then select that HDMI input on the monitor. The X-PLOR screen turns off while the HDMI cable is connected; the image shows only on the monitor.

4.12 Viewing on a Phone or Tablet (Wi-Fi)

The free **Hawkeye X-PLOR WiFi Viewer** app shows the live image on an Android phone or tablet and lets you save photos and video to that device. An iPhone and iPad version is not available at this time.

1. On your phone or tablet, install **Hawkeye X-PLOR WiFi Viewer** from the Google Play Store.
2. On the X-PLOR, open the Settings menu, select **Wi-Fi**, and choose **ON** (Section 5.9).
3. On your phone or tablet, open Wi-Fi settings and connect to the X-PLOR network. Its name starts with **wifi_camera_** and is shown next to Wi-Fi in the Settings menu (Section 5.9). No password is needed.
4. Open the Hawkeye X-PLOR WiFi Viewer app. The live image appears.

Tip: Your phone may report that the X-PLOR network has no internet connection. Choose to stay connected.

Figure 29. The Hawkeye X-PLOR WiFi Viewer app on a phone (left) showing the same live image as the X-PLOR (right)

5. Settings Menu

5.1 Using the Settings Menu

In live view, press **OK** to open the Settings menu. Use **Up** and **Down** to select an item, **OK** to open it or confirm a choice, and **Back** to return. Press the **trigger** to exit straight to live view. The menu has two pages; scroll down past the last item on the first page to reach the second.

Menu item	Options	Section
Date/Time	Year, month, day, time	5.2
Language settings	14 languages (scrolling list)	5.3
Date label	Turn off, ON	5.4
Resolution	1920x1080, 1280x720, 960x720	5.5
Scale display	No ruler function, Cross pattern, Cross frame mode, Grid mode	5.6
Cyclic Record	5 minutes, 10 minutes	5.7
Screen brightness adjustment	1–5	5.8
Wi-Fi	Turn off, ON	5.9
Format	Cancel, Confirm	5.10
Default setting	Cancel, Confirm	5.11
Version	Display only	5.12

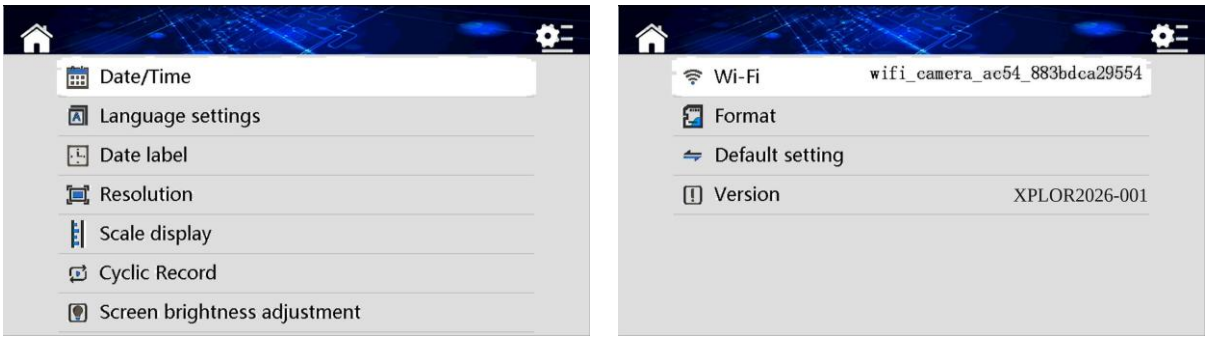

Figure 30. Settings menu, page 1 with Date/Time selected (left), and page 2 with Wi-Fi on and the network name shown (right)

5.2 Date/Time

Select **Date/Time** and press **OK**. The date shows as year / month / day and the time as hours : minutes : seconds. Press **Up** or **Down** to change the highlighted value, and press **OK** to move to the next value. The clock uses 24-hour time. Press **Back** when finished.

Figure 31. Date/Time screen

5.3 Language settings

Select **Language settings**, press **OK**, select a language, and press **OK**. Menus change to the selected language immediately. The list scrolls through 14 languages: English, Deutsch (German), 한국어 (Korean), Italiano (Italian), Espanol (Spanish), Русский (Russian), 日本語 (Japanese), Finnish, Українська (Ukrainian), Polski (Polish), Portuguese (Brazil), Turkish, 繁体中文 (Traditional Chinese), and 简体中文 (Simplified Chinese).

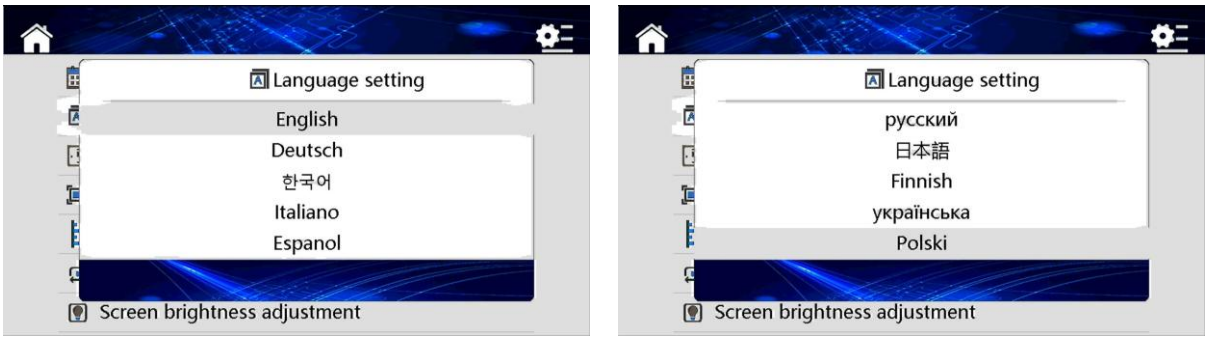

Figure 32. Language settings, first and second screens

5.4 Date label

When **Date label** is **ON**, the date and time are stamped on every photo and video. Choose **Turn off** for files without a stamp.

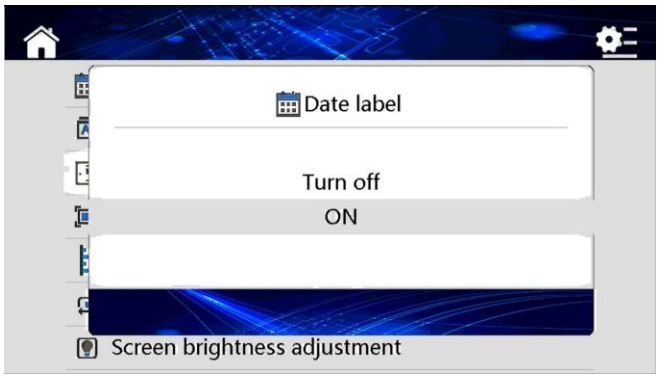

Figure 33. Date label screen

5.5 Resolution

Sets the resolution of the live image, photos, and videos: **1920x1080** (Full HD, best detail), **1280x720** (HD), or **960x720**. Higher resolution makes larger files.

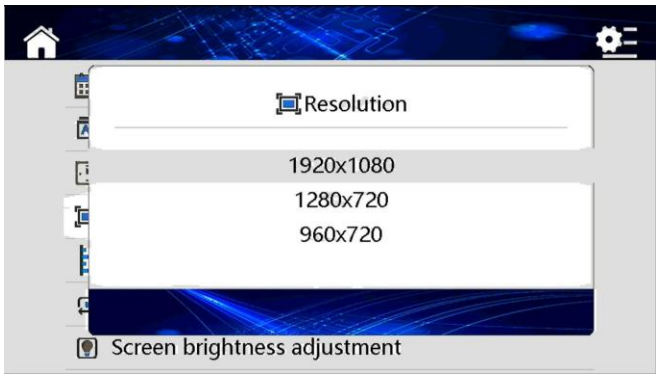

Figure 34. Resolution screen

5.6 Scale display

Adds an on-screen reference overlay: **No ruler function** (off), **Cross pattern**, **Cross frame mode**, or **Grid mode**.

Note: The overlay is a visual reference for positioning and comparison. It is not a calibrated measurement tool.

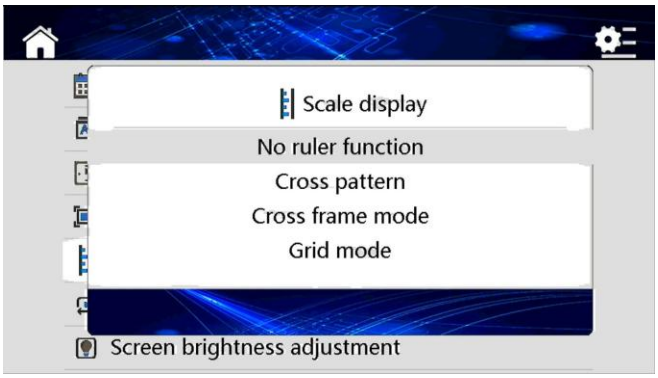

Figure 35. Scale display screen

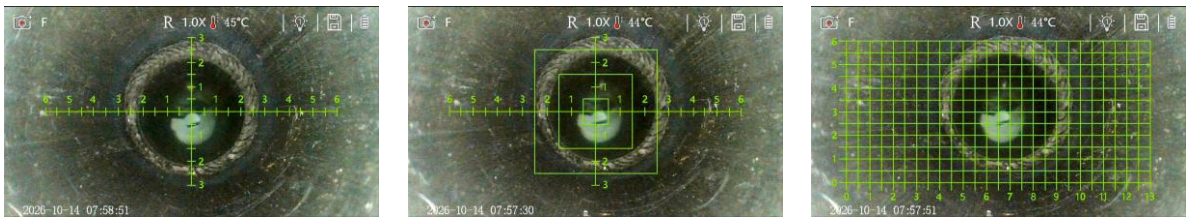

Figure 36. Scale display overlays: Cross pattern (left), Cross frame mode (center), and Grid mode (right)

5.7 Cyclic Record

Sets the length of each video file: **5 minutes** or **10 minutes**. Record as usual; nothing else needs to be turned on. During a long recording, the X-PLOR saves the current file and starts a new one at each interval. For example, a 30-minute recording at the 5-minute setting is saved as six 5-minute videos. Earlier files are not recorded over, so check that the microSD card has enough free space before a long recording.

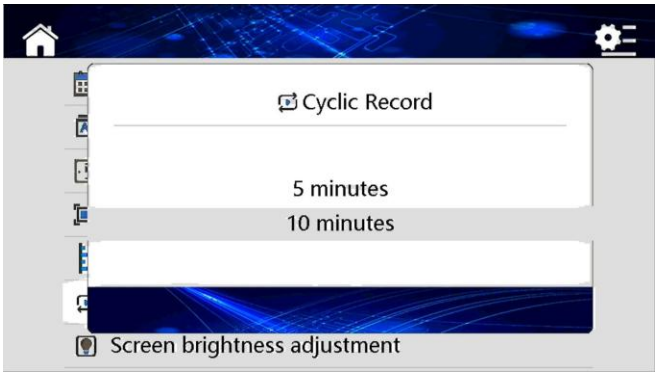

Figure 37. Cyclic Record screen

5.8 Screen brightness adjustment

Sets the display brightness from **1** (dimmest) to **5** (brightest). A lower setting extends battery life.

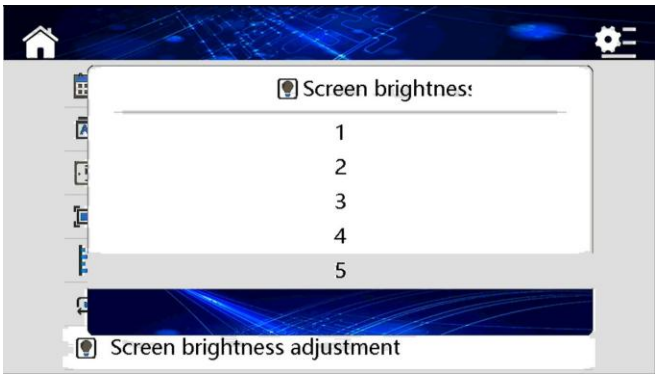

Figure 38. Screen brightness adjustment screen

5.9 Wi-Fi

Choose **ON** to turn on the X-PLOR Wi-Fi network for the Hawkeye X-PLOR WiFi Viewer app, or **Turn off** to turn it off. When Wi-Fi is on, the network name (wifi_camera_ followed by a code) appears next to Wi-Fi in the Settings menu. See Section 4.12.

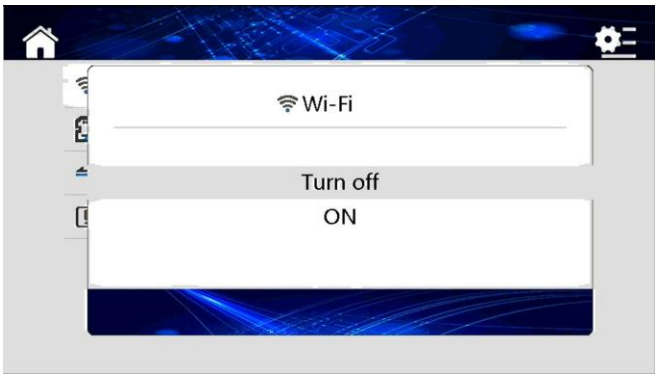

Figure 39. Wi-Fi screen

5.10 Format

Erases everything on the microSD card and prepares it for use. The screen asks **Delete all datas**. Choose **Confirm** to format or **Cancel** to keep your files.

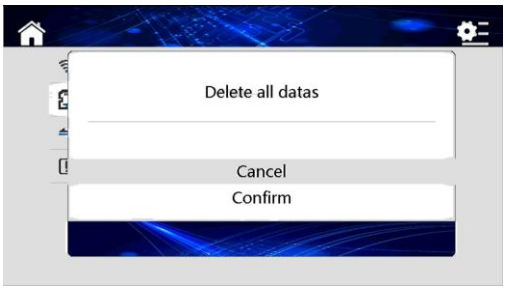

Figure 40. Format screen

NOTICE	Formatting permanently deletes all photos and videos on the card. Copy any files you want to keep to a computer first.

5.11 Default setting

Returns settings to factory defaults. Choose **Confirm** to reset or **Cancel** to keep your settings. The date and time are not reset, and photos and videos are not deleted.

Note: Restoring defaults changes the menu language to Chinese. To switch back to English: press **OK** to open the Settings menu, press **Down** once to select the second item (Language settings), press **OK**, select **English**, and press **OK**.

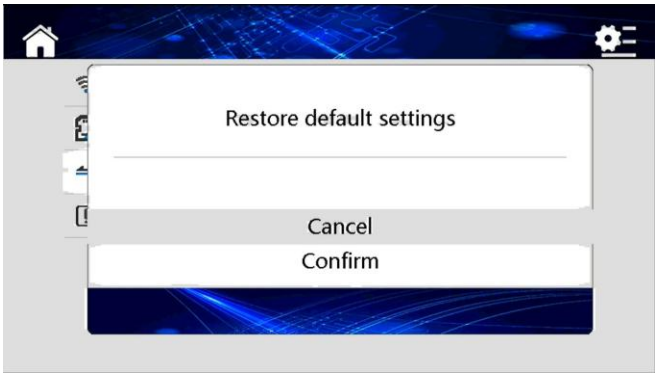

Figure 41. Restore default settings screen

5.12 Version

Shows the firmware version, for example **XPLOR2026-001**. Have this number ready when you contact technical support.

6. Care and Maintenance

6.1 Cleaning

- Clean the outside of the X-PLOR with a soft, damp cloth.
- Clean the lens at the probe tip after each use. Residue on the lens blurs the image. Use lens cleaning solution or a commercial glass cleaner with a soft, non-scratching cloth or cotton swab.
- Clean the screen the same way. Do not spray cleaner directly onto the X-PLOR.

NOTICE	Do not use acetone or other strong solvents. They damage the screen, housing, and insertion tube.

6.2 Chemical Compatibility

The insertion tube can withstand brief contact with the following fluids without damage:

Water	Jet A fuel	Kerosene
Aviation gasoline	JP-4 fuel	Diesel fuel
Gasoline	Isopropyl alcohol	Hydraulic oil
Synthetic turbine oil	Inhibited transformer oil	

After contact with any of these fluids, wash the insertion tube with mild soap and water and dry it before you return the X-PLOR to the case. These fluids can damage the case foam.

6.3 Storage

- Store the X-PLOR in its case at room temperature, in a clean, dry place.
- Do not store it where it will be exposed to temperatures above 140 °F (60 °C), condensing moisture, direct sunlight, dust, vibration, or corrosive fumes.
- Handle the case with care, and do not stack heavy items on it.
- If you will not use the X-PLOR for more than 3 months, remove the battery. Every 3 months, check that the X-PLOR works and recharge the battery.

6.4 Packing the X-PLOR

1. Center the joystick so the tip is straight.
2. Turn off the X-PLOR.
3. Clean and dry the insertion tube if it contacted any fluids (Section 6.2).
4. With the case handle toward you, place the X-PLOR, mounted on its stand, in the large center cutout (Figure 1).
5. Lay the insertion tube in the track that runs around the other cutouts. Do not pinch it in the lid.
6. Put the neck strap, charging adapter, and USB-C cable in the upper-left pocket, and the HDMI cable and card reader in the upper-right pocket.

7. Troubleshooting

Problem	Possible cause	What to do
X-PLOR does not turn on	Battery discharged or not installed	Charge the battery, or install it (Section 4.1).
X-PLOR turns off by itself	Battery low	Charge the battery. If it continues, remove and reinstall the battery, then restart.
Screen on but image is black	LED level at 0; image frozen; tip against a surface	Press LED to raise the level. Press Power briefly to unfreeze. Move the tip back.
Image is blurry	Dirty lens; tip too close to the object	Clean the lens (Section 6.1). Move the tip farther from the object.
Tip lights go out and battery icon is red	Battery very low	Charge the battery or install a charged spare (Section 4.1).
Cannot adjust LED brightness	Battery low	Charge or replace the battery.
Indicators missing from screen	Indicators hidden	Hold Down to show all indicators (Section 4.6).
“Please insert SD card”	No card, or card not seated	Insert the card until it clicks (Section 4.8).
Cannot save photos or video	Card full	Copy files to a computer and delete them, or use another card.
App cannot find the X-PLOR	Wi-Fi off; phone on another network	Turn Wi-Fi ON (Section 5.9) and connect the phone to the X-PLOR network.
Computer does not see the X-PLOR	Charge-only cable; X-PLOR was on when connected	Use the supplied USB-C cable. Turn off, connect, then turn on (Section 4.10).
Video does not play on computer	Player cannot open MOV files	Use VLC or QuickTime.
Tip does not bend, or joystick resists	Obstruction or damage	Stop. Center the joystick, withdraw slowly, and contact service (Chapter 9).

8. Regulatory Information

8.1 FCC Compliance

Supplier’s Declaration of Conformity (47 CFR § 2.1077)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

8.2 Battery Disposal

The X-PLOR contains a rechargeable lithium-ion battery. Recycle used batteries at a battery recycling location. Do not dispose of them in household trash or by burning.

9. Service, Warranty, and Contact

9.1 Service

To obtain service for a Hawkeye® X-PLOR, contact your reseller or Gradient Lens Corporation directly. If the problem cannot be solved over the phone, we will issue a Return Materials Authorization (RMA) number and instructions for shipping the X-PLOR to an authorized service center. Have the firmware version (Section 5.12) and model number ready.

9.2 Warranty

Gradient Lens Corporation warrants that all Hawkeye® X-PLOR borescopes and accessories will be free of defects in materials and workmanship for one year from the date of purchase.

This warranty does not cover breakage or failure due to tampering, misuse, neglect, accidents, modification, or improper maintenance, service, and cleaning procedures. This warranty is also void if the instrument is not used in accordance with the manufacturer's recommendations, or if required service is performed by anyone other than Gradient Lens Corporation.

NO OTHER EXPRESS OR IMPLIED WARRANTY IS GIVEN.

9.3 Sales and Technical Support

Gradient Lens Corporation, 4647 Jackson Lane, Unit D, Phelan, CA 92371
Phone: 585-235-2620 | Toll-free: 800-536-0790
Email: info@gradientlens.com | Web: www.hawkeyeborescopes.com

PRECISION BORESCOPES

Gradient Lens Corporation
4647 Jackson Lane, Unit D
Phelan, CA 92371

www.hawkeyeborescopes.com
info@gradientlens.com
585-235-2620 | Toll-free 800-536-0790

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