



V3 **HD VIDEO BORESCOPE** User's Manual



V3-040-XXXX-4

V3-060-XXXX-4

Safety Information	1
General Warnings.....	1
General Cautions.....	1
Operation Overview	2
<i>Hawkeye® V3</i>	3
Battery.....	4
Battery Status Indicator	4
Stand	4
Port Cover	4
Controls	5
Touch Screen	5
Live Screen Mode	5
Zoom	5
Status Indicators.....	5
Menu Mode.....	5
Joystick	5
Live Screen Mode	5
Menu Mode.....	6
Torsion Tube / Insertion Tube.....	6
Keypad.....	6
Power	6
Home	7
Exposure Weighting	7
Image Capture	7
Video Capture.....	7
Glare Reduction.....	7
Menu	8
Illumination	8
Menu	8
Folders.....	8
File Manager.....	8
Opening Folders	9
Create Subfolders.....	9
Navigate Up One Level	9
View, Rename, Move, Delete.....	9
Image Viewer	9
Previous/Next.....	9
Delete	10

Add Notes	10
Edit Image	10
Shape / Color / Undo	10
Edit Notes	11
Notes Files	11
Editing Notes Files	11
Video Viewer	11
Previous/Next	12
Delete	12
Settings	12
Status Indicators	12
Text Overlay	13
Audio Settings	13
Mirror	13
Display	13
Date and Time	13
Language	13
System Information	14
PowerSave	14
AutoSave	14
AutoSave Options	14
Display Setting	14
Location	14
Memory	15
Transferring captured Images, Video, and Notes Files	15
V3 internal memory to a USB flash drive:	15
V3 internal memory to a Personal computer:	16
V3 USB Flash drive to a personal Computer:	16
Wi-Fi	16
Software Upgrade	16
User Manual	16
V3 Disk Mode	17
Status	17
Autosave On/Off and Location	17
Date & Time	17
Illumination	17
Glare Reduction	17
Battery	18

Memory	18
Mirror	18
Audio Recording	18
Articulation	18
Wi-Fi Status	18
Exposure Weighting	18
Text Overlay	18
Display Customization	18
Pinch-to-Zoom Magnification	19
Accessories	20
Tip Cap	20
Tip Adaptors	20
90° Prism Tip	20
Close-Up Tip	20
Tip Adaptor Installation	20
Support Strap System	21
Assembly	21
Bench-Top Tripod Support	21
Assembly	21
Maintenance	22
Cleaning the System	22
Chemical Compatibility	22
Sales and Technical Support	23
Service	23
Warranty	23
Certifications / Compliance	24

Safety Information

General Warnings

The following warning statements apply to use of the Hawkeye® V3 Video Borescope in general. Warning statements that apply to specific procedures appear in the corresponding sections of the manual.



DO NOT allow the Hawkeye® V3 insertion tube, system, or working tools to come into direct contact with any voltage or current source. Prevent all contact with live electrical conductors or terminals. Damage to the equipment and/or electrical shock to the operator may result.



DO NOT use the Hawkeye® V3 in explosive environments.



USE PROPERLY. Using the Hawkeye® V3 in a manner not specified by the manufacturer may impair the product's ability to protect the user from harm.

General Cautions

The following caution statements apply to use of the Hawkeye® V3 Video Borescope in general. Caution statements that apply to specific procedures appear in the corresponding sections of the manual.



HANDLE CAREFULLY. Keep the insertion tube away from sharp objects that might penetrate its outer sheath. Keep the insertion tube as straight as possible during operation; loops or bends anywhere in the insertion tube decrease the ability to steer the probe tip. Avoid bending the insertion tube sharply.



ALWAYS use the *HOME* button to straighten the bending neck before withdrawing insertion tube from the inspection area or putting the probe away. Never pull, twist, or straighten the bending neck by hand; internal damage may result. At the first sign of damage, return the probe for repair.



CHEMICALS MAY DAMAGE THE V3. For a list of substances that are safe for the V3, see *Chemical Compatibility*.

Operation Overview

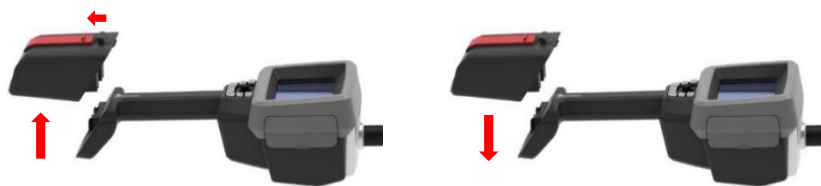
The Hawkeye® V3 Video Borescope is controlled via the *Keypad*, *Joystick*, and *Touch Screen*. The *Graphical User Interface* is accessed using the *Keypad*, and selections are made using the *Joystick* or the *Touch Screen*. These controls allow the user to:

- Articulate the bending neck to change the direction of view.
- Capture video and still images and view them.
- Adjust image brightness and metering options.
- Select where images and videos are stored.
- Choose which status icons are displayed on the live screen, and how they operate.
- Control text overlays that are displayed on the live screen and saved with images and videos.
- Add text and graphic annotations to saved images.
- Record audio notes.
- Output the screen to an iPhone or iPad via Wi-Fi.
- Output stored images and videos to a computer via USB.

Hawkeye® V3



Battery



To remove the *Battery*, release the *Battery Latch* by sliding it toward the base of the V3, then slide the *Battery* straight up. To replace the *Battery*, slide the *Battery* straight down until the *Battery Latch* clicks into place.

Battery Status Indicator

Pressing the button at the base of the *Battery Status Indicator* shows the state of the *Battery's* charge.

3 lights → 100% charge

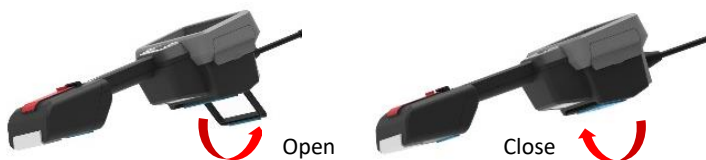
2 lights → 60% charge

1 light → 30% charge



Stand

Rotate the *Stand* away from the V3 body until it locks into place. Push toward the body to close the *Stand*.



Port Cover

Lift the port cover to gain access to the ports.



Controls

Touch Screen

The V3 Touch Screen input modes:

1. Touch.
2. Touch and Hold (hold for 2 seconds).
3. Gestures.

Live Screen Mode

Zoom

Touch the screen with two fingers then move them together or apart to zoom the live image in or out.

Status Indicators

Touch Live Screen Status Indicators to gain direct access to system Settings without having to navigate menus.

Menu Mode

Touching an icon selects that icon or opens a folder. The *Touch Screen* also allows typing on the virtual keyboard. *Touch and Hold* (folders, images, videos) to open submenu options.

Joystick

The V3 Joystick has three input modes:

1. Multidirectional navigation.
2. Click (press straight down on the Joystick until it clicks).
3. Click and hold (hold for 2 seconds).

Live Screen Mode

The Joystick is used to control the bending neck, capture still images, and record video. Move the Joystick to articulate the *Bending Neck*. As the *Bending Neck* is articulated, the live image will pan. The *Articulation* icon (bullseye; upper left) indicates the bending neck direction and degree. Red warning bars will appear when near the end of the travel range in the indicated direction.



UNCOIL the *Insertion Tube* of the Hawkeye® V3 Video Borescope before you begin moving the Joystick to articulate the Bending Neck, failure to do so will decrease the articulation range and may result in damage to the articulation system.

Click the *Joystick* to capture an image. *Click and Hold* to record video. A red *Video Recording* icon will appear in the upper right corner of the screen.

Menu Mode

Use the *Joystick* to move between and select icons in *Menu* mode. *Click* to select the highlighted folder, image, video, or icon. *Click and Hold* (folders, images, videos) to open submenu options.

Torsion Tube / Insertion Tube

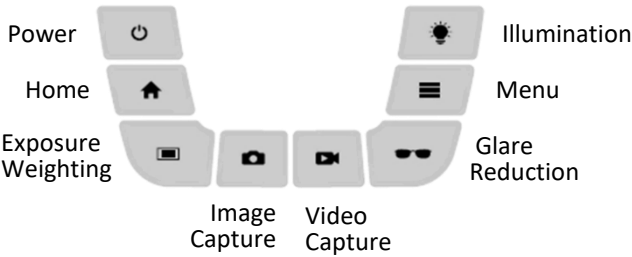
The *Torsion Tube* is used to rotate the insertion tube up to 90° independent of the V3 handset/screen while guiding the tip of the V3 to the location you want to inspect.



NEVER FORCE the Insertion Tube to bend too sharply. Extreme bends may result in damage to the *Insertion Tube*.

Keypad

The keypad allows direct access to commonly used features without having to navigate menus.



Power



Press the *Power* button to **POWER ON** the

Hawkeye® V3. The *Battery Status Indicator* will light momentarily while the system software is loaded. When the booting sequence is complete, the



Hawkeye® V3 will display the *Live Screen*. To turn the **POWER OFF**, press and hold the *Power* button for 2 seconds.

Home



Pressing the *Home* button returns the bending neck to a neutral, centered position. The Green dot in the *Articulation Icon* (*Live Screen*; upper left) will return to the center of the icon indicating that the bending neck is now home.



ALWAYS use the *Home* button to straighten the bending neck before withdrawing the *Insertion Tube* from the inspection area. Failure to *Home* the bending neck before withdrawing the insertion tube may damage the bending neck.

Exposure Weighting



Press the *Exposure* button to step through three exposure settings that can help to improve image quality - *Average*, *Center Weighted*, and *Edge Weighted*.

Image Capture



Capture a still image in *Live Screen* mode by pressing the *Image Capture* button, or by pushing straight down on the *Joystick* until it clicks.

Video Capture



Record video by pressing the *Video Capture* button or *Click and Hold* the *Joystick*. The *Video Recording* icon will appear (red dot; upper right). Stop recording by pressing the *Video Capture* button again or *Click and Hold* the *Joystick*. The *Video Recording* icon will disappear indicating that video recording has ended. Still images may be captured at any time during video recording by pushing the *Image Capture* button or by clicking the *Joystick*. Video recording will not be interrupted. This *Capture Image from Video* feature also works when reviewing videos on the V3.

Glare Reduction



Press the *Glare Reduction* button to step through three levels of glare reduction that will help to reduce glare and improve image quality.

Menu

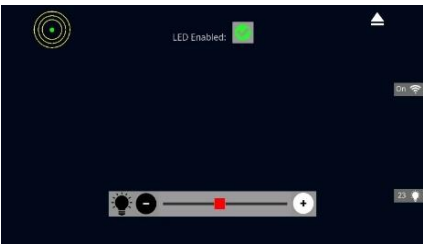


Press the *Menu* button to display the main menu on the *Live Screen* where the settings and features of the V3 may be modified.

Illumination



LED output may be adjusted by pressing the *Illumination* button. This brings up a horizontal scroll bar at the bottom of the screen, which can be adjusted via the *Touch Screen* or the *Joystick*. An *LED ON / OFF* button at the top of the screen toggles the V3's internal LED light source. The V3 will automatically adjust video exposure if the LED is off. It will adjust the LED brightness and video exposure in tandem if the LED is on.



LED on



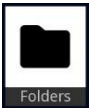
LED off

Menu



Press the *Menu* button to display the *Folders*, *Settings*, and *Status* icons of the main menu. Pressing the *Menu* button again will return to *Live Screen* mode. *Touch* or *Click* Icons on the *Touch Screen* to activate or open them.

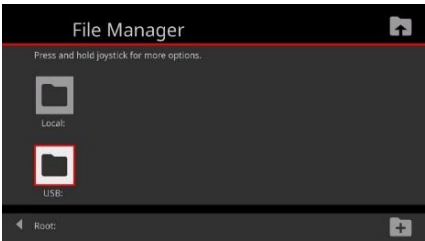
Folders



Touch or click the *Folders* icon to open the *File Manager*.

File Manager

The *File Manager* allows you to choose where images, videos, and notes are stored, and to navigate through the file systems in the *Local* and *USB* storage areas.



Opening Folders



Touch or Click a folder icon to open that folder.

Create Subfolders



While any folder is open, touch or click the *Add Folder* icon (lower right) to create a subfolder.

Navigate Up One Level



Touch or click the *Up One Level* icon (upper right) to navigate up one folder level.

View, Rename, Move, Delete

Touch and hold or *Click and Hold* a folder, image, or video to open a menu with options to view (*Image Viewer*, *Video Viewer*, open folder), rename, move, delete, or to set that location as the *AutoSave* location (folders only).

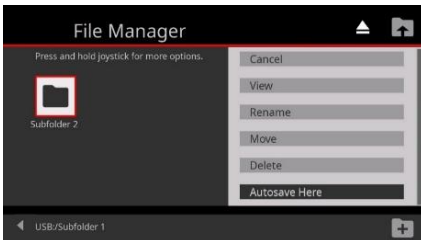
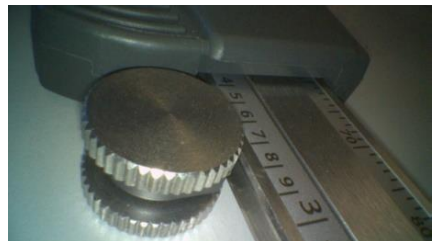


Image Viewer

Touch or Click an image file to open the *Image Viewer*. *Touch or Click* the image in the *Image Viewer* to open a full-screen view of the image. *Touch or Click* the image again to return to the *Image Viewer*.



Previous/Next

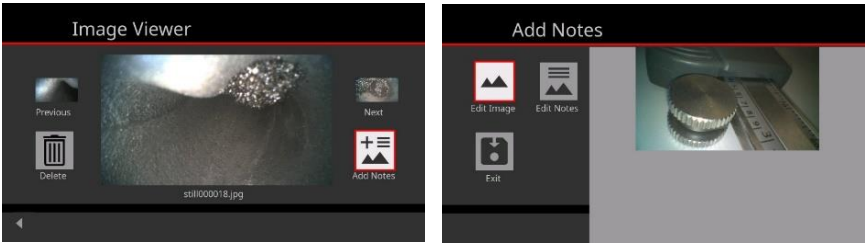
Touch or Click the *Previous Image* (upper left) or the *Next Image* (upper right) to navigate to the previous or next image without having to return to the *File Manager*.

Delete

Touch or Click the Delete icon to open the delete file confirmation window where delete can be confirmed or canceled.

Add Notes

Touch or Click Add Notes (lower right) to open the Add Notes screen. The Add Notes screen is used to create a .docx copy of the image that can be viewed on the V3 or as a Microsoft Word document on a computer. The original image is not altered. Touch or Click Exit (lower left) to return to the Image Viewer without creating a Notes file. Touch or Click the Back Arrow icon (bottom left) to return to the File Manager.

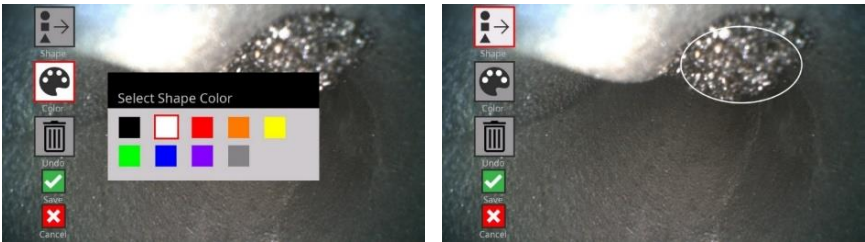


Edit Image

Touch or Click Edit Image to open the Editing screen. Here 4 outline shapes in 9 colors can be added to highlight areas of interest in the image.

Shape / Color / Undo

Touch or Click Shape to select an outline shape. Touch or Click Color to choose a color for the outline shape. Touch and Hold to place the shape on the image. Move your finger across the screen to size the shape. Each Touch and Hold adds another shape to the image. Touch or Click Undo to remove shapes in the

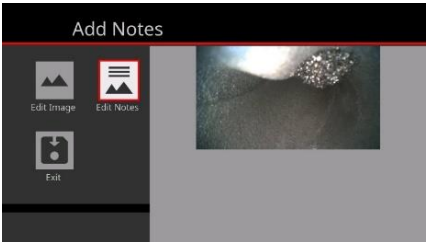


order they were added. Touch or Click Save to add the shape to the .docx

notes file. *Touch or Click Cancel* to return to the *Add Notes* screen without saving.

Edit Notes

Touch or Click Edit Notes to enter *Notes* on the *Virtual Keyboard*. *Touch or Click Save* to add the notes to the .docx *Notes* file. *Touch or Click Cancel* to return to the previous screen without adding any *Notes*.

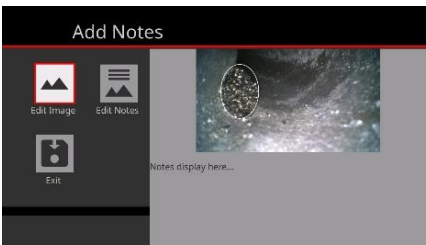
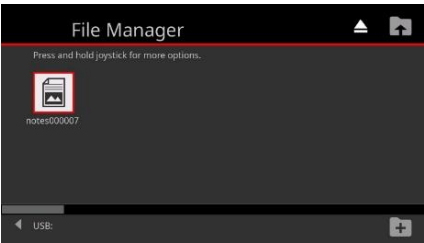


Notes Files

Notes files take the form notesxxxxxx.docx where the xxxxxx corresponds to the still image file number (i.e., still000012; notes000012.docx).

Editing Notes Files

Touch or Click a *Notes* file to open the *Add Notes* menu. The *Notes* menu will display the still image along with any shapes or notes that have been added to the image. *Touch or Click Edit Image* to remove existing shapes, or to add



new ones. *Touch or Click Edit Notes* to make changes to existing notes or to add new ones. *Touch or Click Save* to save the edits or *Touch or Click Cancel* to return to the *Add Notes* screen. *Touch or Click Exit* to return to the *File Manager*.

Video Viewer

Touch or Click a video file in the *File Manager* to open the *Video Viewer*. The *Video Viewer* screen is used to play videos or to delete them. *Touch or Click* the video file previewed in the *Video Viewer* to



play the video. While playing, *Touch* or *Click* the Pause button to pause the video. *Touch* or *Click* the Play button to resume playing the video or to play the video again. Touch or Click the X icon to return to the *Video Viewer*. *Touch* or *Click* the Back Arrow icon in the lower left corner of the screen to return to the *File Manager*.

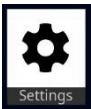
Previous/Next

Touch or *Click* the *Previous* or *Next* icons to navigate to the previous or next video without having to return to the *File Manager*.

Delete

Touch or *Click* the *Delete* icon to open the delete file confirmation window where delete can be confirmed or canceled.

Settings

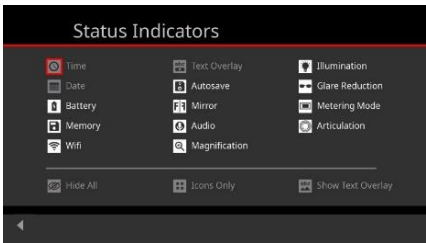


Touch or *Click* the *Settings* icon to open the settings screen.

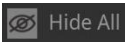
Status Indicators



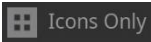
Touch or *Click* *Status* icons to choose which *Status Indicators* are displayed on the *Live Screen*. When active, *Status Indicators* will be highlighted.



The icons below the line control groups of display items.



Hide All hides all the status indicators on the live screen even if they have been selected.



Icons Only displays selected status indicators without text to save *Live Display* space.



Show Text Overlay will toggle *Text Overlay* items on or off on the *Live Screen*

Text Overlay



Configure text overlays that will be shown on the *Live Screen* and saved as part of the image.



Display *Text Overlay*.



Set *Overlay Status Icon*.



Include Time & Date in *Text Overlay*.



Configure up to 20 user defined text strings. Select one to display as part of the *Text Overlay*.



Select *Text Overlay* text color.



Select where on the *live Screen* to place the *Text Overlay*.



Display *Live Screen Grid*.

Select Grid color.



Preview changes made to the *Text Overlay* settings.

Audio Settings



Enable or disable the recording of audio along with your videos. An external microphone plugged into the *Audio* is required. Set the *Audio Status Indicator* – *Always ON*, *Always OFF*. When the *Audio Status Indicator* is set to *Always ON*, Touch the *Live Screen Audio Indicator* icon to return to this screen where audio can be toggled ON or OFF.

Mirror



Set the *Live Screen* to display a left to right mirror image. Set the *Live Screen Status indicator* - *Always*, *Never*, or *When Active*.

Display



Set screen backlight brightness for optimal viewing in dark or brightly lit environments.

Date and Time



Set the Date and Time. Toggle date and time *Status Indicators*.

Language

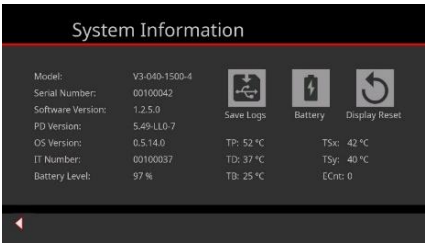


Set display language.

System Information



The *System Information* screen displays important system information: Model#, Serial#, Software Version, Battery Charge Level, and Component Temperature.



PowerSave



Control how long the V3 will remain idle before going to sleep or powering off to conserve battery charge.

AutoSave



The *AutoSave* screen allows for complete control over where and when images and videos are saved.

AutoSave Options

- 1. *Full Autosave On* - automatically saves images and videos to the *Autosave Location*.
- 2. *Location Only* - prompts you to save to the *AutoSave Location* or to delete.
- 3. *Autosave Off* - prompts you to select a *Save Location* and to save or delete.

Display Setting

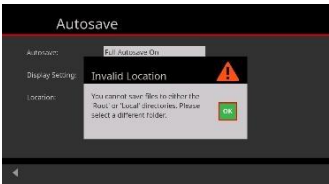
- 1. *Always ON* turns the *Live Screen Status Indicator* ON.
- 2. *Always OFF* turns the *Live Screen Status Indicator* OFF.

Location

Select an *AutoSave Location* by navigating to and opening a folder. Confirm the location by selecting the *Back Arrow* (lower left). The new *AutoSave Location* will be displayed in the *Location* block.



The *Local* folder is **NOT** a valid *Autosave Location*. Attempting to use the *Local* folder will display an error message. Use the Default folder or use the *Add Folder* icon (upper right) to create folders and sub-folders to set as the *AutoSave Location*.



Memory



Flash Drive is installed in USB PORT2. If a USB Flash Drive is present, the Live Screen will display a *USB Eject* icon (top right). If no USB Flash Drive is present, a warning message will appear

Primary storage memory is provided by the included USB Flash Drive. This enables the hassle-free transfer of images, videos, and notes to a computer. At startup the Hawkeye® V3 will verify if a USB



is powered ON, the *Live Screen* will display a prompt to change the *AutoSave Location*.

indicating that content will be stored to internal memory. The V3 internal storage capacity is 1GB and will accommodate approximately 1900 images or 17 minutes of video or a combination of both. If a USB Flash Drive is installed while the V3

Transferring captured Images, Video, and Notes Files

V3 internal memory to a USB flash drive:

1. Insert USB Flash Drive.
2. Press the Menu button.
3. *Touch* or *Click* the Folders icon.
4. *Touch* or *Click* the Local icon.
5. *Touch and Hold* or *Click and Hold* the Default icon.
6. *Touch* or *Click* Move.
7. *Touch* or *Click* the Folder UP icon in the upper right corner.
8. Touch USB
9. Touch SAVE

V3 internal memory to a Personal computer:

1. Press the Menu button
2. Touch Settings (or press down on the Joystick)
3. Touch V3 Disk Mode
4. With the supplied USB cable, Connect the V3 to your personal computer
5. Access to the *V3 Internal Memory-Default Folder* should now be available from your PC

V3 USB Flash drive to a personal Computer:

1. If the V3 is powered on, touch the Eject icon on the upper right corner of the display, then remove the USB drive and insert into your PC.
2. If the V3 is powered off, simply remove the USB drive, and insert into your PC.

Wi-Fi



Mirror the V3 screen to a Wi-Fi connected Apple iPhone™ or Apple iPad™ using the *V3 View* app that can be downloaded from the Apple App Store™.



The *V3 View* app will ask you to select the V3 device to connect with and then display the video stream from the Hawkeye V3. The Wi-Fi password for the V3 is **Password2\$**. Images can be captured, and video saved into iPhone™ Photos from the *Hawkeye V3 View* app. From there they can be texted or sent in an email as you would any other image or video.

Software Upgrade



Copy firmware onto USB Flash Drive then follow on-screen prompts to Install firmware upgrades.

User Manual



An abbreviated, beta version of this user guide is accessible by activating this icon.

V3 Disk Mode



V3 Disk Mode allows you to mount the V3 as an external drive on your computer. Connect the V3 to your computer using a USB mini b cable (pictured below) which connects to USB PORT1 under the port cover on the side of the V3 display. Images and files stored in the Local folder of the V3 will then be accessible for downloading to the computer.

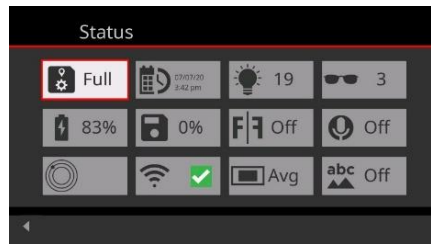


The USB flash drive is **NOT** accessible in V3 Disk Mode. To transfer content from the USB Flash Drive, see: '*Transferring captured Images, Video, and Notes files*'.

Status



Touch or Click the Status icon on the main Menu to open the Status page. Icons here allow the user to select which *Status Indicators* are active and how they will display on the *Live Screen*.



Autosave On/Off and Location



Set *Status Indicator* - *Always ON, Always OFF*. Set *AutoSave* and *Autosave Location*.

Date & Time



Set date and time. Set *Status Indicator* - *Always, Never* - individually or as a pair.

Illumination




Adjust LED *Illumination*. Set *Status Indicator* - *Always ON, Always OFF*, or *On When Active*.

Glare Reduction




Adjust *Glare Reduction*. Set *Status indicator* - *Always ON, Always OFF*, or *ON When Active*.


Battery

 *Set Status Indicator - Always ON, Warning Only* (displays when battery charge is low). Displays current battery charge level and other battery performance parameters.


Memory

 *Set Status Indicator - Always ON, Warning Only* (displays when memory is approaching full).


Mirror

 *Set Status Indicator – Always ON, Always OFF or ON When Active.* Toggle function ON or OFF.


Audio Recording

 *Set Status Indicator - Always ON, Always OFF.* Enable or disable *Audio Recording*.


Articulation

 *Set Status Indicator - Always ON, Warning Only* (warning bars will appear when near the end of the travel range in the indicated direction).


Wi-Fi Status

 *Set Status Indicator - Always OFF, ON When Active.* Enable *Wi-Fi* broadcasting.

Exposure Weighting

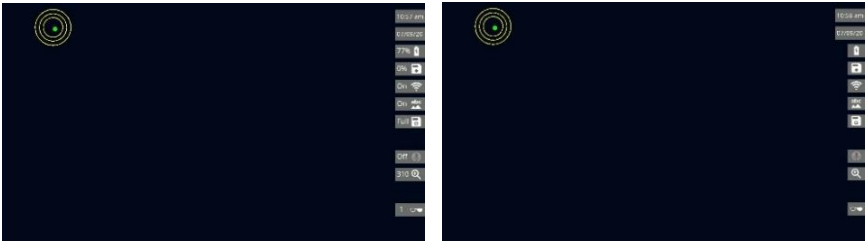
 *Set Status Indicator - Always ON, Always OFF or ON When Active.* Set *Exposure Weighting* mode.

Text Overlay

 Open *Text Overlay* screen.

Display Customization

Status Indicators will appear in a column at the right edge of the live screen when selected for display by the user.



The Articulation Status Indicator will appear in the upper left corner of the *Live Screen* when active.

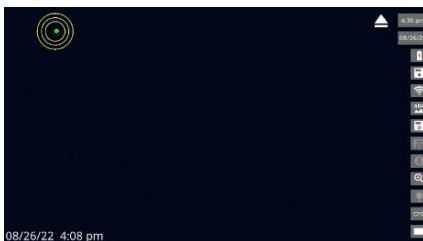
Any active Text Overlay can be positioned on the *Live Screen* using the Text Overlay controls found in *Settings*.

When the display mode of an indicator is set to *ON*, the *Status Indicator* icon is displayed on the live screen.

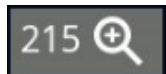
When the display mode of a *Status Indicator* is set to *OFF*, the icon for that feature will only display on the live screen when it is indicating a warning condition. (i.e., if the *Battery Status Indicator* display mode is set to *OFF*, it will only appear if the battery is getting low.

When the display mode is set to *ON*

When Active, the status icon will only appear on the live screen when the feature is active. Here the live display with Text Overlay showing *Date & Time* in lower left, and *Articulation Display* bullseye in the upper left and the Status Icons displayed in Icon Only mode.



Pinch-to-Zoom Magnification



The live screen image may be magnified up to 5X. Touch the screen with two fingers then move them together or apart to zoom the *Live Screen* image in or out. When the *Live Screen* image is magnified, the magnification *Status Indicator* will appear if it is set to display. When *Icons Only* mode is set to *OFF*, the magnification Status Indicator will display the degree of magnification as a percentage, with 100 indicating 1:1 magnification.

Accessories

Tip Cap



The *Tip Cap* protects the *Tip Face* and *Tip Threads* while using the *V3* without *Tip Adaptors*.

Tip Adaptors

90° Prism Tip



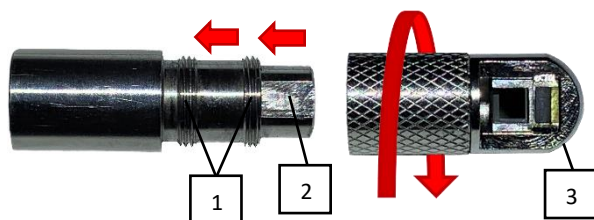
1. Cinch Down Barrel
2. 90° Prism
3. Light Guide

Close-Up Tip



1. Cinch Down Barrel
2. Close Focus Lens
3. Light Guide

Tip Adaptor Installation



1. Threads
2. Tip Flat
3. Tip Head

Slide the *Adaptor* onto the tip and rotate the *Cinch Down Barrel* in a clockwise direction. Continue clockwise rotation until the *Cinch Down Barrel* clears the 1st set of threads. Align the *Tip Flat* with the internal adaptor flat by gently turning the *Tip Head* until the flats align and slide together. Rotate the cinch down barrel to engage the 2nd set of threads.



Support Strap System

Use the two-piece *Support Strap System* to avoid fatigue when using the V3 for extended periods of time.



Assembly

To assemble the *Support Strap System*, attach the neck strap to the threaded socket on the back of the *Hawkeye V3*.



Fasten the Belt around the waist and place the battery of the V3 in the belt pouch. Adjust the neck strap and belt lengths as needed.



Bench-Top Tripod Support

Use the Bench-Top Tripod Support to position the Hawkeye V3 for optimal viewing when using the V3 on a work bench or other flat surface.

Assembly

Remove the quick-release plate from the tripod clamp and attach it to threaded socket on the back of the V3. Place the *Bench-Top Tripod* on a flat surface with the quick-release plate on the V3 secured in the tripod clamp. Adjust the tripod head so the V3 is supported by the Battery case and the Tripod.



DO NOT use the tripod as the sole support for the V3. It is for bench-top use with the battery of the V3 resting on the bench.

Maintenance

Cleaning the System

Clean the exterior of the *Hawkeye V3* with a soft, damp cloth. Clean the optical surfaces at the tip, as well as the *Touch Screen* with the supplied lens cleaning solution, or a commercial glass cleaner. Use a soft, non-scratching cloth or the included cotton swabs or equivalent.



DO NOT use strong solvents such as acetone on the V3.

Chemical Compatibility

Chemical compatibility refers to the probe's ability to withstand contact with various liquid substances for short periods of time and not be damaged.



DO NOT use the Hawkeye® V3 Video Borescope in explosive environments.

These substances are safe for a short duration of contact with the insertion tube:

- Water
- Aircraft Gasoline
- Jet-A-Fuel
- Isopropyl alcohol
- JP-4Fuel
- Kerosene
- Synthetic Turbo Oil
- Gasoline
- Diesel Fuel
- Hydraulic Oil
- Inhibited Transformer Oil

After contact with the above fluids, the insertion tube must be cleaned using soap and water and then dried prior to returning the Hawkeye® V3 Video Borescope to the case for storage. The foam in the storage case is not compatible with these chemicals.

Sales and Technical Support

Gradient Lens Corporation

207 Tremont Street
Rochester, NY 14608
Phone: 585-235-2620

Gradient Lens Corporation West

4647 Jackson Lane, Unit D
Phelan, CA 92371
Phone: 585-235-2620

gradientlens.com
info@gradientlens.com
Toll Free: 800-536-0790

Service

To obtain service for a Hawkeye® V3 Video Borescope, please contact your reseller or Gradient Lens Corporation directly. If the problem cannot be corrected over the phone, a Return Materials Authorization number (RMA) will be given along with instructions for shipment to an authorized service center.

Warranty

Gradient Lens Corporation warrants that all Hawkeye® Borescopes and accessories will be free of defects in materials and workmanship for one year from the date of first retail purchase. Video and lighting products have manufacturer's warranties for one year. This warranty does not cover breakage or failure due to tampering, misuse, neglect, accidents, improper installation, modification, shipping, or to improper maintenance, service, and cleaning procedures. This warranty is also void if the instrument is not used in accordance with the manufacturer recommendations or if required service is performed by anyone other than a Gradient Lens Corporation authorized agent. NO OTHER EXPRESS OR IMPLIED WARRANTY IS GIVEN.

FCC Statement / CAN ICES-3 (A) / NMB-3(A)

DECLARATION OF CONFORMITY

Application of Council Directive: 2014/35/EU

Standards to which conformity is declared: IEC61010-1:2010

Manufacturer's Name: Gradient Lens Corporation

Manufacturer's Address: 207 Tremont Street
Rochester, NY 14608

Equipment Description: Borescope

Equipment Class: Class II

Model Number: V3-060-3000-4, V3-040-1500-4, V3-040-3000-4,
V3-060-1500-4, V3-060-3000-4, V3-060-6000-4,
V3-060-8000-4

I the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Place: Rochester, NY USA

Signature: Handwritten Signature

Full Name: Leland Atkinson

Position: Vice President

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with part 15 of 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.

Notes:



207 Tremont Street
Rochester, NY 14608 USA

gradientlens.com
info@gradientlens.com
585-235-2620 • 800-536-0790

v1.3