
UNITRON®

ZoomHD

**DIGITAL MACRO ZOOM
INSPECTION SYSTEM**

**SOFTWARE
OPERATION
MANUAL**



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Operating the ZoomHD

Before You Start...

Read the instruction manual and ensure that the ZoomHD was installed properly.

Turn on the ZoomHD using the toggle switch on the power cord.

The software should launch automatically. If the software interface is not displayed with a live image and toolbar on the left, then click the circle icon  at the bottom of the window to go to the main screen, then click the all apps button . Click the Soptop Cameraex icon to launch the ZoomHD software.

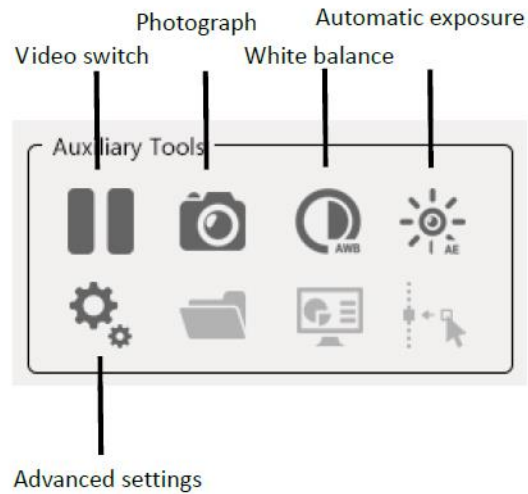
Main Interface



Focusing the ZoomHD

Use the focus knobs towards the back of the ZoomHD to focus on the sample. NOTE: Focus may need to be readjusted after changing magnifications using the zoom wheel.


Using the Imaging Settings Dialog



Video switch




▶ Starts the preview. || Pauses the preview.

Photograph



With the video preview on, click  to save an image to the USB storage device connected to the ZoomHD. Images are saved in .jpg format. Users can customize their own naming convention (refer to Advanced Settings > Photo Settings).

White balance

White balance ensures consistent and more accurate color when using the ZoomHD. To set white balance, place a sheet of white paper below the ZoomHD – it is important that there is no color in the paper and the LED ring light of the ZoomHD is adjusted to the intensity you wish to use for viewing

samples. In video mode, click . The  icon will appear in the upper right corner of the screen and the camera will automatically adjust the white balance. The white balance process will stop automatically when the appropriate value is reached (this is confirmed when the  icon in the upper right disappears).

Automatic exposure

In video mode, video mode, click . The ZoomHD will enter the real time automatic exposure mode and automatically adjust the exposure value in real time according to the brightness of illumination. The brighter the illumination, the shorter the exposure time. The target brightness value can be adjusted in "Advanced Settings > Video Settings". Click the  icon again to turn off automatic exposure.

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Advanced Settings

Setting

Shooting settings

Photo naming Auto Manual
Photo Path
Save Graphics Yes No

Measure Swttings

Edge - + Graphics
Line - + Font
Font - + Scaling

Video Settings

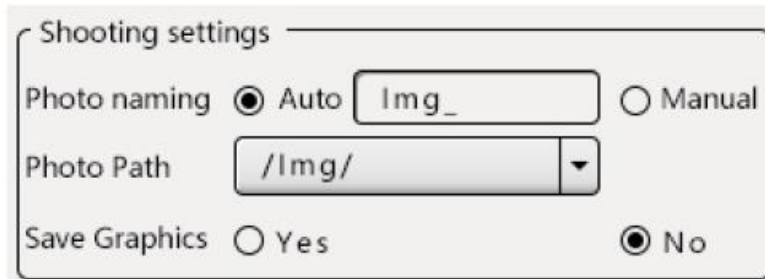
Exposure 1108 - +
AE Light 30 - +
Gain 0 - +
R Gain 295 - +
B Gain 239 - +
Saturation 8 - +
Contrast 100 - +
Sharpness 110 - +
HDR 7 - +

Horizontal Vertical BW

Restore En Edit
PN : dmsz8 Update

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Shooting Settings

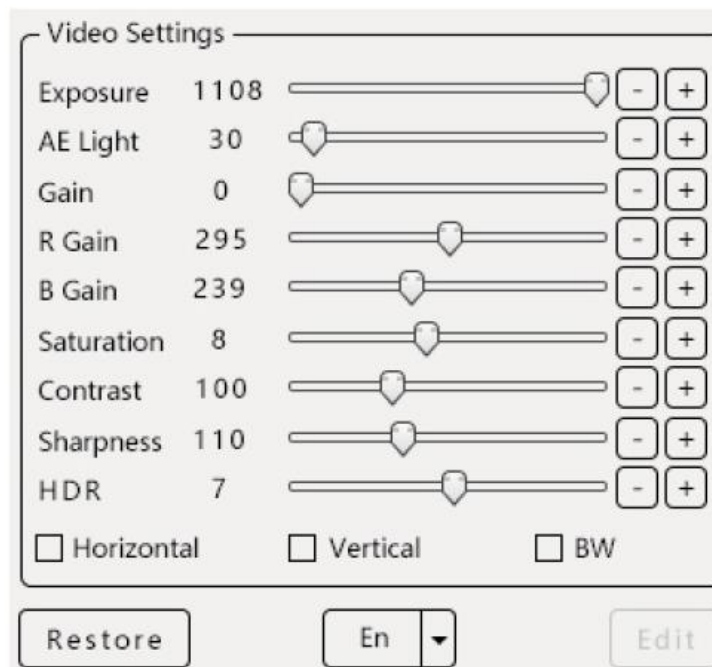


1. The Automatic naming rule for images is “Img_”, followed by a sequence of numbers counting up to the total number of pictures taken. Images are saved in the folder named “img” on the USB external storage device connected to the ZoomHD.

NOTE: A FAT32-formatted USB stick is required to be connected to the ZoomHD in order to capture images. A USB 3.0 rated USB stick is recommended.

2. To name images manually, first select the “Manual” naming rule button, then capture an image. The naming dialog box will appear, and the file can be named following your preferred naming convention.
3. is taken, the naming dialog box will pop up, and the user can name it by himself.
4. The save path cannot be designated.

Video Settings



Use the Video Settings dialog to adjust various detailed settings of the image. The AE Light setting is used to set image brightness for Automatic Exposure. The three boxes at the bottom activate a horizontal or vertical flip of the image, and BW will convert the default color image to black and white (monochrome).

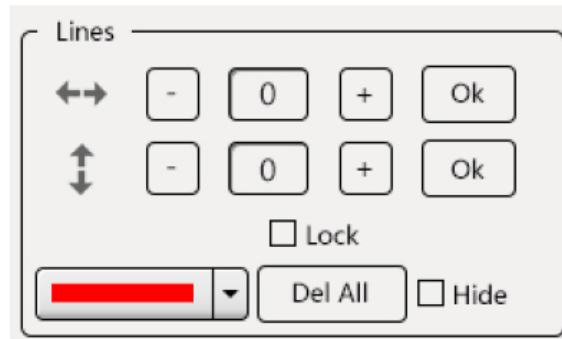
Click the [Restore] button to return all settings to the factory default.

Language Setting



Click the middle dropdown button to select your preferred language. Options include: Chinese (simplified), English, and Chinese (traditional).

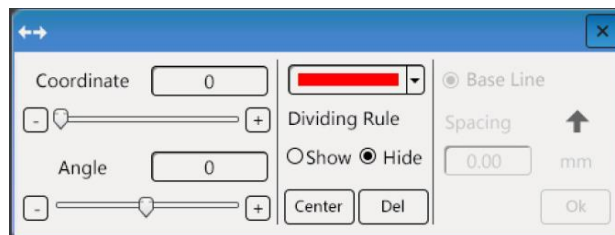
Scales (grids, reticles)





The scale feature overlays a grid onto the preview image and is divided into up to 100 horizontal lines and 100 vertical lines.

Scale adjustment method:

1. Adjust the number of horizontal and vertical scale lines using the “+” and “-” buttons. Click the “OK” button next to each selection to accept the setting. The current corresponding number of scales are displayed in the video frame.
2. Once the number of scales has been set, that number can only be increased using the “+” button – the number of scales cannot be decreased. To decrease the number of scales, you can delete it by double-clicking the right button on the scale to enter the edit mode, then edit, delete or "delete all" scales.
3. Double-click the right button on the scale and a pop-up edit box appears. Use this dialog to delete the current scale or adjust its position, angle, color, show/hide the scale and adjust base line settings. See figure below:



4. After the adjustment is completed, click the “X” on the upper right corner of the edit dialog box to close it.

5. Right click any scale, the scale will turn yellow, and the mouse changes to a  appearance. The scale position can now be moved by clicking and dragging.
6. To add scales after the number of scales has been set and are displayed in the video frame, click the “+” button to increase the number, then click “OK”. The added scales will be displayed in the video frame.
7. The color shown in the color display box  is the new scale color.
8. Click “Delete all” to delete all the current scales.
9. Select the “Hide” button to hide the current selected scale, or click “Show” to display it.

USB Stick



Uninstall the USB stick by first clicking the  icon in the main interface. REMOVING THE USB STICK FROM THE ZOOMHD WITHOUT UNMOUNTING IT CAN CAUSE LOSS OF DATA AND IMAGES.

Use only FAT32 formatted USB stick. USB 3.0 speed is highly recommended.

Transferring Saved Images & Video to a PC or Macintosh

Images and video saved to the USB stick can be readily transferred to a PC or Macintosh.

1. Remove the USB stick as described above.
2. Insert the USB stick into a compatible computer.
3. View the file directory and copy/move desired files according to the computer’s operating system.
4. Unmount the USB stick from the PC/Mac according to the operating system.
5. Reinstall the USB stick into a USB port on the ZoomHD.

SERVICE

UNITRON® microscopes are precision instruments which require periodic servicing to keep them performing properly and to compensate for normal wear. A regular schedule of preventative maintenance by qualified service personnel is highly recommended. Your authorized UNITRON® distributor can arrange for this service. Should unexpected problems be experienced with your instrument, proceed as follows:

1. Contact the UNITRON® distributor from whom you purchased the microscope. Some problems can be resolved simply over the telephone.
2. If it is determined that the microscope should be returned to your UNITRON® distributor or to UNITRON® for warranty repair, pack the instrument in its original molded shipping carton. If you no longer have this carton, pack the microscope in a crush-resistant carton with a minimum of three inches of a shock absorbing material surrounding it to prevent in-transit damage. The microscope should be wrapped in a plastic bag to prevent dust from damaging the microscope. Always ship the microscope in an upright position; **NEVER SHIP A MICROSCOPE ON ITS SIDE**. The microscope or component should be shipped prepaid and insured.

LIMITED MICROSCOPE WARRANTY

This microscope is warranted to be free from defects in material and workmanship for a period of 1 year from the date of invoice to the original (end user) purchaser. This warranty does not cover damage caused in-transit, misuse, neglect, abuse or damage resulting from improper servicing or modification by other than UNITRON® approved service personnel. This warranty does not cover any routine maintenance work or any other work, which is reasonably expected to be performed by the purchaser. Normal wear is excluded from this warranty. No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage or other conditions beyond the control of UNITRON Ltd. This warranty expressly excludes any liability by UNITRON Ltd. for consequential loss or damage on any grounds, such as (but not limited to) the non-availability to the End User of the product(s) under warranty or the need to repair work processes. Should any defect in material, workmanship or electronic component occur under this warranty contact your UNITRON® distributor or UNITRON at (631) 543-2000. This warranty is limited to the continental United States of America. All items returned for warranty repair must be sent freight prepaid and insured to UNITRON Ltd., 73 Mall Drive, Commack, NY 11725 – USA. All warranty repairs will be returned freight prepaid to any destination within the continental United States of America. For all foreign warranty repairs, return freight charges are the responsibility of the individual/company who returned the merchandise for repair.