

# Mighty Cam Eidos

*5M Camera with Integrated 11.6" HD Monitor*



User  
Guide



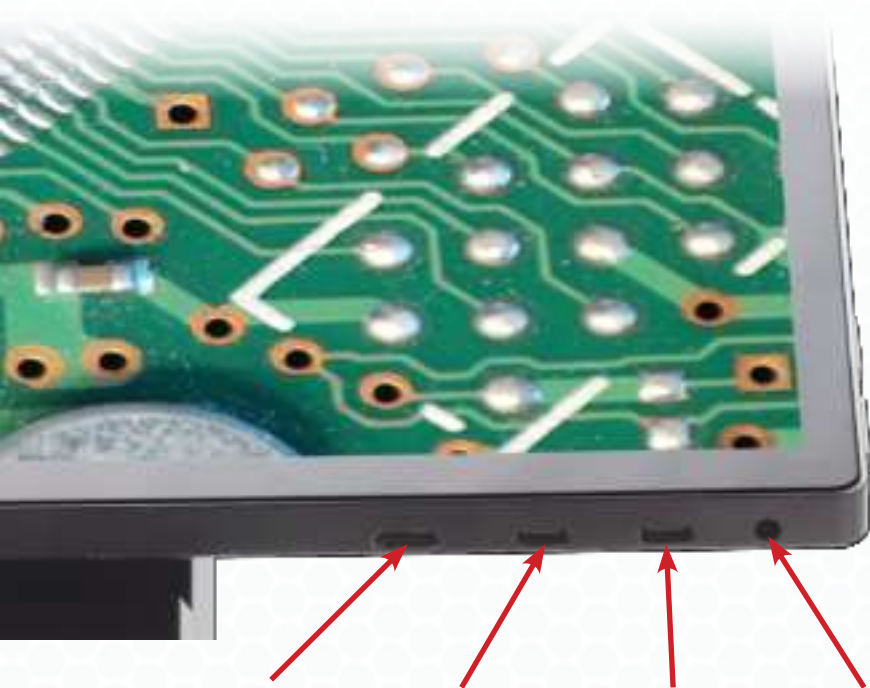
# Table of Contents

<b>Technical Data</b>	2
<b>Ports and Buttons</b>	3
<b>Inspection Modes</b>	4
<b>Side Toolbar</b>	5
<b>Camera Tab</b>	5
Exposure	5
White Balance	5
Parameter Adjustment	6
Tool	7
<b>Measure Tab</b>	8
Calibration	10
Measurement Attribute	11
Grid	11
Scale Ruler	11
<b>Settings Tab</b>	12
<b>Top Toolbar</b>	13
<b>Gallery</b>	14
Renaming an Image or Video	15
Viewing File Information	15
Viewing Images	15
Playing Videos	15

# Technical Data

<b>Image Sensor</b>	SONY CMOS (1/2.8")
<b>Built-in Monitor</b>	11.6" IPS Screen
<b>Resolution</b>	5MP (1920 x 1080p @ 60 FPS)
<b>Ports</b>	<ul style="list-style-type: none"><li>- Mini HDMI</li><li>- (2) USB C Ports</li><li>- MicroSD Card Slot</li></ul>
<b>Software Features</b>	<ul style="list-style-type: none"><li>- Image &amp; Video Capture</li><li>- Measurement Capabilities</li><li>- Annotation</li></ul>
<b>Languages</b>	<ul style="list-style-type: none"><li>• English</li><li>• French</li><li>• German</li><li>• Italian</li><li>• Japanese</li><li>• Russian</li><li>• Simplified Chinese</li><li>• Traditional Chinese</li></ul>

# Ports and Buttons

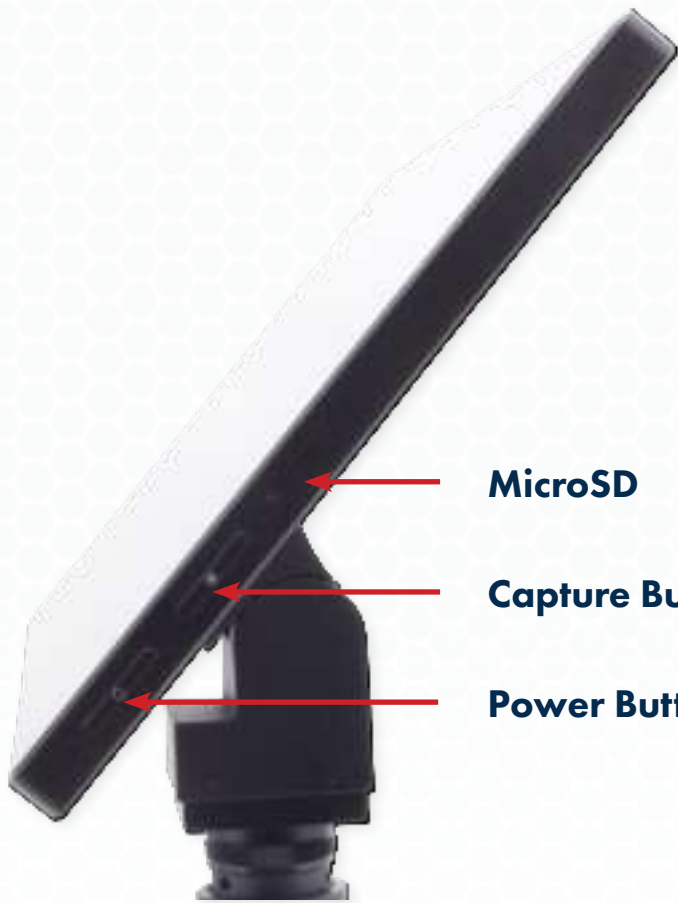


**Mini  
HDMI**

**USB C**  
(PC/USB Storage)

**USB C**  
(Mouse)

**Power  
Supply**



**MicroSD**

**Capture Button**

**Power Button**



# Inspection Modes

## Built-in Screen

Operate the Mighty Cam Eidos by utilizing the Built-in Screen of the microscope

UI Position

Built-in screen ▼

## HDMI Mode

Connect the Mighty Cam Eidos to an external screen via HDMI to utilize an additional monitor

Total Space:

External Screen(HDMI)

UI Position

Built-in Screen

Auto Hide Interface

☐ On

*\*The live on-screen image will show up on both monitors while in HDMI mode, however the user interface (UI) will only show up on either the **Built-in Screen** or **External Screen (HDMI)**. Choose which screen you want the UI to display on by clicking the **UI Position** drop-down menu under the settings tab.*

## PC Mode

Connect the Mighty Cam Eidos to a PC via USB to utilize a compatible third-party software of your choice (e.g. Windows Camera App)

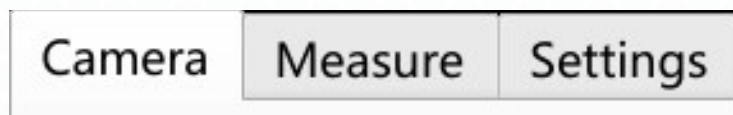
*\*The Mighty Cam Eidos will enter PC mode when connected to a computer via USB. To exit PC mode, disconnect the USB cable and restart the Mighty Cam Eidos.*

Currently in PC mode, remove cable, and restart device.

OK

# Side Toolbar

## Camera Tab

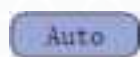


Click the camera tab to access the camera settings

## Exposure



When Auto Exposure is enabled, the target exposure can be set by sliding the "Target Value" bar to the desired value.



The "Exposure Time" and "Gain" cannot be adjusted when "Auto Exposure" is enabled



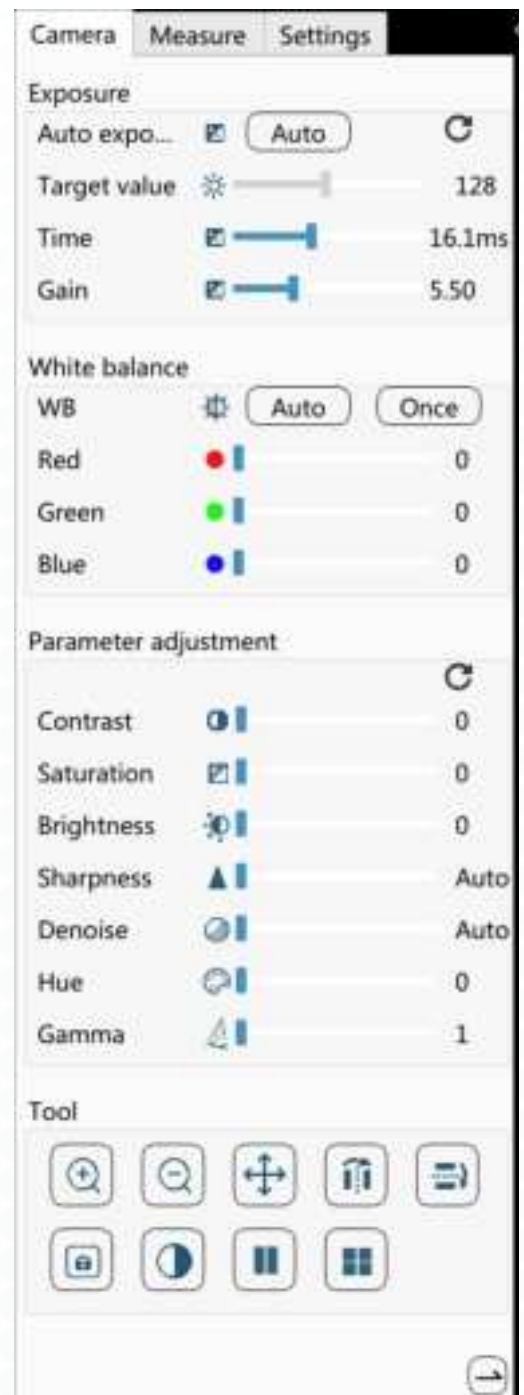
Click the reset button to reset the exposure parameters and enable "Auto Exposure"

## White Balance



Place a white card under the microscope, adjust the focus, and click on "Auto"

- "Auto" will automatically adjust the color temperature of your images. This option helps the camera choose the best option closest to what your eyes might see
- The individual RGB values cannot be adjusted when the Auto white balance feature is in use
- To adjust the RGB values of the images individually, disable "Auto" white balance.
- Click on "Once" to adjust white balance once. The camera will automatically set the RGB values



# Parameter Adjustment

**Drag the sliders to the left and right to increase/decrease each parameter**



**Contrast** - Adjusts the variation between light and dark areas of the image

**Saturation** - Modify the intensity of the colors in the image

**Brightness** - Control the overall lightness and darkness of the image

**Sharpness** - Adjusts the contrast of the edges in the image

**Denoise** - Removes digital noise from the image

**Hue** - Shifts the color values in the image

**Gamma** - Adjusts the contrast between light and dark tones



*Resets the camera parameters back to factory default*



# Tool



**Zoom in:** Digitally enlarge the image (*up to 5x*)



**Zoom out:** Reduce image size



**Pan tool:** Move across different parts of the screen (*When the image is above 1x, left-click and drag the mouse to the area of interest*)



**Horizontal flip:** Horizontally flip the image on screen



**Vertical Flip:** Vertically flip the image on screen



**Freeze:** Locks the on screen image



**Monochromatic:** Convert the on screen image to monochromatic



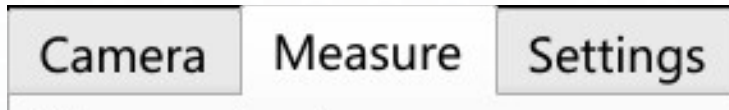
**Compared:** Compare the current on screen image with a saved image on the USB Drive



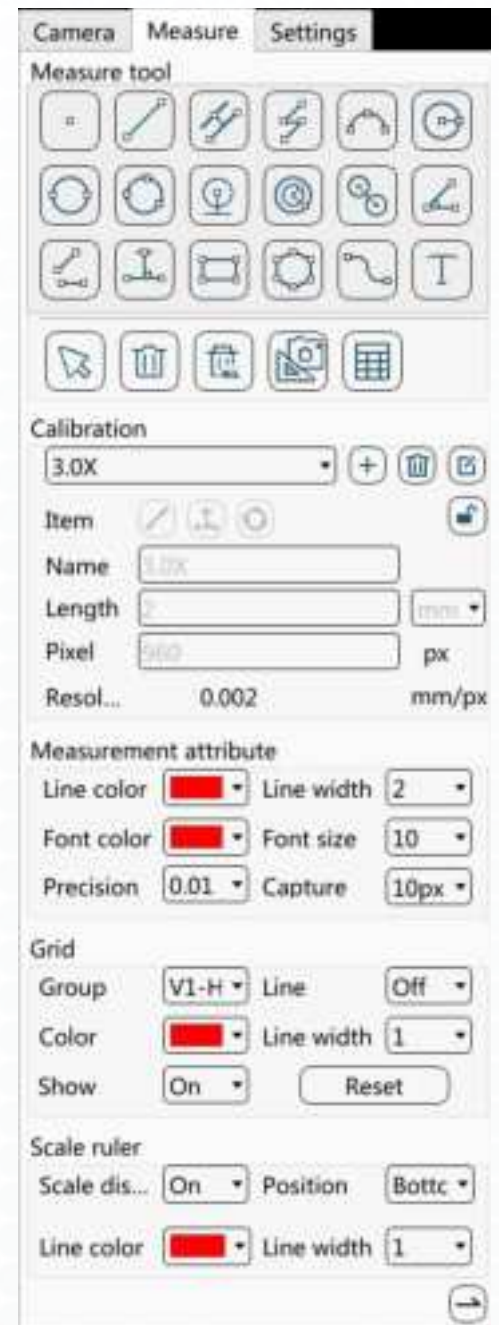
**Four-Screen:** Splits the Screen in 4 Sections (*You can click on each section to freeze/unfreeze the image*)



# Measure Tab



Click the “Measure” tab to access measurement tools



**Point:** Create a point by clicking to display the corresponding coordinates



**Line:** Click once to select a starting point, click again at the desired end point to complete the line  
(A line will be created with the measurement value)



**Parallel Lines:** Click once to select a starting point, click again to create the line, click a third time to create a parallel line with a vertical line connecting the two lines



**Polyline:** Left click to continue creating new points, right click to complete the polyline  
(The total length will be displayed)



**Arc:** Create a 3-Point-Arc by clicking once to set the starting point, click again to choose the end point, drag the mouse to create the desired arc, then click a third time to finalize it (The radius and angle of the arc will be displayed)



**Radius Circle:** Click once to set the center of the circle, drag and click to the desired edge for the circle (The circle will be created and the radius will be displayed)



**Diameter Circle:** Click to set a point on the circle, drag and click to determine the diameter of the circle (The circle will be created and the radius will be displayed)



**Three Point Circle:** Click to determine a point on the circle, then click the distance between the diameter and the point, finally click the distance between the circle and the second point  
(The circle will be created and the radius will be displayed)



**Circle to Line:** Click to determine the center of the circle then drag and click again to determine the distance (The radius will be displayed)



**Concentric Circles:** Click to create the center point for the circles, drag and click to determine the size of the first circle, then drag and click again to determine the size of the second circle  
(The radius of the two circles will be displayed)



**Double Circle:** Create the first circle using the three point circle technique then move the mouse to the desired location for the second circle and repeat the three point circle technique  
(The distance between the center of the two circles will be displayed)



**Angle:** Click on three different points to create an angle  
(The degree will be displayed)



**4-Point Angle:** Click on four different points to create an angle  
(The degree will be displayed)



**Vertical Line:** Click to set a starting point, click again at the desired end point for the line then click one more time to create a perpendicular vertical line  
(The length of the vertical line will be displayed)



**Rectangle:** Click once to set the upper left corner of the rectangle then click again at the desired lower right corner for the rectangle  
(The area and perimeter of the rectangle will be displayed)



**Polygon:** Left click to create a new point, right click to close and finish creating the polygon  
(The area and perimeter of the polygon will be displayed)



**Draw:** Press and hold down the left mouse button to draw freely



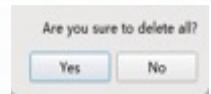
**Text:** After clicking, a keyboard dialog box will pop up on screen to allow for annotation



**Move:** Allows you to move points, line segments, text, and circles



**Delete:** Left click to delete a measurement or annotation individually



**Delete All:** Delete all measurements and annotations on screen at once



**Screenshot:** Capture photo with measurements



**Form:** View details of the current drawn line segments and export as an Excel file *(The Excel file is saved in the "MEASUREMENT" folder on the USB flash drive)*

## Calibration

1. Click the + icon to create a new calibration
2. Name your calibration
3. Select the appropriate measurement tool for your calibration
4. Enter the appropriate measurement and select the unit of measurement you used to calibrate
5. Save the calibration

Calibration

0.7X [+] [trash] [edit]

Item [pencil] [point] [circle] [lock]

Name 0.7X

Length 5 units

Pixel 537 px

Resol... 0.009 mm/px

Select a previously saved calibration



Add a new calibration



Lock the calibration



Delete the selected calibration



Edit the selected calibration



Save the calibration



## Measurement Attribute

**Line Color:** Choose the color of the lines

**Line Width:** Adjust the line thickness

**Font Color:** Select the text color

**Font Size:** Adjust the size of the text

**Precision:** Choose which decimal place to round the measurements

**Capture:** Allows you to capture points in measured positions

### Measurement attribute

Line color	<input type="color" value="red"/>	Line width	<input type="text" value="2"/>
Font color	<input type="color" value="red"/>	Font size	<input type="text" value="10"/>
Precision	<input type="text" value="0.01"/>	Capture	<input type="text" value="10px"/>

## Grid

**Group:** Select the group of grid lines to edit

**Line:** Enable/disable control of the group of grid lines selected

**Color:** Choose the color of the grid lines selected

**Line Width:** Choose the thickness of the grid lines

**Show:** Display/hide the grid line

**Reset:** Resets all grid properties to their default position

### Grid

Group	<input type="text" value="V1-H1"/>	Line	<input type="text" value="Off"/>
Color	<input type="color" value="red"/>	Line Width	<input type="text" value="1"/>
Show	<input type="text" value="Off"/>	<input type="button" value="Reset"/>	

## Scale Ruler

**Scale Display:** Show/hide the scale ruler

**Position:** Adjust the position of the scale ruler

**Line Color:** Choose the color of the scale ruler

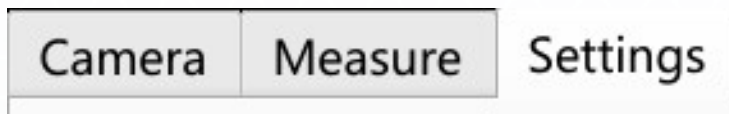
**Line Width:** Adjust the line thickness of the scale ruler

### Scale Ruler

Scale Disp	<input type="text" value="Off"/>	Position	<input type="text" value="Cente"/>
Line Color	<input type="color" value="red"/>	Line Width	<input type="text" value="1"/>



# Settings Tab



Click the “Settings” tab to modify properties of the Eidos

Click to switch languages



**Power Frequency:** Select 50 Hz or 60Hz based on your anti-flicker requirements

**Storage:** Choose which storage device to store the files on

**UI Position:** Allows you to switch the display position between the Eidos monitor and an external HDMI monitor

**Auto Hide Interface:** Toolbar will automatically show while the mouse hovers over the toolbar

**Recording Method:** Choose whether to show measurements and UI elements while recording

**Factory Reset:** Restore the Eidos back to factory settings

**Date:** Allows you to set the date and time



## Show/hide the side toolbar

(After the toolbar is hidden a simple measurement toolbar will display while under the “Measure” tab)



**Show side toolbar** (while in the simple measurement toolbar)



**Move side toolbar to the left/right side of the screen**

# Top Toolbar



**Photograph:** Capture an image



**Camera Timer:** Set a timer to capture images over a period of time

**Total time mode:** Set the number of photos taken over a certain period of time

**Interval time mode:** Set the frequency of how often a photo is taken

**Start:** Camera timer begins (Interval must be greater than two seconds)

**Pause:** Pauses the camera timer sequence

**Stop:** Cancels the camera timer

**Close:** Closes and stops the camera timer

Total time mode					Interval time mode
Day	Hour	Minute	Second	Frequency	
0	0	0	0	0	
Interval Time:					0
Next photo time:					
Last Photo Name:					
Number of shots:					0
Start					Pause
Stop					Close



**Screenshot:** Captures an image of the entire screen (includes measurements and UI elements)

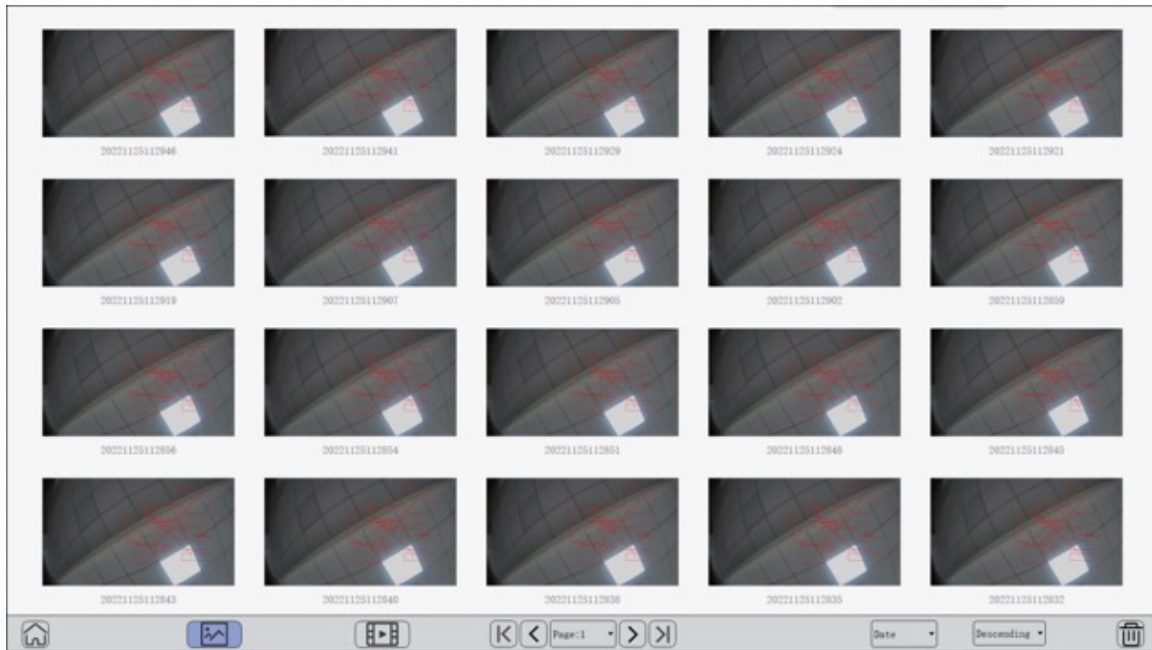


**Record Video:** Click to start the recording (a recording indicator and time will display on the upper left/right corner) Click again to stop the recording  
\*Requires at least 50 MB of free space to record



**Gallery:** View captured photos and video files

# Gallery



**View captured photos**



**View recorded videos**



**Go to the next page**



**Go to the previous page**



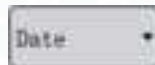
**Jump to the first page**



**Jump to the last page**



**Displays the current page number**



**Sort by name or date**



**Sort order** (ascending or descending)



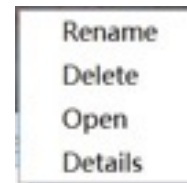
**Delete** (Select 1 or multiple files)



**Exit the gallery**

## Renaming an image or video

1. Select an image or video to rename
2. Right-click and select "Rename" or double-click the file name
3. Enter the new name for the file
4. Click "Enter" to finish changing the name



## Viewing File Information

1. Select the image or video you want to view
2. Right-click and select "Details" to display the information of the current file

## Viewing Images

Double-click a photo to open it

View next/previous image



Exit the gallery



## Playing Videos

Double-click a video to open it

Play/pause a video



View next/previous video



Stop the current video



Exit the gallery

