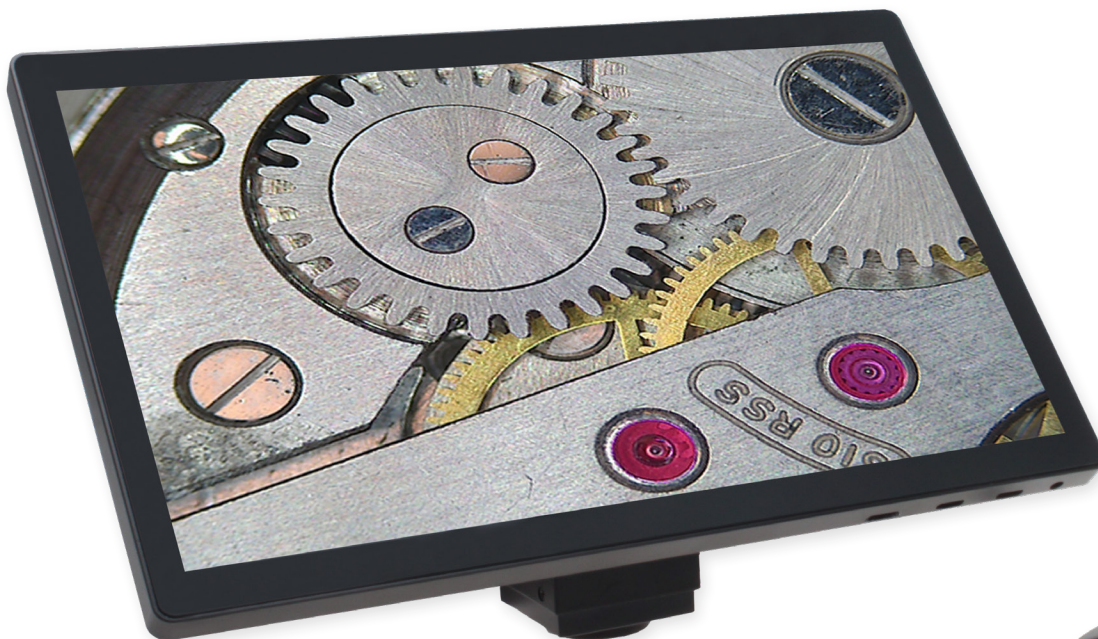


Mighty Cam Eidos

5M Camera with Integrated 11.6" HD Monitor



User
Guide



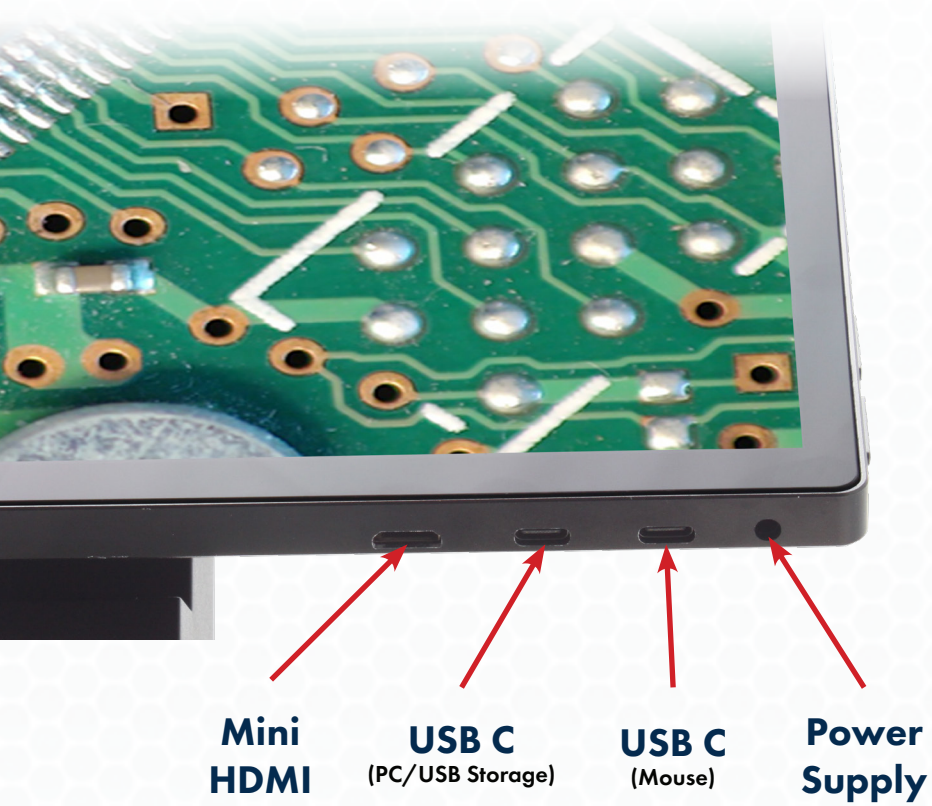
Table of Contents

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

Technical Data

Image Sensor	SONY CMOS (1/2.8")
Built-in Monitor	11.6" IPS Screen
Resolution	5MP (1920 x 1080p @ 60 FPS)
Ports	- Mini HDMI - (2) USB C Ports - MicroSD Card Slot
Software Features	- Image & Video Capture - Measurement Capabilities - Annotation
Languages	• English • French • German • Italian • Japanese • Russian • Simplified Chinese • Traditional Chinese

Ports and Buttons



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)

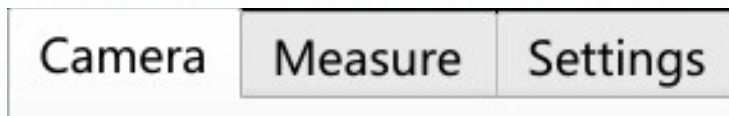
**The Mighty Cam Eidos will enter PC mode when connected to a computer via USB. To exit PC mode, disconnect the USB cable and restart the Mighty Cam Eidos.*

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.

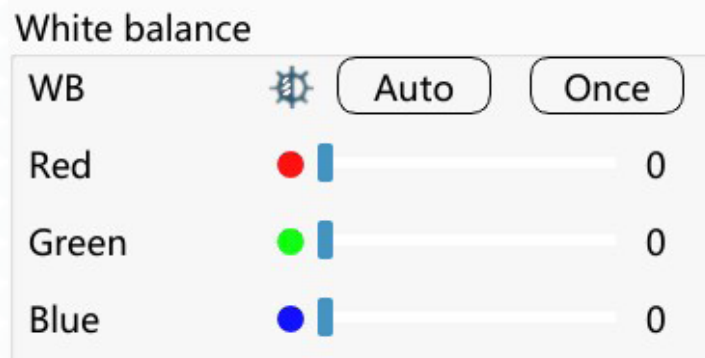
Auto

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



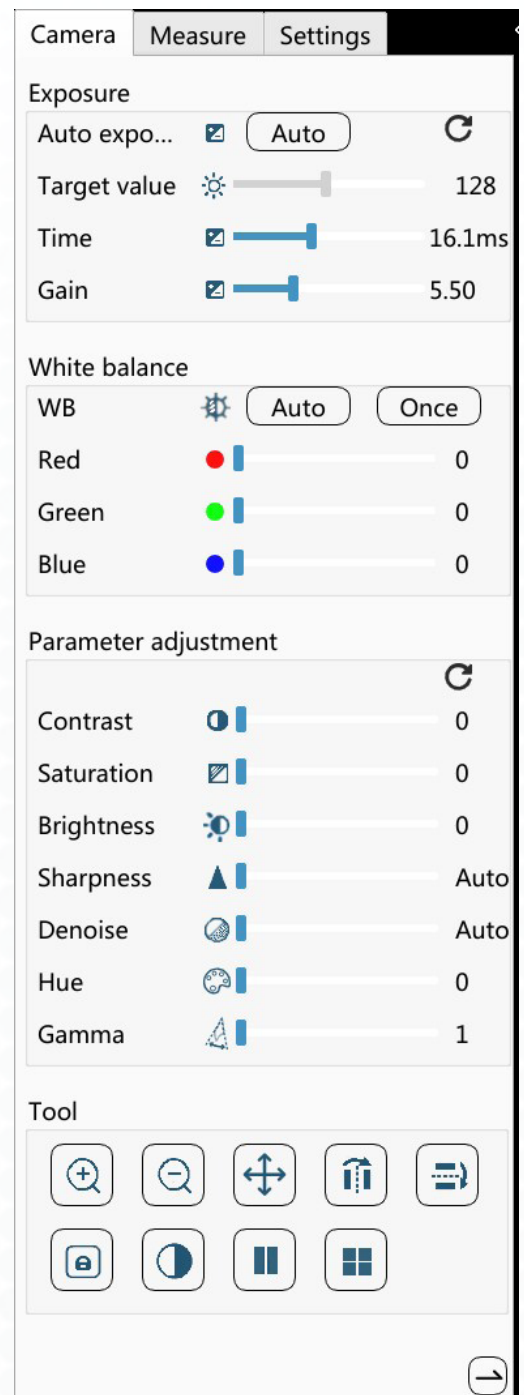
Place a white card under the microscope, adjust the focus, and click on "Auto"

- "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

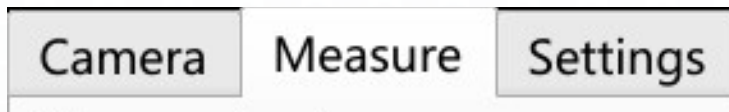


Compared: Compare the current on screen image with a saved image on the USB Drive

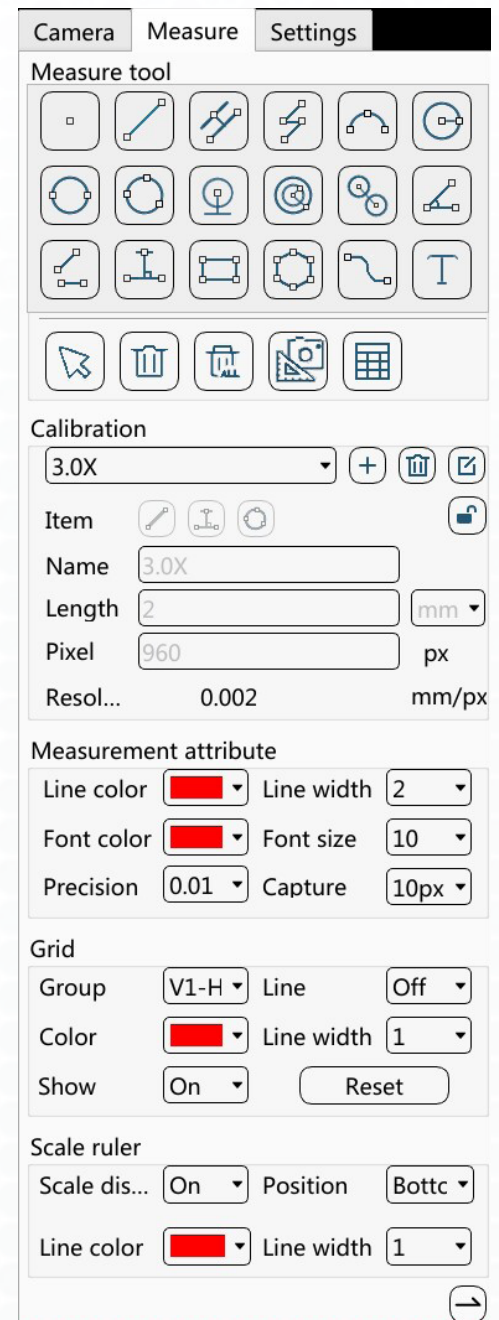


Four-Screen: Splits the Screen in 4 Sections (*You can click on each section to freeze/unfreeze the image*)

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



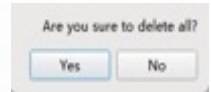
Text: After clicking, a keyboard dialog box will pop up on screen to allow for annotation



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

+

🗑️

✎

Item

📏

📐

🔄

🔒

Name

0.7X

Length

5

mm

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		Line width	2
Font color		Font size	10
Precision	0.01	Capture	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	V1-H1	Line	Off
Color		Line Width	1
Show	Off	<button>Reset</button>	

Scale Ruler

Scale Display: Show/hide the scale ruler

Position: Adjust the position of the scale ruler

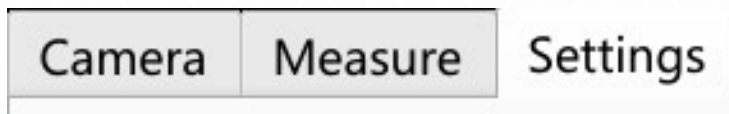
Line Color: Choose the color of the scale ruler

Line Width: Adjust the line thickness of the scale ruler

Scale Ruler

Scale Disp	Off	Position	Center
Line Color		Line Width	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

Camera	Measure	Settings
Language		English
Power Frequency		☐ DC ☐ 60Hz ☒ 50Hz
Storage		USB1
AvailableSpace:		58.56GB
TotalSpace:		58.58GB
UI Position		Built-in screen
Auto Hide Interface		☒ On
Recording method		Video recording
Factor Reset		Reset
Date		01-02-2022 03:47:21
1 Jan 2022 00:00:00		Save
Version		TS-V1.2311241420-5M
Firmware version		TS-G1.2310241020
SDK version		TS-23.11.171568
Measurement li...		TS-23.9.26140
Serial No		TS-202306081



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

A screenshot of a software dialog box titled "Camera Timer". It has two radio buttons at the top: "Total time mode" (selected) and "Interval time mode". Below these are five input fields: "Day", "Hour", "Minute", "Second", and "Frequency", each with a numeric value of 0 and up/down arrows. Further down are labels for "Interval Time:", "Next photo time:", "Last Photo Name:", and "Number of shots:", with corresponding values of 0, blank, blank, and 0. At the bottom are four buttons: "Start", "Pause", "Stop", and "Close".

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

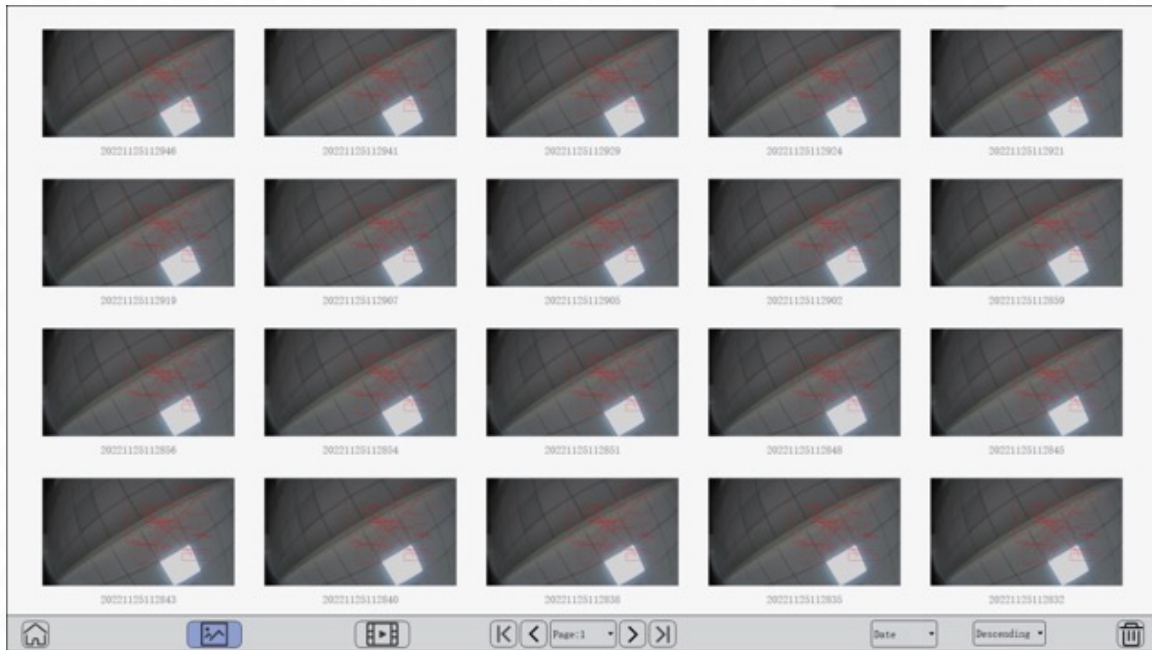


Record Video: Click to start the recording (a recording indicator and time will display on the upper left/right corner) Click again to stop the recording
*Requires at least 50 MB of free space to record



Gallery: View captured photos and video files

Gallery



View captured photos



View recorded videos



Go to the next page



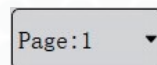
Go to the previous page



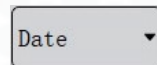
Jump to the first page



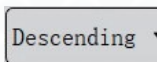
Jump to the last page



Displays the current page number



Sort by name or date



Sort order (ascending or descending)



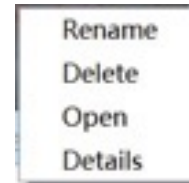
Delete (Select 1 or multiple files)



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

