Cilika Manual

Table of Content

Introduction

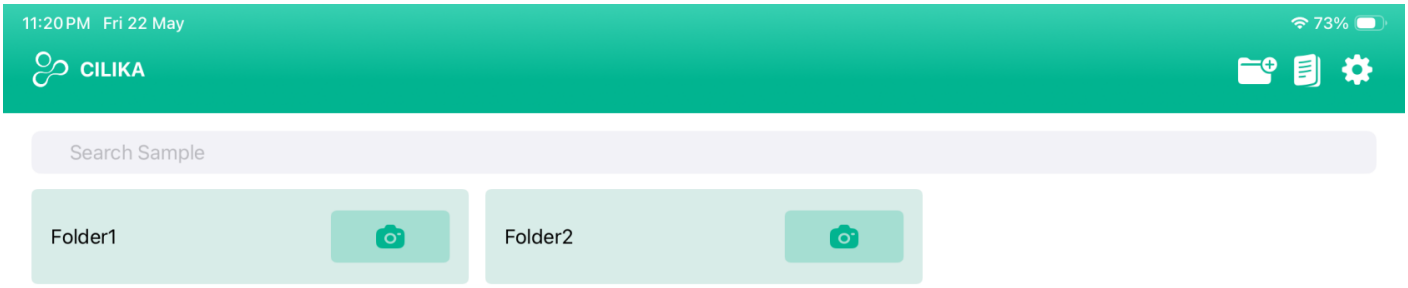
*Cilika is a **professional digital microscopy application** developed exclusively for iPad for use in organizational and laboratory settings. It enables users to capture microscope images and manage them through an integrated system for imaging, annotation, measurement, calibration, and report generation. The application is intended for use in pathology laboratories, educational institutions, research facilities, and clinical environments where accurate specimen documentation, precise dimensional measurement, and collaborative review are required as part of routine operations.*

This training manual provides a structured explanation of the features available in the Cilika application. The content is organized by functional area so that staff members can understand each control, its purpose and expected behavior. Each section of the manual is designed to support consistent use of the application across the organization by describing operational steps, key functions, and practical guidance for effective and accurate workflow management. This manual is created to walk you through the application in the most simplest way possible. If you have any doubt while reading the content you can either switch and read the FAQ's or keep it in mind until the very last.

Initial Configuration

Steps to install the application with image

Launching The Application



1. Unlock the iPad and go to the Home Screen.
2. Locate the **Cilika** app icon (the green CiLika logo).
3. Tap the icon to open the application.

Navigating the Dashboard

Image of the dashboard

image of icons and their names

Info graphics of dashboard tools and their features.

Creates a folder on the homepage where your files are stored.

Helps create report by uploading files and necessary details.

Dives you through various configurations of the application.

Core Work Flow

1.2 Create a Folder

Following are the steps to "***Create a Sample Folder***" -

On the ***Home Page****:*

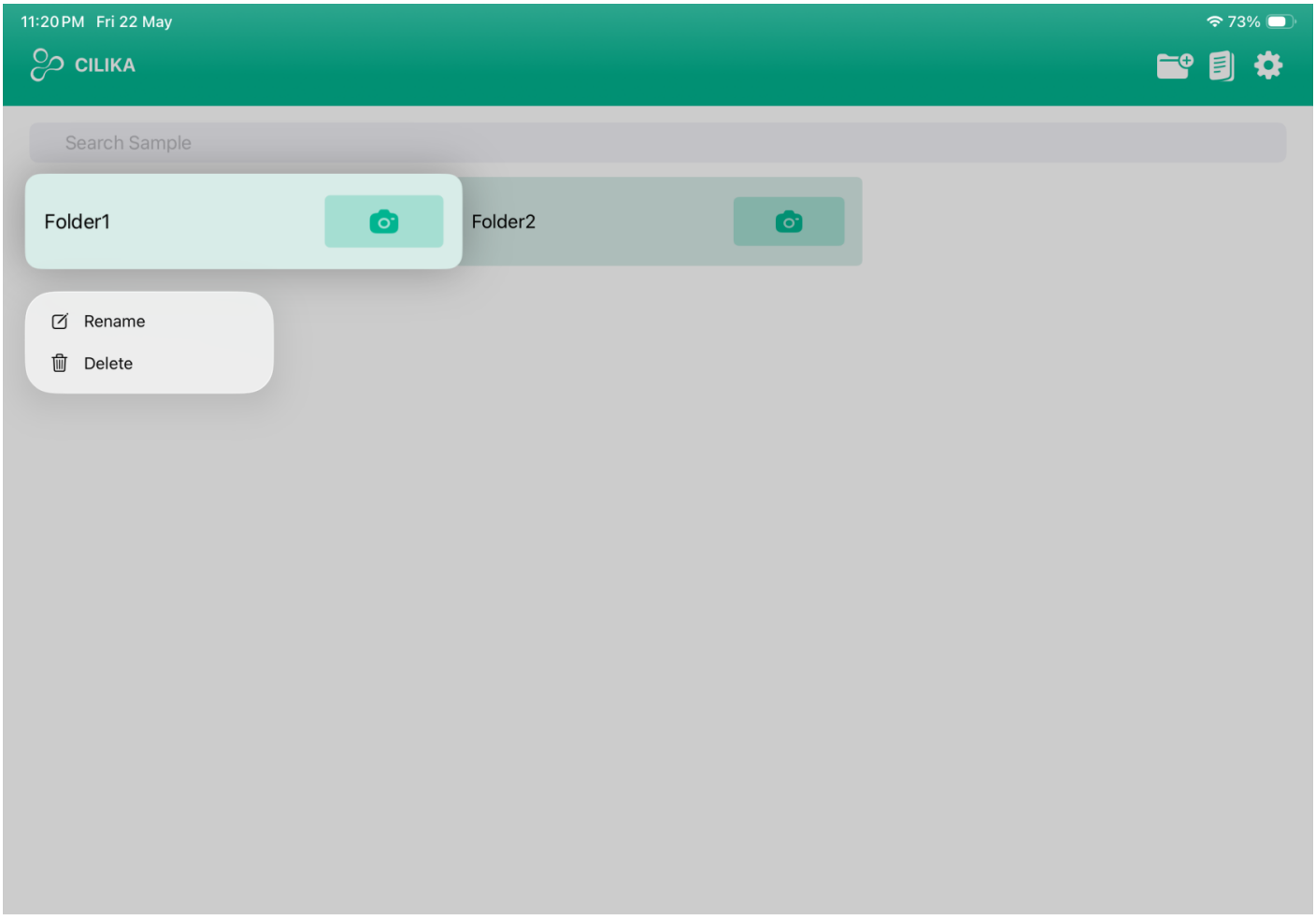
1. Tap the **Create Folder** icon in the top-right (folder with a **+** sign).

2. A **New Folder** dialog appears — type a clear, unique name (for example the sample ID, case number or patient identifier).

3. Tap **Save / Create,** the new folder appears on the Home Page grid.

4. If the folder does not appear, **swipe down** on the grid to refresh.

5. To rename the folder, long press the folder and tap on the **Rename** option.



Create a Folder

1.3 Create a File

On the Home Page:

1. Inside the folder, tap the **Camera** icon.

2. Wait for the **Live Microscopic View** to open.

3. Confirm you can see the microscope image on screen. If facing any issue go through the troubleshooting guide.

1.4 Understanding the Camera

UI of the camera screen

Live View — Screen Layout:

Top bar

1. **Back (‹)** arrow ? tap the **Back (‹)** arrow to return to the folder.

2. **Crosshair / Reticle** ? shows/hides the center target.

3. **Lock** ? locks the screen against accidental touches.

4. **Settings (gear)** ? opens Camera Settings.

Left side

1. **Zoom Slider** ? Use **? / ?** arrows for fine adjustment.

Right side

1. **Open Drawer** ? Opens a drop-down of annotation tools.

Zoom Slider

1. You can locate the **Zoom slider** on the left side of the screen.

2. **Drag up** to zoom in on the microscopic image and drag down to zoom out

3. Use **? / ?** arrows for fine adjustments.

4. The range of the zoom is between ***1.00x to 5.00x.***

Bottom bar

1. Read the **scale bar** (example: 30.0µm).

2. Confirm the **objective lens** on the bottom-right **(4x, 10x, 40x, 100x)**, this is to be selected same as microscopic magnification for best results.

3. Confirm the correct **objective lens** is selected.

4. To customize the **objective lens**, go through the App settings guide().

Recording

1. You can record either an image or a video.

2. Tap on the **Circle Button** located at the bottom center of the screen. To switch to video, you can tap on the **Video Button** to the left.

3. The video can be recorded with or without an audio.

Open Tab - Undo/Redo

1. Find the **Open** drawer located on your right.

2. By tapping on the **Open** drawer, a drop-down appears.

3. The drawer contains all the tools for markings, annotations and shapes.

3. Any annotations or measurements drawn can be **undone**, **redone** and **deleted** here as well.

Cursor?

Teaching Pointer

1. A **Teaching Pointer** is a digital cursor on the screen and can be used to highlight specific cells or areas in the microscopic view. Institutions can use them as a way to teach.

2. By default, only 1 **Teaching Pointer** appears on the screen. However, up to 4 **Teaching Pointers** can be used together at any given point (go to general settings).

3. Hold and drag to move the pointers to your desired area.

Annotation Tools

Tools	**Symbol**	**Feature**	**Steps**
Freehand			1.1. Tap the **pencil icon** in the **drop down** to create a freehand annotation. Hold your finger/stylus and trace. 1.2. **Long-press or double tap** the tool to open the **Line Width**, adjust line width. 1.3. If you wish to change the color of the annotation, tap on the **red dot (●)** in the drop down and change it to your desired color.
Line\Arrow			1.1. A line appears once you tap on l**ine/arrow icon** . 1.2. Tap on it once again to adjust the line width according to your preference. 1.3. The length of the line can be adjusted using the **two arrows** located at both the two ends of the line. 1.4. As you move the line, the number located near the line changes. That's the distance (d) measured by the line, you can move it around by dragging it. 1.5. If you do not wish to have the measurement, simply tap on the **M** icon to switch the measurements off.

Tools	**Symbol**	**Feature**	**Steps**
Text	**A**	The Custom Text is used to type specific labels or add in custom notes for better identification.	1.1. Tap the A tool, use the Custom Text dialogue box to type specific labels or notes directly onto your slide. 1.2. Once you have entered the desired text, tap the '**SET**' button to place the annotation on the viewing field.
Circle	**o**		1.1. Tap on the **O** icon to create a circle. 1.2. The size of the circle can be adjusted by dragging out the cursors. 1.3. Tap on the icon again to **adjust the line width**, lock the shape or set the radius. Tap **Set** to?? 1.4. Once the shape is locked, pointer size can be adjusted accordingly.
Box	□		1.1. Tap on the □ **icon** to create a box. 1.2. You can adjust the size of the box by moving the two cursors. 1.3. Another way to set height and width is by taping on the icon again. The height and width can be set by typing in the measurements according to your preference. Tap Set to 1.4. Here you can adjust the line width as well as lock the shape.

Tools	**Symbol**	**Feature**	**Steps**
Dotted Marker	**S**		1.1. Tap on the **S** icon to get a dotted marker. 1.2. Tap on it again to adjust the line width.
Enclosed Shape			1.1. By tapping on the icon below the **S** icon, the tool will automatically connect your endpoint to your starting point with a straight line.

Made a mistake?

Tools	Symbols	Features	Steps
Undo	**?**	*Reverses your last performed action or a series of action.*	1.1. Locate the **undo** icon at the very top of the open drawer. 1.2. Tap on it to **reverse your last performed action** or **a series of action**.
Redo	**?**	*Reverses the Undo command, reapplying the changes you just removed.*	1.1. Locate the **redo** icon at the very top of the open drawer. 1.2. It will reverse the **undo** command reapplying the changes that have just been removed.
Erase		Erases only unwanted annotations.	1.1 Scroll down and locate the erase Icon in the tools drawer. 1.2. Tap on the icon to erase the unwanted animation. 1.3. Tapping on it again, lets you adjust the wide of the eraser. Adjust it depending on how much area you want to erase.

Delete All	**?**	Instantly clears all current annotations, markings, and measurements from the live view or image.	

Rendering

Rendering helps to save multiple annotations and markings permanently on the current image so they all appear in the saved file.

1. Scroll down and locate the rectangle icon.

2. Tap on the icon to save your annotations and markings and render the image.

1.5 Camera Settings

Enable Manual Exposure	Enabling this settings help lets you control the image's brightness, rather than letting the camera decide to get the exact creative look and lighting you want.
Exposure Duration	Known as the *Shutter Speed*, is the exact amount of time the camera's shutter remains open. • Dark Image: Keep the duration short/fast (e.g., 1/1000th of a second) • Brighter Image: Keep the duration long/slow (e.g., 2 seconds) Adjust the Exposure Duration according to your liking. Glide the slider to the right to increase the shutter speed.
ISO	
Focus	
Hide Zoom Slider	This option hides the zoom slider on the live screen.
Color Option	Disable Color Option - Removes select color option from open drawer. Enable Color Option
Measurement	
Configuration	

Enable Manual Temperature	
Temperature	
Tint	
Focus	
Hide Zoom Slider	This option hides the zoom slider on the live screen.

Color Option	Disable color Option - Removes select color option from open drawer. Enable color Option
Measurement	
Configuration	

1.6 Exposure Lock

1.7 Grid

App Settings

1.5 App Settings

Go to the back to the home page, and tap on the settings icon. A pop up window appears on the screen with various settings option.

Image Compression

1. **This setting offers the user to select, image quality type.**
2. **Low: Medium: Original:**

Video Compression

1. **This setting offers the user to select, image quality type.**

Screen Recording

Allows users to record live view screen, can be used in demonstrations and trainings.

Horizontal Flip

1. Tap on the Horizontal Flip toggle to flip the live view screen image horizontally.

Vertical Flip

1. Tap on the Vertical Flip toggle to flip the live view screen image vertically.

Measurement Unit

1. Tap on the toggle to change the measurement unit to either micrometer or millimeter

Enable Tiff Format

1. Tap on the Enable Tiff to stores the image in the highest quality.

Lens Profile

1. **Go to lens profile by tapping on it**
2. **A default lens profile will already be active.**
3. **Scroll down to set up another lens profile.**
4. **Add your custom lens and give it a personal color.**
5. **Tap on the plus icon on the write to add it.**
6. **Tap on the lens you want to see on the live screen. Selected lenses will turn black. Preview the lens you have selected.**

7. **Add a profile name and tap on add. Lens profile is added.**
8. **Scroll back up and tap on your profile to activate it.**
9. **To delete the lens profile, tap on the edit option above the status.**
10.

Object Storage

Quick Share

1. Helps direct file transfers between your iPad and a desktop computer (Windows or Mac) within the same local network.

Reference Image

1. An external reference image can be added on the live view screen and can be positioned according to the users preference.

Watermark General

1. **Watermark can be used as an identifier.**
2. **The watermark can be customized according to the**

Watermark Cilika

Zoom

Scale Setting

Auto Hide

RBC Template

hide Calibration

Enable Grid

Unit

Size

Opacity

Line Type

Color

Show frame

Features Page

1.1 Home Page

Folder: Adds new folder to the dash board.

- Rename Folder
- Delete Folder

Report: Helps medical professionals generate a report on their findings.

The **PATIENT INFO** form is a structured data entry screen with the following fields:

- **Name**: Patient's full name. This appears as the report title.
- **Age/Sex**: Patient' age and biological sex. Free-text field — type in your preferred format (e.g. 45/M, 32 Female).
- **HID No**: Hospital identification number. Links the report to your institution's patient record system.
- **Path No**: Pathology accession number. This is the unique identifier for the specimen being examined.
- **Department**: The requesting department (e.g. Hematology, Histopathology, Microbiology).

1.2 App Settings

Image Compression: Indicates the quality of the image. The User has three options from which they can choose their preferred image quality.

Video Compression: Indicates the quality of the image. The User has three options from which they can choose their preferred image quality.

Screen Recording: Allows users to record live view screen, can be used in demonstrations and trainings.

Horizontal Flip: Flips the live view image horizontally.

Vertical Flip: Flips the live view image vertically.

Measurement Unit: *The measurement unit can be changes here. You can switch between* ***Micrometer and Millimeter.***

Enable Tiff Format: Tiff Format is an uncompressed file format, enabling this format stores the image in the highest quality.

Lens Profile:

Object Storage:

Quick Share:

Reference Image: An external reference image can be added on the live view screen and can be positioned according to the users preference.

Watermark General: a faint, semi-transparent text which the user can place over their captured image. Its primary purpose is to identify ownership, protect against unauthorized copying.

Watermark Cilika: It is a faint, semi-transparent image, embedded by default in the captured image.

Zoom: Switching ON this option helps you increase and decrease the magnification on live view.

Scale Setting: Controls the appearance and behavior of the on-screen scale bar. This settings gives the user two scale settings to choose from.

- *Bar:* A simple horizontal line with end caps and a numeric label (e.g. 600.0 µm). This is the most common style for publication-quality images.

- *Ruler:* A bar with periodic tick marks resembling a physical ruler.

Auto Hide: This option hides the Open drawer.

RBC Template:

Hide Calibration:

Enable Grid: The Enable Grid, overlays a grid on the live view screen.

Unit: This setting helps determine the measurement unit in either *micrometers* or *millimeters*

Size:

Opacity:

Line Type:

Color:

Show frame: This option helps capture the microscopic view in a square frame instead of the usual microscopic circle view.

1.2 Live Microscopic View -

Zoom Slider: *Lets you zoom in and out of the microscopic image*

Scale:

Objective Lens:

Camera settings:

- ***Enable Manual Exposure:*** This settings help lets you control the image's brightness, rather than letting the camera decide to get the exact creative look and lighting you want.

- ***Exposure Duration:*** This setting is also commonly called as the Shutter Speed, is the exact amount of time the camera's shutter remains open, allowing light to hit the camera's sensor.

    - *The shorter/faster (e.g., 1/1000th of a second) the shutter speed, the less light gets in making the image darker.*

    - *The longer/slower (e.g., 2 seconds) the duration, the more light gets in, resulting in a brighter image.*

- ***ISO***: ISO is the camera's sensitivity to light.

    - *Low ISO (e.g. 100 or 400)*: This requires more light, but gives you a crystal-clear, high-quality image with rich colors. This is ideal for

looking at clear slides with bright illumination.

- *High ISO (e.g. 800 or 1600)*: The camera digitally amplifies the light. This is useful for poorly lit specimens or high-magnification views, but the resulting "noise" makes the image look fuzzy and grain.

Focus:

- ***Hide Zoom Slider:*** This setting hides the zoom slider that is on the microscopic view screen on the left. (attach screen shot)
- ***Color Option:***
- ***Measurement:***
- ***Configuration:***

Temperature

- ***Enable Manual Temperature:*** This is the white balance. This setting lets you determine how warm or cool you wanna keep your image. It lets you adjust the camera so white objects in your slide look pure white, fixing weird yellow, blue, or green.
  - Warm Light: Lower numbers (e.g., 3200K) have a yellow/orange tint.
  - *Cool Light:* Higher numbers (e.g., 7000K) have a blue tint.
- ***Temperature:*** It describes the specific color tone of the light being used, helping the camera know what true "white" should look like so your specimen colors remain accurate.
  - *Warm Light:* Lower numbers (e.g., 3200K) have a reddish/yellow tint.
  - *Cool Light:* Higher numbers (e.g., 5500K to 6000K) have a bluish tint.

- ***Tint*:** Refers to an unwanted color shift in your image, making it look slightly too green or too magenta. It usually happens because the camera's sensor reacts differently to the microscope's artificial light. Adjusts the balance between Green and Magenta.

- ***Focus*:** Adjusting the distance between your lens and your subject so that the image appears crisp, clear, and perfectly outlined.

- ***Hide Zoom Slider:*** Enabling this hides the zoom slider

- ***Color Option:***

- ***Measurement:***

- ***Configuration:***

Lock Exposure: *This setting will freeze the brightness settings so the lighting doesn't change even if the view is re-framed or if the lighting shifts.*

Annotation & Pointer Tools

Cursor:

Teaching Pointer: Displays a digital cursor on the screen to highlight areas during live demonstrations.

Marker: A freehand drawing tool.

Eraser: Allows for the selective removal of specific markings or annotations without clearing the entire screen.

Delete All: Clears all current annotations, markings, and measurements from the live view or image.

Text: Helps add custom labels or case notes directly onto the live view.

Measurement Tools

Linear Measurement: Calculates the straight-line distance between two points.

Circular Measurement: Determines the diameter, circumference and area of a circle.

Rectangle Measurement: Measures the length, width, and area of a defined rectangular region on the sample.

Irregular Parameter Measurement:

Irregular Area Measurement:

System Tools

Arrow:

Render: Rendering helps to save multiple annotations and markings permanently on the current image so they all appear in the saved file.

Undo: Reverses your last performed action or a series of action.

Redo: Reverses the Undo command, reapplying the changes you just removed.

Erase: Erases only unwanted annotations.

Delete All: Instantly clears all current annotations, markings, and measurements from the live view or image.

Error Tables

FAQ's