FiLMiC Pro

User Manual v. 5.0

rev 7 - current as of v5.0.3



Cinegenix, LLC

Welcome to FiLMiC Pro 5.0

This release is the culmination of a complete rewrite of the FiLMiC Pro framework. Optimized for iOS 9 but backward compatible to iOS 8, the entire codebase has been rewritten in Apple's new coding language Swift 2. If you are a longtime user of FiLMiC Pro then you will find all of the same best-of-breed functions but in a better, faster, and more intuitive design and implementation. The first few pages of this manual will walk you through the updates to the app, from there the remaining portion will give you a more in-depth look at the app specific functionality, best practices, tips, etc.

In addition to the new Swift code, the FiLMiC Pro interface has been updated and refreshed to be more intuitive. We have developed a fully variable, pull-to-point manual control for focus, exposure and even temperature or color tint shifts. We've added 4K support for the new 6S and 6S+, including new FiLMiC Extreme 4K bit rates of 100mbps. The audio framework is new and offers AAC, AIFF (Apple Lossless) and PCM options as well as Voice Processing and Peak Limiting audio filters.

There is a new expanded range of custom frame rates giving you complete control over (1-60, 2-120, or 3-240 fps) depending on your device's native capabilities. Also included is a convenient Motion FX slider to simplify the setting of Slow and Fast Motion FX options. We have reengineered the manual controls, action slider and settings menu to provide better situation awareness of your camera's disposition before during and after your shot.

The result is the best FiLMiC Pro yet, the perfect solution for your creative pursuits. Tell your story.

Camera View 4

Learning Camera View Controls 5

Double Reticles 6

Mixed Reticle States 8

Action Slider 9

Advanced Zoom Controls 11

Zoom Target Controls 12

Manual Controls 13

Manual Controls: White Balance & Tint 14

Manual Controls: Manual Focus & Focus Pulling 16

Manual Controls: ISO, Shutter Speed & Exposure Compensation 17

Settings Menu 20

Resolution, Framing & Video Encoding 21

Frame Rate 24

Audio 26

Device 28

Presets 29

Hardware 30

Community 31

FiLMiC Library 32

Tips and Tricks 33



Camera View

The FiLMiC Pro Camera View user interface, is designed to shoot high quality video from the moment you open the app.

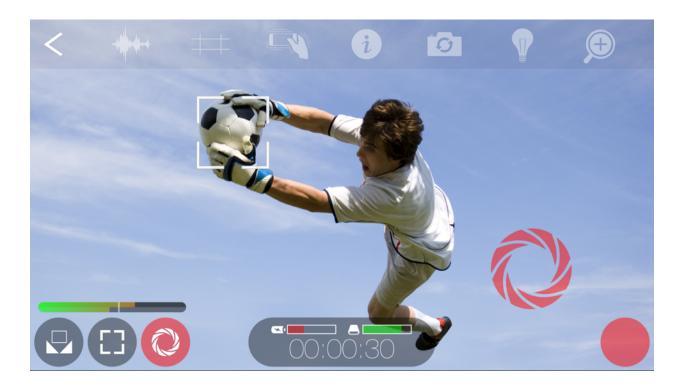
FiLMiC Pro defaults to 1080p HD video in 16x9 aspect ratio and has a default cinematic frame rate of 24fps as opposed to the 30fps of the native camera. (fps=frames per second)

FiLMiC Pro additionally has a default 'FiLMiC Quality' encoding option that records video data with 33% more information than Apple's Standard encoding. All of this mean, once you hit record you are well on your way to an improved, FiLMiC experience.



Learning Camera View Controls

- Step 1: Learn to move and use the separate focus and exposure reticles
- Step 2: Use the White Balance, Focus and Exposure locks to control your image
- Step 3: Tap the record button to start and stop your video recording
- Step 4: Monitor device status and record time with the Battery/Hard Drive Indicators and Time Code Counter
- Step 5: Access Action Slider for advance controls and information screens
- Step 6: Change Settings by accessing the Settings Gear
- Step 7: Find recorded clips inside the Clip Library.



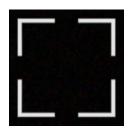
Double Reticles

Focus and Exposure Reticles are at the heart of the FiLMiC Pro experience. Start by learning to use the standard locking reticle system and then advance to the manual slider controls.

- Step 1: Tap to lock the white balance icon to prevent unwanted color shifts
- Step 2: Position the focus reticle on the focal point of your shot, tap to lock focus
- Step 3: Place the exposure reticle over the highlights to as a good starting point to prevent blown out highlights and to set a good exposure
- Step 4: Adjust exposure by moving reticle, tap to lock exposure
- Step 5: Observe reticles and control bar icons turn red to indicate locked state



For true skin tones, center a the 3rd of the screen on a gray card or white sheet of paper under the scene lighting conditions and press the WB lock



Set Focus before Exposure, Focus performs best in all available light. Always stop down Exposure after Setting Focus if possible.



Riding Exposure, when panning, tracking or tilting in variable light conditions, place the unlocked Exposure reticle at the leading edge of frame in whatever direction you are moving

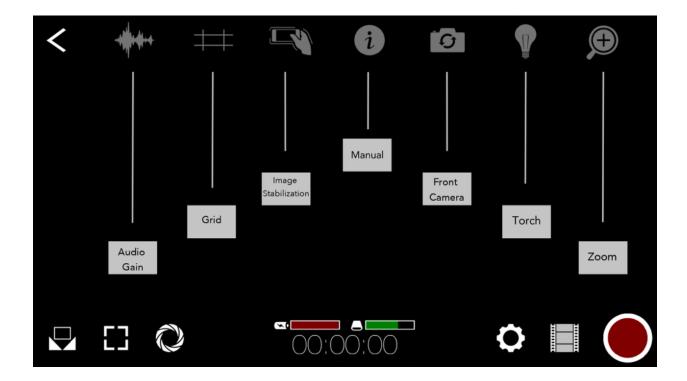


Mixed Reticle States

Create compelling images by controlling focus and exposure individually to capture the exact image you want. For more advance techniques, look for opportunities to leave either the Focus or Exposure reticle unlocked and continually sample (or ride) the changing Focus or Exposure value.

The above example utilizes locked exposure on the the darker cloud section and an unlocked focus reticle on the horizon in preparation for a sailboat out of frame to pass from right to left.

If your subject is moving and not at a fixed focal distance, place the unlocked focus reticle over the moving subject to continually and automatically adjust focus.



Action Slider

Tap Arrow to Open/Close | Tap Individual Icon to Toggle or Select

*Not all Action Slider controls are available on older devices

Audio Gain

Tap and hold the Audio Gain to increase or decrease the audio input to your movie clips.

Grid

Enable the Rule of Thirds grid to help you line up your horizons or get your framing just right!

Image Stabilization

Enable this when capturing footage hand held for more steady footage. If you are using a tripod or some other solid shooting tools be sure to turn this off. Image Stabilization is an on/off setting and will automatically apply the highest level of stabilization supported for the device and shooting configuration. (Cinematic Image Stabilization is available on the iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus only.)

Information

Access the Quick Start Guide and FiLMiC Pro User Manual via this link.

Front Camera

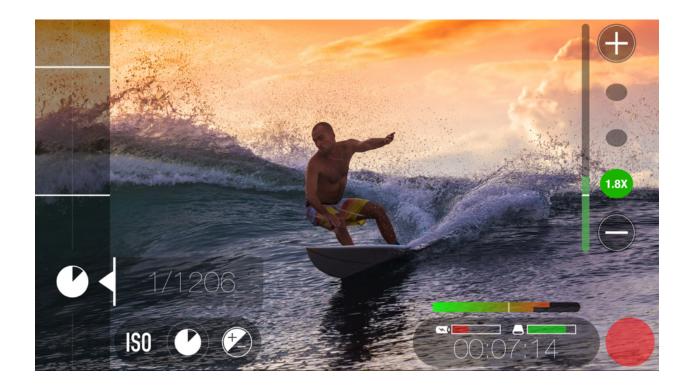
Access your front camera.

Torch

Tap on this to enable the flash on your rear camera as a constant light source. FiLMiC Pro now offers four grades of light, tap and hold the the icon reveal the torch intensity slider. Move the icon up and down on the slider to find the light strength you'd like to use.

Zoom

Tap on this to access the advanced zoom control options.



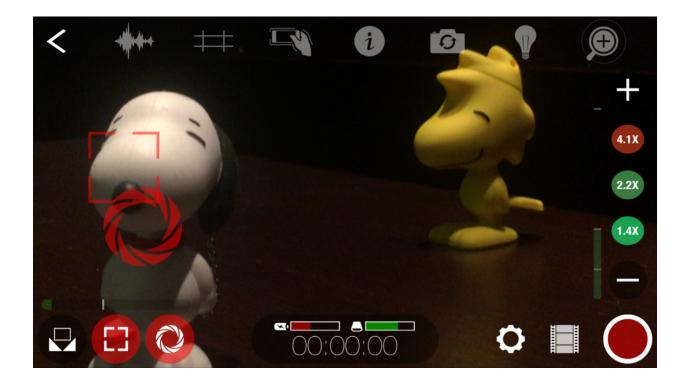
Advanced Zoom Controls

Tap to Toggle on Zoom Controls from the Action Slider

- Reveal +/- zoom controls
- Zoom Status Bar
- Zoom Target Controls

Long Press to Reveal Zoom Speed Slider

- Slide to the top for faster zoom moves
- Slide to the bottom for slow zoom moves



Zoom Target Controls

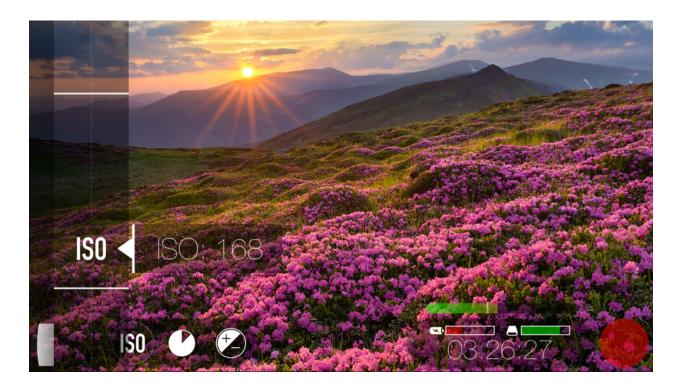
Steps:

- 1. Zoom to desired location
- 2. Tap one of the bubbles to set a Zoom Target Location
- 3. Zoom to additional Target Locations
- * Tap and Hold a bubble to Erase Target Location

Once your zoom points are set, tap the bubbles to move from point to point.

Control the speed with the slider along the left side. To access this slider Tap and Hold on the Zoom icon in the Action Slider.

Note: You'll notice a color change in the icons as you're zooming in. This is a bit of a warning system to let you know that the footage may not be high quality.



Manual Controls

FiLMiC Pro Manual Controls

Access manual control with a Long Press on corresponding Icon
Tap applicable icon to access access Sub-Controls
Move icons along slider to adjust values
Tap White Bars to move between preset controls
Long Hold on Corresponding Icon to return to Standard (Reticle) Mode,

Control Options

White Balance: Temperature, Tint

Focus: Focal Distance Slider

Exposure: ISO, Shutter Speed, Exposure Bias

FiLMiC Pro v.5 introduces pull-to-point slider controls for manual adjustments. Set the top and bottom pull points, then tap on to automatically adjust between each.



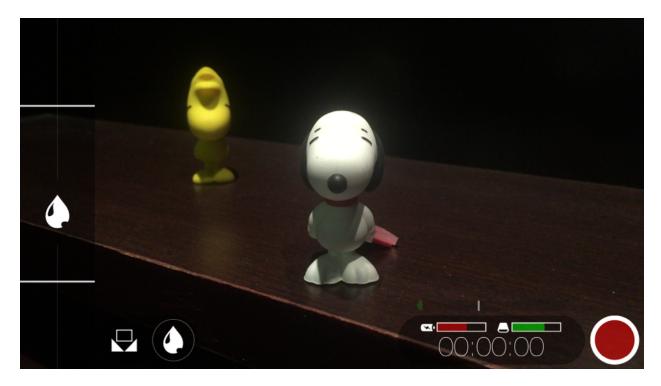
Manual Controls: White Balance & Tint

White Balance

- To activate these controls tap and hold on the White Balance Icon
- Move the icon up and down the slider to set your white balance
- Move the white bars up or down to set a point
- Tap the white bars to move between White Balance preset points
- Tap outside of the slider to close the menu

Taking this a step further you can control the speed of change.

• Hold lightly and swipe right to reveal the Variable Speed Slider, move this up and down to control the speed movement between points.



Tint

- To activate manual tint control tap the droplet icon
- Move the icon up and down the slider to set your Tint
- Move the white bars up or down to set a point
- Tap the white bars to move between Tint preset points
- Tap outside of the slider to close the menu

Taking this a step further you can control the speed of change.

• Hold lightly and swipe right to reveal the Variable Speed Slider, move this up and down to control the speed movement between points.



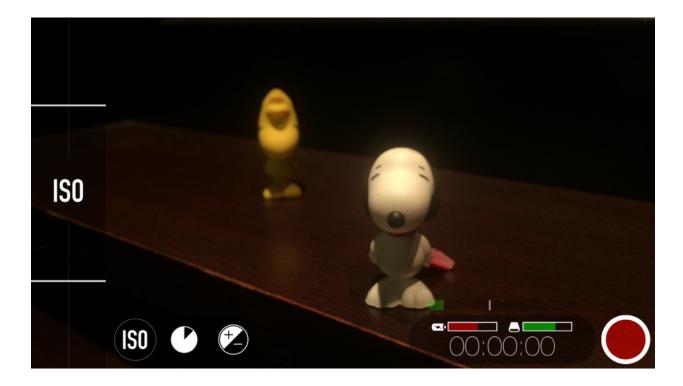
Manual Controls: Manual Focus & Focus Pulling

- Move the small reticle icon up and down to find your focus point,.
- Tap one of the white bars to snap that bar to a preset point
- Move the reticle again to find your second point
- Tap the other white bar to snap to that point.
- Now you can tap on one bar or the other to focus pull between these points.

Taking this a step further you can control the speed of focus.

• Hold lightly and swipe right to reveal the Variable Speed Slider, move this up and down to control the speed movement between points.

^{**}You can also move the white bars up and down to set your focus presets.



Manual Controls: ISO, Shutter Speed & Exposure Compensation

ISO

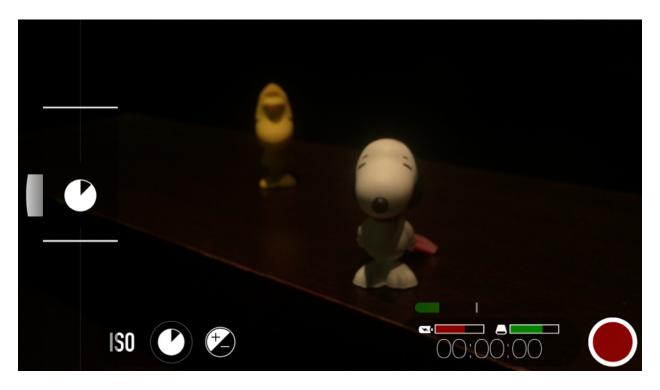
- Tap and Hold the Exposure reticle to access the controls, the icon will turn red
- Tap ISO activate the manual ISO slider
- Tap the ISO on the slider to move it up or down to select your ISO
- Tap outside of the slider to close the menu

As with some of the other manual controls there are slider options if you would like to pull between two ISO points. To do this:

- Tap one of the white bars to snap that bar to a preset point
- Move the reticle again to find your second point
- Tap the other white bar to snap to that point.
- Now you can tap on one bar or the other to focus pull between these points.

TIP: Use low ISO in bright light conditions and higher ISO in low light situations.

• Hold lightly and swipe right to reveal the Variable Speed Slider, move this up and down to control the speed movement between points.

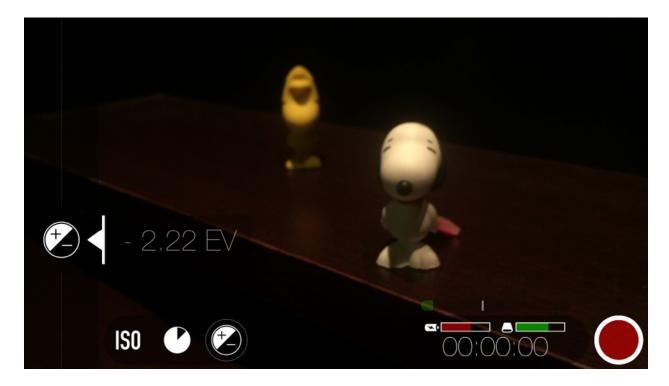


Shutter Speed

- Tap the Shutter Speed icon
- Move the Shutter Speed icon up or down to select your shutter speed of choice.
- Tap outside of the slider to close the menu

As with some of the other manual controls there are slider options if you would like to pull between two Shutter Speed points. To do this:

- Tap one of the white bars to snap that bar to a preset point
- Move the reticle again to find your second point
- Tap the other white bar to snap to that point.
- Now you can tap on one bar or the other to focus pull between these points.
- Hold lightly and swipe right to reveal the Variable Speed Slider, move this up and down to control the speed movement between points.



Exposure Compensation

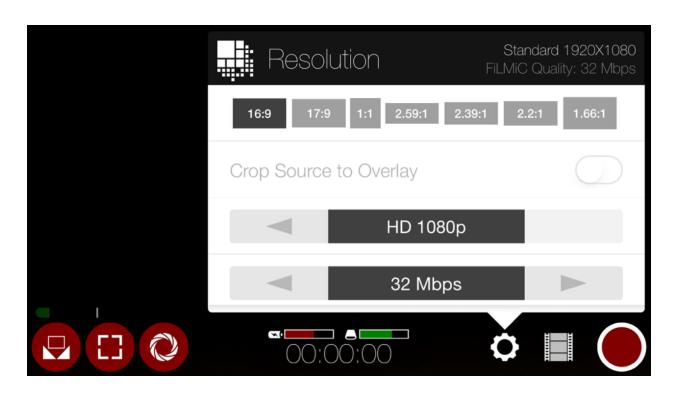
- Tap the +/- icon
- Move the icon up or down to select your desired exposure.
- Tap outside of the slider to close the menu

Note: Exposure Compensation cannot add light into a scene so there are limits to how bright you can make a scene.



Settings Menu

The FiLMiC Pro Settings Menu offers more control than any other video camera app. The next few pages will allow you to learn about all of the fine control that lies at your fingertips. Wide screen options, throwback aspect ratios, higher bit rates, altered frame rates, audio options, 35mm glass integration, resolutions, etc



Resolution, Framing & Video Encoding

Framing Options:

16:9 - Standard Wide Screen format

17:9 - DCI

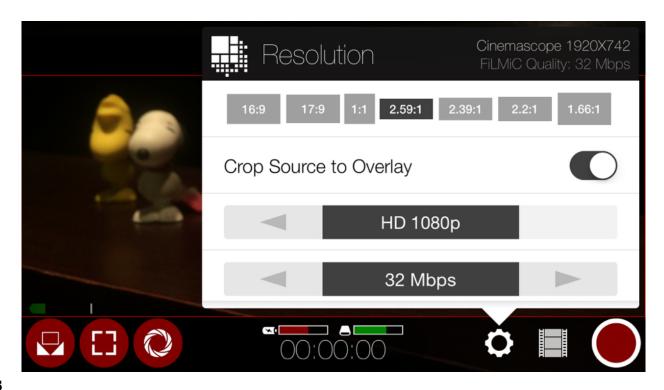
1:1 - Square crop, especially great for social network content

2.59:1 - Cinemascope

2.39:1 - Super 35

2.2:1 - Letter Box

1.66:1 - Super 16



Crop Source to Overlay

When enabled this wraps a thin red border on the frame to display where your footage will be cropped in the recording process. If you just want to frame the footage as a guide and handle the crop in post production, you'll want to disable this.

Resolution Options

4K (iPhone6S and iPhone 6S Plus only)

3K 1836p

2K 1152p

HD 1080p

HD720p

^{*}Resolutions are dictated by a device's native resolution support. Not all devices can support all resolutions.

Video Encoding:

Video encoding rate has a large impact on final video quality. The higher the encoding rate the more data data is utilized for a particular clip. FiLMiC Pro offers four levels of encoding rates from Extreme at the high-end to economy at the low-end. The higher the quality but also the higher the video size in your device's storage. Experiment with different encoding rates for your particular shoot to identify the best combination of performance, size and quality to suit your needs. Examples of FiLMiC Pro bit rates are below. (mbps=megabits per second)

FiLMiC Extreme

• 100mbps for 4k. A 1080p this is 50mbps, the setting that raised the bar for mobile video quality at the Zacuto Camera Shoot Out.

FiLMiC Quality

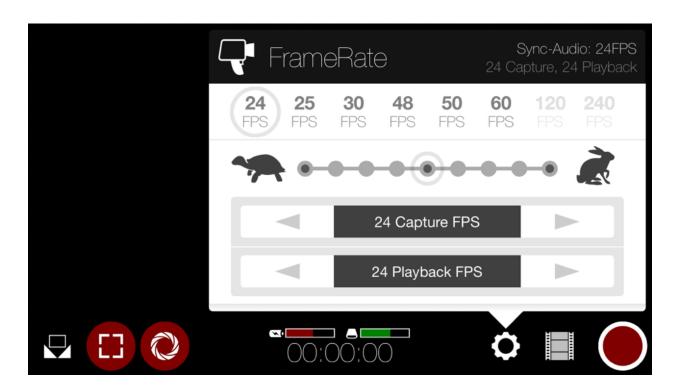
• At 1080p, FiLMiC Quality is 32mb per second for improved image quality, detail and color information.

Apple Standard

• The same data rate as you get with the native camera. Adjusts for resolution as do all bitrates.

Economy

• Save space with this economy bitrate. Lower resolution to save more space.



Frame Rate

Frame Rate Options:

Frame Rate Presets - The top section of this menu is actually the 'standard' frame rate presets as supported by your device. Preset options include: 24 FPS, 25FPS, 30FPS, 48FPS, 50FPS, 60FPS, 120FPS & 240FPS Tapping one of the frame rates will put a gray circle around it to select and will set your capture and playback frame rate to one of the values. 24, 25 and 30 are the most commonly used around the world.

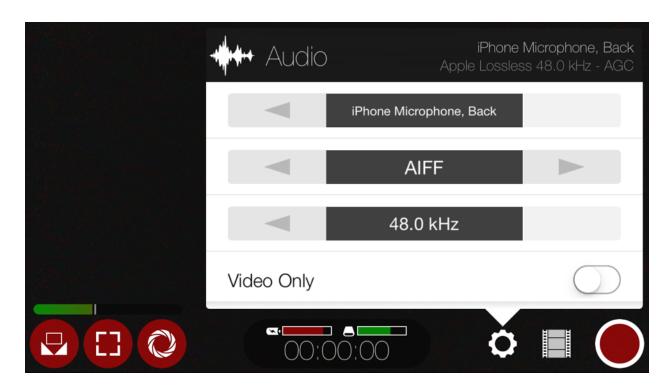
**Support for 120FPS and 240FPS is device dependent, and only supported when the resolution is set to 720p

Motion Slider - The new frame rate motion slider or 'bunny slider' (for obvious reasons) is an intuitive solution to a confusing problem in the past: How do you know by selecting a slow or fast motion option what it will do to your actual frame rate? The motion slider mechanism, works by tapping and dragging the circle from the middle to either the left or right. In the middle this indicates that you are in standard motion, so your capture and playback will be the same. From there you can move it left or right to create slow or fast motion effects. When you make changes to the motion slider you'll see that the frame rate preset you selected at the top will now

show a red circle to indicate you're no longer in a standard frame rate but rather an altered motion frame rate based on a playback rate from your original selection. Or to put it another way, 'if red, then you're out of sync'.

Frame Rate Selectors - The bottom third of the menu is where you have even more control. You can select individual capture and playback frame rate values and create your own custom combinations. By doing this too you can even achieve some non-standard sync rates. Want to have a clip that is recorded and played back in sync at 7fps? sure.. set both selectors to 7fps and you are good to go.

FiLMiC Pro v5.0



Audio

Microphone Selection Modes:

Video Only

iPhone Microphone - Bottom

iPhone Microphone - Front

iPhone Microphone - Back

** Tip, select the microphone option closest to the sound you're capturing

A note on External Microphones:

When an external mic is plugged in the App will automatically use that as your primary audio input, "disabling the iPhone microphone". Please note some external mics may require a TRRS adapter to work with the FiLMiC Pro app.

Supported audio encoding formats:

AAC

AIFF

WAV

Supported audio sampling rates:

44.1kHz

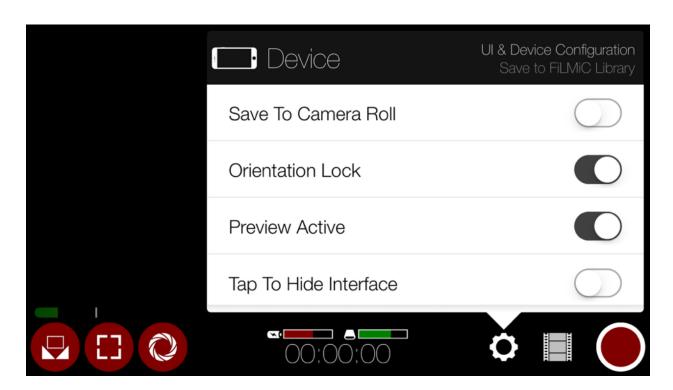
48.0kHz

Additional options include:

Automatic Gain Correction - Used primarily when the device's internal microphone is employed or with an external microphone without gain level adjustment. This allows the FiLMiC Pro gain control slider and setting to be enabled. If this setting is unchecked then the expectation is that an external microphone is being used that supports a native gain control on the microphone itself.

Voice Processing - When enabled this setting highlights audio frequencies in the range of human speech to bring out human voice better.

Peak Limiter - When enabled this provides a nominal top end of the audio range to prevent spikes of audio due to loud audio picked up by the microphone. (eg: a quiet setting and then the crash of a window breaking)



Device

Save to Camera Roll

Enable this to have all footage recorded in FiLMiC Pro save to the camera roll by default. Please note in doing this you may see some compression of your files. For full resolution files we recommend using iTunes File Sharing to Save footage directly from your phone to your computer.

***Not supported for devices on iOS 8.

Orientation lock

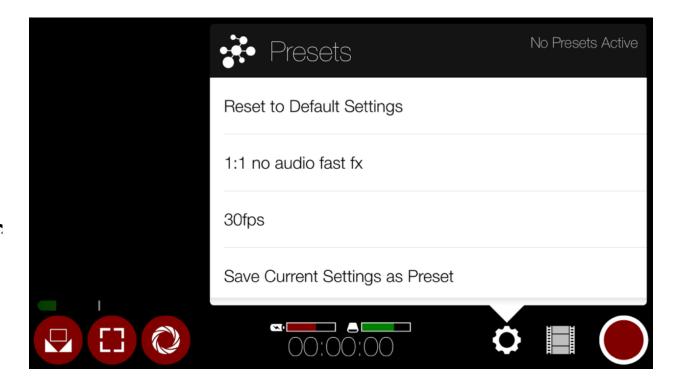
Lock the orientation with the Home button the right side of the app. This prevents the app from rotating when the phone is rotated

Preview Active

Controls whether the video preview is displayed on the screen. Use this feature in situations where the light emitted by the preview screen could affect the ambient light in the room or of a secondary camera placed nearby. When used in conjunction with 'Tap to Hide Interface' the entire device screen can be blacked out.

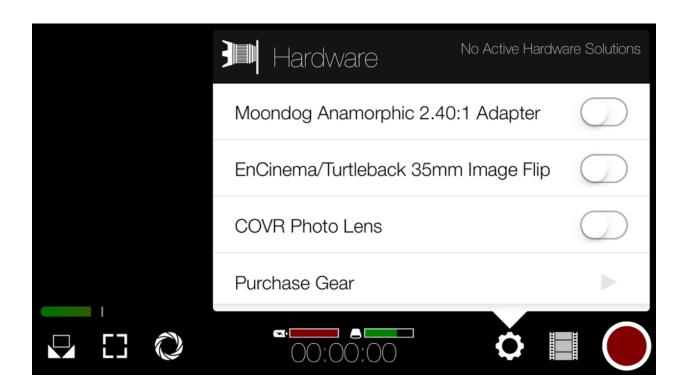
Tap to Hide Interface

This setting hides the on-screen controls with a tap to the screen. Use this function if mirroring the device's screen display to an external screen for monitoring purposes. In this capacity, setup your shot, tap record, confirm video recording on the time counter then tap the screen to hide the primary controls.



Presets

The preset controls allow you to configure, save and update presets for most of FiLMiC Pro's settings. This allows for quick recall of a particular shooting style. Want a special Preset for your favorite Motion FX? Select the desired frame rate and then Save as a Preset. Want to access the Super 35 Matte at the touch of a button? Select the desired Aspect Ration Matte and Save as a Preset. Want to create your own economy Preset for when you are low on storage space or wish to email smaller size files. Select 720, choose a lower bitrate then Save as a Preset. All Custom Presets must have a name of at least 5 characters. (do not use \ or / characters in the preset name as this is not valid in Apple's data storage framework.



Hardware

The Hardware menu includes the following options:

Moondog Anamorphic 2.40:1 Adapter

Configures the app to de-squeeze footage shot using the Moondog Labs Anamorphic Adapter. This lens was used to shoot the movie TANGERINE that was released theatrically in the Summer of 2015.

EnCinema/Turtleback 35mm Image Flip

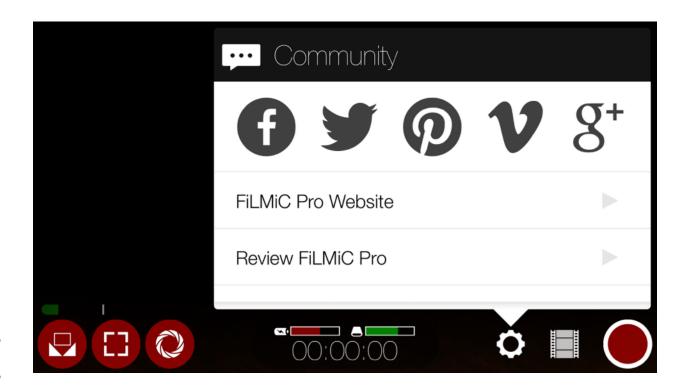
Use this setting to ensure that your video will be the correct orientation if using the EnCinema or Turtleback 35mm SLR lens adapter.

COVR Photo Lens

This setting enables support for COVR lenses cases.

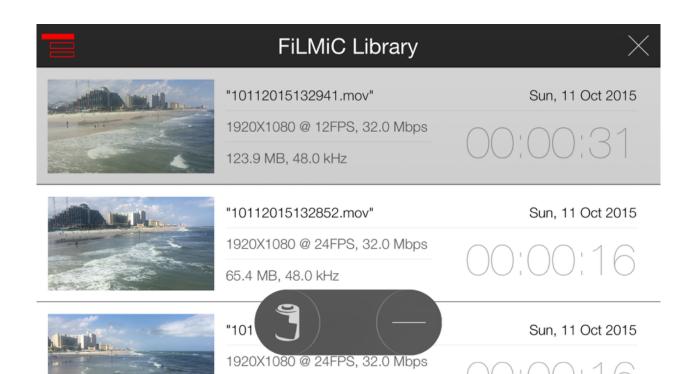
Purchase Gear

For more information on gear that the FiLMiC team has had good experiences using in the field see: www.filmicpro.com/gear



Community

Connect with FiLMiC Pro on Social Media. Check out our Website. Give us a review in the App store. Direct link to this manual as well ways to get additional help with FiLMiC Pro via our Support team and Contact Page.



FiLMiC Library

To Save/Delete footage to Photos (Camera Roll) form the FiLMiC Library:

Tap on the icon in the top left corner.

Select the clip(s) you want to save (selected clips will turn gray as opposed to white)

Tap the Film Canister icon to save to the Camera Roll or the Minus sign to Delete

NOTE: Always verify which clips are selected for delete. Deleted clips cannot be retrieved.

Tap the X to exit the FiLMiC Library

(tip1: long press on the clip icon in the top left of the screen to select all clips)

Tips and Tricks

Essential Tips for Filming with FiLMiC Pro

Before you start filming we recommend the following tips:

Be sure your device is fully charged.

Be sure you have plenty of free storage on your device.

Ensure adequate light is present for your shoot. Poor lighting can contribute to the presence of video noise and other quality issues.

Put your device into Airplane mode, as notifications can interrupt the recording process.

Saving footage to your computer via iTunes

Connect your iPhone to your Computer

Open iTunes

Tap on the iPhone icon in iTunes once connected

Go to Apps

Within the Apps section Scroll down to File Sharing

Select FiLMiC Pro under apps, this will load all of your Clips (in folders) and some other files

Select the clips you want to save to your computer, then click Save To... and select a directory on your computer

Have a question that was not answered in this User Manual?

Feel free to email us at support@filmicpro.com