Cinema FV-5

The official user guide

Welcome to Cinema FV-5
Willkommen bei Cinema FV-5
Bienvenido a Cinema FV-5
ようこそ Cinema FV-5 へ

Flavio González Vázquez

Based on Cinema FV-5 version 1.23

Contents

Introduction

Cinema FV-5 is a professional video camera application for mobile devices that puts professional manual controls in your fingertips. Tailored to enthusiast and professional videographers and filmmakers, with this video camera application you can capture the best footage with top-of-the-line controls for perfect postproduction purposes.

Major features.

- Adjust all the image sensor parameters that you only thought pro-videocameras had: exposure compensation, ISO, light metering mode (matrix/center/spot), focus mode and white balance.
- Change sensor parameters (like ISO, exposure compensation or white balance) also during recording.
- Focus adjustments during recording: lock focus on your subject before recording and change focus planes while recording.
- Professional viewfinder: 10+ compositing grids, 10+ crop guides available, safe areas display and much more.
- The most advanced electronic viewfinder on a video camera: live RGB and luminance histogram are available also during recording.
- Professional sound metering options: display audio peaks and sound clipping warnings during recording.
- Use any audio input source for your video: built-in microphone, external (wired) microphone or wireless (Bluetooth) headset.
- Choose video and audio codec, adjust the bitrates, audio sampling rates and number of channels.
- Record in 4K UHD (Ultra High Definition) video on supported devices.
- All camera functions assignable to volume keys. You can adjust EV, ISO, color temperature, zoom and more using volume keys (including those in cable-headsets) as well as focusing and recording. Devices with hardware camera shutter keys are also supported.
- Video geotagging support.
- Autofocus, macro, touch focus and infinity focus modes, plus a focus lock switch (AF-L).
- Autoexposure (AE-L) and auto white balance (AWB-L) locks in Android 4.0+. You can also lock exposure and white balance during clip recording automatically.

- Zoom after and while recording. Set specific focal lengths thanks to the 35mm equivalent-based focal length display.
- Powerful video clips organization options: different storage locations and fully customizable file names (even with variables).

Cinema FV-5 is the perfect app for producing the best footage for any short- to medium-sized production. With it you can record the best material possible with any medium- to high-end device. Cinema FV-5 specially supports Android-based compact cameras, so you can even leverage a high-quality, optically stabilized zoom. The footage captured with Cinema FV-5 can be easily edited on any NLE like Apple Final Cut Pro, Adobe Premiere, Sony Vegas or DaVinci Resolve.

Getting Cinema FV-5

Cinema FV-5 is available through Google Play, the marketplace for Android applications. Google Play is preinstalled on all Android devices. You can find Cinema FV-5 by searching for "Cinema FV-5".

There are two versions of Cinema FV-5: Cinema FV-5 Lite and Cinema FV-5 (paid version). Both versions are essentially the same, with the only difference being the limitation on the clip recording length on the free Lite version. Therefore you can try the application without any time limitations and see if the application works properly and fits your requirements before buying the full paid application.

Regardless of the version of the application you download, you have access to frequent updates. You get those updates by either manual download (you get notifications on the Android notification drawer when updates become available) or automatically if you decided to do so. It is recommended that you select automatic application updates. You always get the most stable version and newer features without having to care to download updates manually. After each update, a dialog will tell you what's new on the updated version (new features, bug fixes and improvements). Application updates are also free once bought the paid version as well. Therefore, buying the application is a one-time payment, granting you access to all future updates at no extra cost.

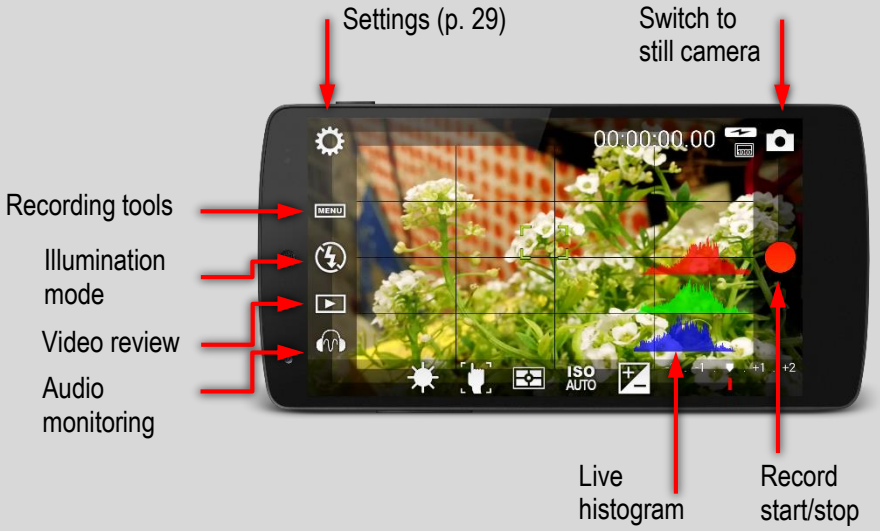
Furthermore, when you buy the application, you can install Cinema FV-5 on all your Android-powered devices at no extra cost. To do that, be sure to always download the application using the same account you used for buying it on the first place. On that case, you won't be prompted to pay again each time you install the application on the same or other devices you might own.

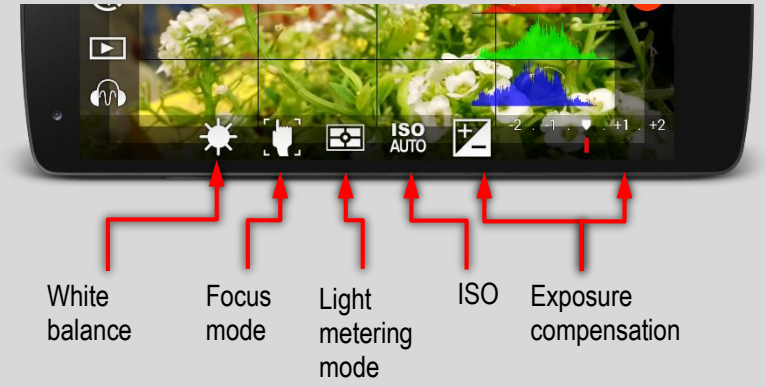
Obtaining support

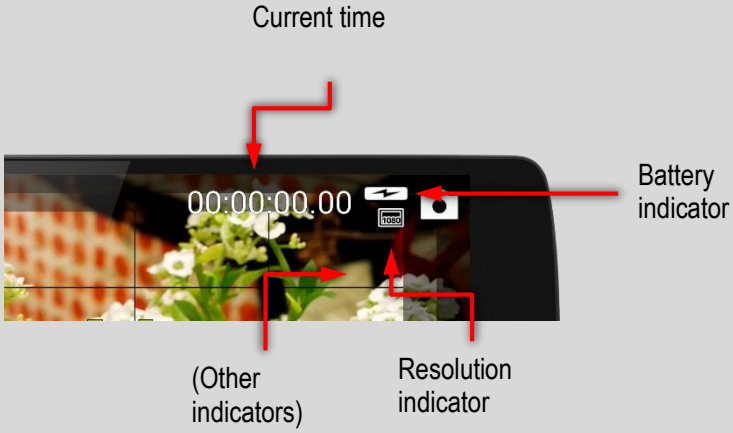
For any problem related to Cinema FV-5, you can contact to the support team via e-mail: support@cinemafv5.com. However, before contacting the aforementioned e-mail address for support, please visit the Frequently Asked Questions (FAQ) here: http://www.cinemafv5.com/faq.php, as it is really likely that your questions is already answered there.

Basic commands

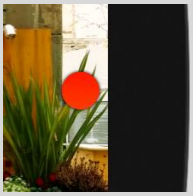
Cinema FV-5 puts all the controls and options —that you would typically find on dedicated physical buttons on a high-end videography camera— directly on the screen. Adjusting the ISO, the metering mode or the white balance is just a tap away. All the controls are located around the viewfinder.







Record start/stop



Located on the right of the viewfinder. It starts and stops recording of an individual clip.

Record virtual button

The virtual shutter button emulates a physical record button. Since the virtual record button cannot react to half-presses like physical two-stepped buttons,

the normal operation —tapping on the virtual button— always starts recording. However, the default behavior is to trigger autofocus, and then start recording (that is, the recording does not start immediately but only after the focus has been acquired).

There are two settings to override this behavior:

- The normal behavior is not to start a new clip if the autofocus result was unsuccessful (that is, the autofocus routine didn't achieve a sharp subject or couldn't locate the focus position, both situations lead to a red focus rectangle). If you want Cinema FV-5 to start recording in any case (whether the focus succeeded or not), activate the option ***Settings > General camcorder settings > Allow capturing videos without focus***.
- If you simply don't want to trigger autofocus before recording a new clip (that is, you want to start recording without changing the focus position), activate the option ***Settings > General camcorder settings > Focus before capturing***.

Note
If the focusing routine fails, the default behavior is not to start recording a new clip. The focus rectangle turns into red in this case. You can change this behavior in ***Settings > General camcorder settings > Allow capturing videos without focus*** although it is discouraged, as the resulting clip could be incorrectly focused.

Physical record button

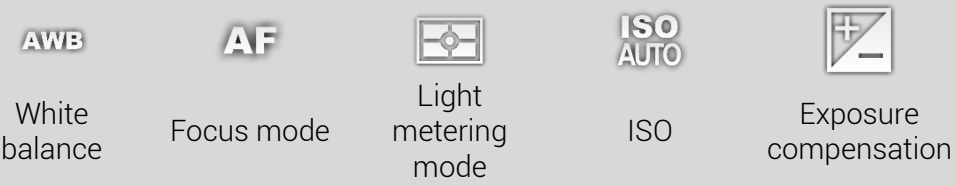
If your phone has a physical camera key, you can use it to start and stop recording clips with Cinema FV-5. Save for the zoom (when not assigned to volume keys) and any other manual controls, you can record clips without having to ever use the touch screen.

There are two types of camera keys:

- With two steps. Those shutter keys have two depths: you can press it slightly until the middle (half-press) and then continue until the end (full-press). When you half-press the camera key, Cinema FV-5 focuses the frame and then locks the focus, meaning that you can reframe your composition and the focus distance will remain. When you finally fully-press the camera key, the clip recording starts.
- With one step. On that case, the physical camera key will behave the same way as the virtual record start/stop button.

Film controls

The main film controls —exposure compensation (EV), ISO, light metering mode, focus mode and white balance (WB)— are always available at the bottom of the screen. Changing those parameters is a breeze: they are just two taps away, and you always get a preview of the effects reflected on the viewfinder. Furthermore, you can change all those parameters while recording as well.



White balance | Focus mode | Light metering mode | ISO | Exposure compensation

Tip
You can reset altered film parameters to their defaults by long-pressing on their corresponding buttons. The device will produce a short vibration to confirm that the setting was reset to its default and the icons will also reflect the change. White balance is reset to AWB, focus mode to AF, metering mode to matrix, ISO to Auto and exposure compensation to +/- 0.

Exposure compensation (EV)

Adjust the compensation of the frame exposure time. A value of +1 effectively doubles the exposure time, whereas a value -1 halves the exposure time. The EV range and step vary across devices. A range of [-2, 2] and a step of ½ stop is typical.

Note
Depending on the currently selected frame rate, it might be not possible to adjust the exposure compensation on the whole range on certain lighting conditions. If the frame rate is set to 30 FPS, the per-frame exposure time cannot go under 1/30 of a second.

Sensor sensibility (ISO)

Select the sensitivity of the film: automatic (AUTO) or in the range from ISO 50 to ISO 3200, depending on the device (some sensitivities may not be available, or may take no effect if Cinema FV-5 is unable to detect the available ISO range of your device).

Light metering modes

Select which zones to use from the frame to meter light. The available options are:

	**Matrix.** Use all zones to meter light.
	**Center.** Use the central part of the frame to meter light.
	**Point.** Use the area of the focus rectangle when it is centered on the viewfinder. In case you are using touch-focus (i.e. the focus rectangle is not centered) the metering point will still be centered. If you want point metering, but not centered, you can use **touch metering** (if available).
	**Touch metering.** Allows you to select the metering point from any point of the frame. This option is only available on devices whose camera hardware supports this feature. The metering point is chosen by long-pressing on the viewfinder (if touch-metering is not available, long-pressing on the viewfinder will have no effect). Then, a metering rectangle will appear. This rectangle can be dragged around the viewfinder with the finger once is placed on a specific position. You can adjust the metering point before and also during recording (therefore you can record all metering changes as you drag the metering rectangle around the frame). You can reset the metering mode by selecting any of the other metering modes (matrix, center or point).
	**Auto-exposure lock.** Stops the automatic exposure algorithm, keeping the last automatic exposure time calculated while the lock is active. Tap the toggle again to unlock. Supported only on Android 4+ devices with the appropriate support from the camera hardware.

Tip
If you usually record clips with the exposure locked, you might find more comfortable to have Cinema FV-5 to lock the exposure for you automatically during the clip recording. To do so, activate the option ***Settings > Video > Lock exposure during recording***.

Focus mode

Cinema FV-5 supports the following focus modes (the availability of the specific focus modes is subject to device support and availability), plus a focus lock switch.

	**Autofocus.** Focus anywhere on the picture. Focus priority depends on camera maker. Tap anywhere on the viewfinder to trigger AF.
	**Macro.** Gives AF system a hint to prioritize closer objects. On some devices, effectively lowers the allowed minimum focusing distance.

	**Face detection.** Focus automatically on people's faces. The focus rectangle is hidden on this mode, and detected faces are marked with green rectangles. The camera adjusts focus continuously to follow detected faces. It is not possible to manually trigger focus while on this mode.
	**Continuous.** The camera focuses automatically and continuously. It is not possible to choose where and when to focus, the camera driver decides the best focus automatically and continuously. This focus mode might introduce unnecessary refocusing during the recording, and therefore is not recommended. Consider triggering the focus manually during the recording if you want to change focus planes.
	**Touch focus.** Gives AF system a hint to focus on the selected object. Tap anywhere on the viewfinder to select the focus point and trigger AF.
	**Infinity.** Set the focus to infinity. Tapping on the screen always result in focus confirmation and AF is not triggered.
	**Autofocus lock.** Locks the focus at the current position. Tap the toggle again to unlock.

Tip
In Cinema FV-5 focusing is always manual (unless "Face detection" or "Continuous" focus modes are selected). That means, the focus doesn't change during recording unless you manually tap on the screen and you trigger the focus mode again. Setting a focus point manually using touch focus mode for instance, won't update the focus automatically on the selected point, but will lock the focus on the point you tapped initially.

White balance (WB)

You can compensate white biasing because of different illuminant temperatures. As of now, you can choose from different presets (ordered from colder to warmer temperatures):

	**Automatic.** The camera calculates the temperature of the light source present on the scene and automatically compensates it.
	**Cloudy.**
	**Sunny.**
	**Fluorescent light.**
	**Warm fluorescent light.**
	**Incandescent light.**

Note that preset white balance settings depend on device manufacturer support.

On supported devices you can lock the automatic white balance algorithm.

WB-L	**Auto white balance lock.** If the white balance is set to auto, when the toggle is active, the automatic white balance algorithm will stop running, keeping the last calculated scene temperature. Tap again the toggle to unlock it and recalculate the scene color temperature.

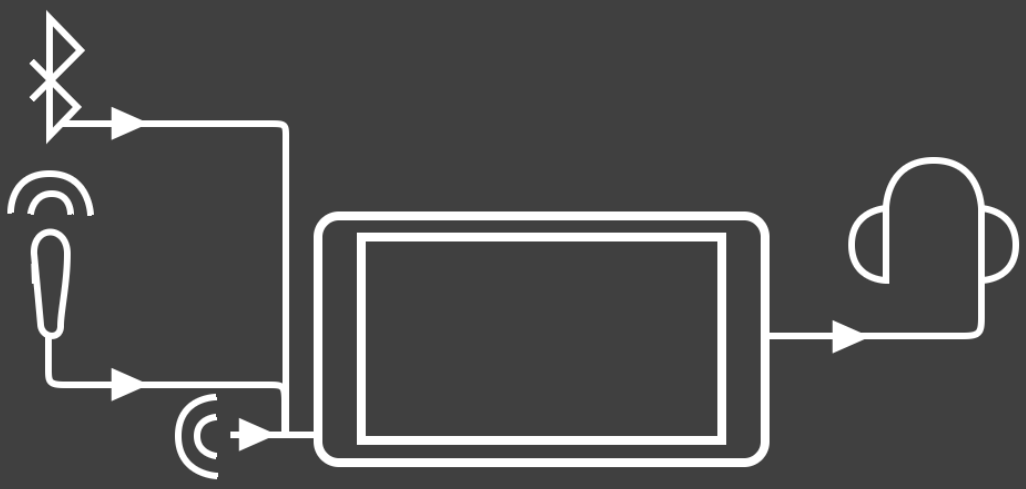
Tip
If you usually record clips with the white balance locked, you might find more comfortable to have Cinema FV-5 to lock the white balance for you automatically during the clip recording. To do so, activate the option ***Settings > Video > Lock white balance during recording***.

Menu

At the left side of the viewfinder, from top to bottom, the following settings are located:

MENU	**Menu.** Contains different video and viewfinder commands. • **Image stabilization.** Activates or deactivates the image stabilization. On most devices, this is digital image stabilization. If image stabilization is not supported on the device or the device sports optical image stabilization that cannot be deactivated, this button might not be present. • **Live histogram.** Activates or deactivates the live histogram. • **Grid overlay.** Activates or deactivates the grid overlays. The one fourth grid is used by default, but it can be changed in ***Settings > Viewfinder > Composition grid***. • **Crop guides.** Activates or deactivates the crop guides. 16:9 + safe areas guides are used by default, but it can be changed in ***Settings > Viewfinder > Crop guides***.

Audio monitoring



The audio monitoring functionality lets you pre-listen the quality and loudness of your audio before starting the recording. While active, the currently selected audio input source is monitored and the captured audio is routed in real-time to the output 3.5mm audio jack for use with headphones.

Before starting the audio monitoring, plug a headphone on the 3.5mm audio jack of your device. Otherwise no audio will be monitored.

Note
If you are using an external microphone connected to the 3.5mm audio input jack as audio source, you cannot connect a headphone directly. In this case, you need an inexpensive 3.5mm audio/microphone splitter cable to connect simultaneously an external microphone and headphones on the same 3.5mm jack connector.

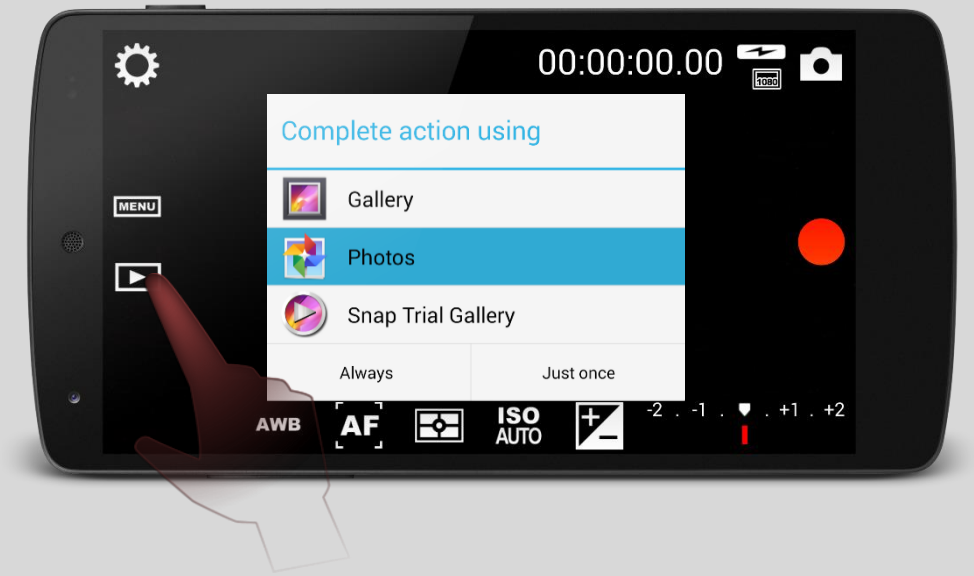
To start audio monitoring, on standby mode (i.e. not while recording), tap on the audio monitoring icon  on the left side of the viewfinder. Through the headphones you will start to hear in real-time the audio captured by the current selected audio source. The audio level scale that is shown during the recording will be displayed as well.

To stop the audio monitoring, tap on the audio monitoring icon  again. Starting the recording will stop the audio monitoring automatically as well.

Video playback

Although Cinema FV-5 doesn't have a built-in video viewer, it can invoke any external video viewer you have installed on your system. By default, almost any Android device have the Gallery application preinstalled. Other phones have also the Photos app by Google. In any case, you can preview the last video taken on any of these external application, and then you can either come back to Cinema FV-5 or you can flick over all the other videos besides the last one.

In case there are more than one application available to review videos on your phone, you will see a dialog that lets you choose which application you can to use. Furthermore, you can either use one application just once, or assign this application as the default one for viewing videos.



In case you choose to do so, you can reset the association on *Android settings > Application manager / Apps > All > [Current default gallery application] > Launch by default > Clear defaults*.

Settings button

Arguably the second most important button on Cinema FV-5 —after the record button of course— is the settings button. It opens the settings panel, where you can adjust the rest of the settings of Cinema FV-5 not present on the main screen. Operation with the settings panel is intuitive for the any videographer used to DSLR videography, and it provides extensive configuration of your

videocamera. General camcorder settings, video settings, audio settings and viewfinder options are just some of the options found on the settings panel. The settings panel is discussed in detail on chapter Camcorder settings (p. 29).

The viewfinder

The viewfinder is comprised of a live camera sensor view (that updates in real time to all film parameter changes) with additional information and composition guides overlaid on top. On the upper part of the viewfinder you can see the actual camera parameters —ISO—, the audio level while in audio monitoring mode or while recording, and the current recording time. On the right many indicators are shown. Finally, there are a number of composition guides overlaid on top that can be activated at any time.

Furthermore, you can activate a live histogram, which is a very powerful exposure guide. Unlike many cameras, that display this information during the review phase, Cinema FV-5 can provide you with a live histogram (both full RGB and luminance) that update in real time, giving you a very useful information to judge the video exposure.

Upper display

On the upper display you can see the audio level widget, the currently selected sensitivity and the recording time.

	Audio level. The audio level widget is shown while audio monitoring is active or while recording a clip. It shows in dB the current audio level, from −∞ dB to 0 dB. Note that this scale is not calibrated, therefore 0 dB on various devices do not have the same audio power. This just indicates the point of audio clipping (saturation).
ISO 100	**ISO value (sensitivity).** This shows the selected ISO value, or the automatically chosen value, in case ISO Auto is selected.
00:00:00.00	**Current recording time.** This shows the current recording time in HH:MM:SS.FF format, where HH are hours, MM minutes, SS seconds and FF frame within the second (0 to currently selected frames per second)

Indicators

The main interaction with the camera takes place through the viewfinder. A part from framing the picture, all the controls and displays are laid out around the viewfinder.

On the top part:

Battery indicator. Shows in a 5 segment battery indicator the approximate remaining battery charge available.

Video resolution indicator. Displays the currently selected video resolution. Only standard resolutions are shown with a specific icon, other non-standard video resolutions just display an empty frame indicator ( ).

Location fix indicator. If the location tagging is enabled in Settings, when a location is available, this indicator is shown. Only if the indicator is displayed, location information will be written to the clip metadata.

External (wired) microphone status. When an external microphone is plugged on the 3.5mm jack, this indicator is shown. Another symbol is displayed if the microphone was not detected, or a headset without microphone was plugged.

Microphone detected	Headset without microphone

Bluetooth microphone status. Displays the current status of the Bluetooth microphone. This is only displayed if *Bluetooth microphone* audio source is selected.

Bluetooth microphone audio source selected but device not paired or not connected	Attempting to connect to the Bluetooth device.	Successfully connected to a Bluetooth microphone device. Ready to record audio from this source.

AF-L	**Autofocus lock indicator.** Displayed when the focus lock is active. To release the lock, tap on AF-L on focus toolbar.
AE-L	**Auto exposure lock indicator.** Displayed when the auto exposure lock is active. To release the lock, tap on AE-L on light metering modes toolbar.
AWB-L	**Auto white balance lock indicator.** Displayed when the auto white balance lock is active. To release the lock, tap on WB-L on white balance toolbar.

On-screen composition aids

Two different on-screen composition aids can be activated via the settings panel: **composition grids** and **crop guides**. Those are found in ***Settings > Viewfinder > Overlays***.

Composition grids

Light grids that aid during framing and scene compositing. They are very helpful for framing good and aesthetically pleasing clips.

Rule of thirds	The simplest of all grids. Display a grid that subdivides the frame in 3x3 cells. Interesting objects, people and edges should lay in the grid intersections or along edges of the grid.
One quarter	Like the previous one, but the frame is subdivided in 4x4 cells.
Crosshair	A simple grid (2x2 cells), useful to keep horizontal features horizontal, and vertical features vertical.
Triangles	Two types: topleft-bottomright and bottomleft-topright.
Golden spiral	Four directions: top right, bottom right, top left, bottom left.

Crop guides

Allow you to frame objects as if the frame had actually a different aspect ratio as the video frame size you have selected. That way, you can use the typical native 16:9 aspect ratio of the video to get the maximum output resolution, but frame as if you had, for instance, 2.35:1 aspect ratio. You can later crop the image to the aspect ratio you used for composition, but if you change your mind, you always have the full resolution footage to keep it or frame (crop) it differently.

Crop guides, when active, show the unused part of the image with a darker semi-transparent overlay. Note that the video is not actually cropped to the

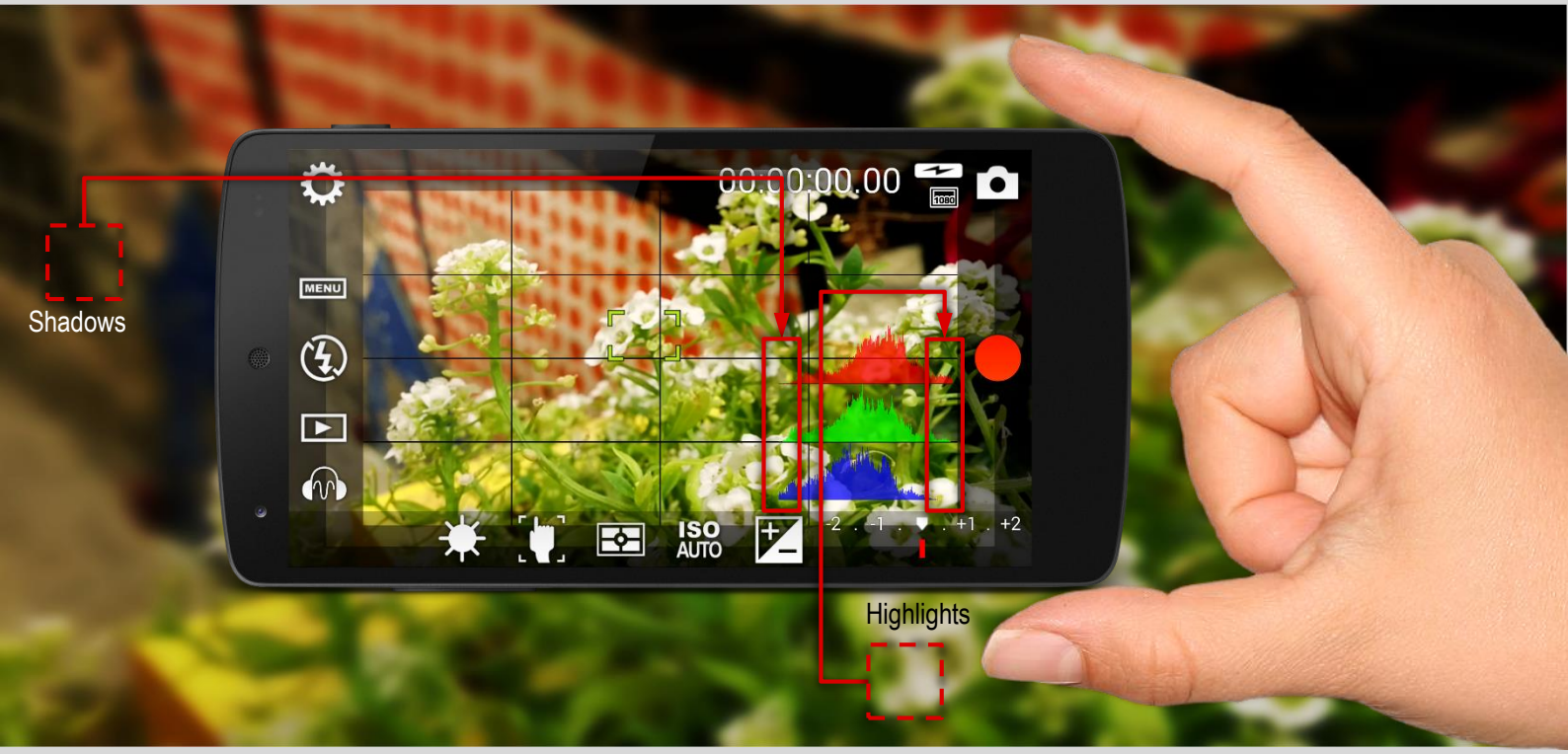
selected aspect ratio, crop guides (as the name implies) are just guides for cropping later.

When the composition grids are active, they adapt to the highlighted area left by the selected crop guide. Some composite guides have different modes to accommodate the grid to the different parts of the composite guides (like *Widescreen multiformat* or *Safe areas*).

Square format	Keeps a centered square on top of the viewfinder, to aid you in framing square videos.
3:2	That is the typical aspect ratio of DSLRs. Selecting this crop guide, you can frame your clips with 3:2 aspect ratio, while capturing in 16:9. If you really want your videos to come out already with 3:2 aspect ratio, you can select a 3:2 aspect ratio frame size in *Settings* > *Video* > *Video resolution*.
Widescreen 16:9	Typical aspect ratio of widescreen films. As explained before, if you want to shoot directly in 16:9 format, select a 16:9 aspect ratio picture size in Settings. In that case, no crop guides will be necessary, as the viewfinder will accommodate a 16:9 preview in your device screen (since most devices have 16:9 aspect ratio screens, the typical black bands of surrounding the preview will go away, and the on-screen buttons will show on top of the preview).
Widescreen 16:9 (upper part)	The option Widescreen 16:9 uses the central part of the native shooting resolution to show the guides. You can align the 16:9 crop to the top by selecting this option.
Widescreen 16:9 (lower part)	The same as the previous option, but the crop area is at the bottom of the native frame.
Cinema 2.35:1	This option shows the typical cinematic aspect ratio.
Widescreen multiformat (grid for cinema)	Two crop guides (widescreen 16:9 and cinema 2.35:1) are shown simultaneously. In this option, the grid is adapted to the 2.35:1 area.
Widescreen multiformat (grid for 16:9)	Two crop guides (widescreen 16:9 and cinema 2.35:1) are shown simultaneously. In this option, the grid is adapted to the 16:9 area.
Safe areas	Displays safe areas (action area and title area) for a 16:9 composition in progressive darker overlays. The action area width and height is the 90% of the complete frame. The title area width and height is the 80% complete frame.
Safe areas (action safe grid)	Same as *Safe areas* but the grid (if shown) fits the action safe area instead of the whole frame.

Safe areas (title safe grid)	Same as *Safe areas* but the grid (if shown) fits the title safe area instead of the whole frame.
Cinema 2.35:1 + safe areas	Same as *Safe areas* but based on a 2.35:1 composition.
Cinema 2.35:1 + safe areas (action safe grid)	Same as *Safe areas (action safe grid)* but based on a 2.35:1 composition.
Cinema 2.35:1 + safe areas (title safe grid)	Same as *Safe areas (title safe grid)* but based on a 2.35:1 composition.

Live histogram



The histogram is a powerful guide to evaluate frame exposure.

A histogram is a graph that counts how many occurrences of a particular brightness channel has. In case of color film, there are three color channels (red, green and blue) each with its own intensities, whereas in black and white film there's only one luminance channel. Also, even with color film, you can opt to get a luminance-only histogram. Internally, the frame is converted to grayscale to calculate the histogram.

Activating the live histogram

Go to *Settings > Viewfinder > Live histogram* and activate Show histogram.

Alternatively, tap MENU, then  . The histogram is calculated in real time

and changes when you move the camera or the subject, or you change settings that affect the lightning or color distribution.

Histogram types

In *Settings > Viewfinder > Live histogram > Histogram type* you can select:

- RGB (3 color channels). This option is only available when recording color footage.
- Luminance. This option is also available when recording color footage. It shows the luminance histogram of the viewfinder converted to grayscale.

Furthermore, you can adjust the size of the graphs in Histogram size (Normal and Mini) and the style of the histogram in Histogram style (Transparent or Solid).

Video clip organization

Whether you are a prolific filmmaker recording thousands of takes or not, you may want to set your rules on how video clips are organized inside your smart device running Cinema FV-5. Normally all videos are put into a folder with a file name. With Cinema FV-5 you can change both the storage folder and the file naming scheme.

Storage folders

To change the storage folder, go to ***Settings > General camcorder settings > Video storage & numbering > Storage location***. There you can choose the following options:

- DCIM folder. Clips will be saved to <Internal memory storage>/DCIM folder.
- DCIM/CinemaFV5 folder. Clips will be saved to <Internal memory storage>/DCIM/100_CINE folder. That is the default option.
- Custom location. You will be required to provide a custom folder in the Custom storage folder setting. If you don't set that setting, DCIM/CinemaFV5 option will be used instead.

In ***Settings > General camcorder settings > Video storage & Numbering > Custom storage folder*** you can set a custom folder to store your clips (remember to set the *Storage location* setting to *Custom location*). A folder browser will open that will let you navigate around your folder structure. Tap Select to define the current selected folder as the storage folder.

Note
There's no universal location of the external SD card location. As the internal memory, the external SD card is shown on the device file system as a normal folder. Usually is called *externalSD* or *extSdCard*, and its location varies across devices *(/sdcard/* or */mnt/* folders are typical but not the only ones).

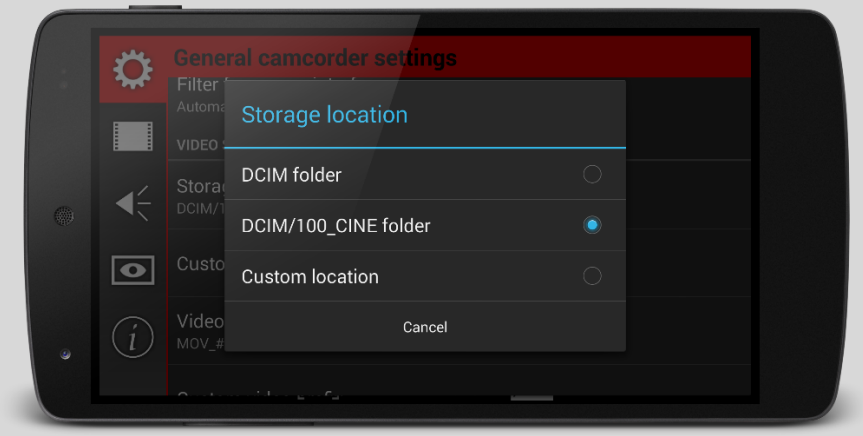
Warning
On Android 4.4 KitKat onwards, the OS does not let developers write to the external SD card anymore. This a limitation of the OS and all third party applications (i.e. not the applications pre-installed on the device) are affected by this, therefore there is little to do. Cinema FV-5 however implements "hacks" for some devices to still make using the external SD card possible by using back-door or system bugs. However, this does not work for all devices, and even on the devices where it works, this could stop working in the future as the bugs are fixed via OS updates. Please blame Google and the OEMs for this and take consideration for the app developers that have nothing to do with this limitation.

File names

By default, clips are named according to the DCIM standard (clips stored in a folder with the session number with 3 digits and a 5 letters suffix, 100_CINE, and clips named with a 4 letters prefix and 4 digits counters, MOV_0001.MP4). That is the standard that follows most compact digital cameras and all DSLR cameras. It allows printers and other devices to automatically locate sessions and clips and import them. However, you might want to change the file names to suit your needs, even if they don't follow the DCIM standard.

Custom prefixes

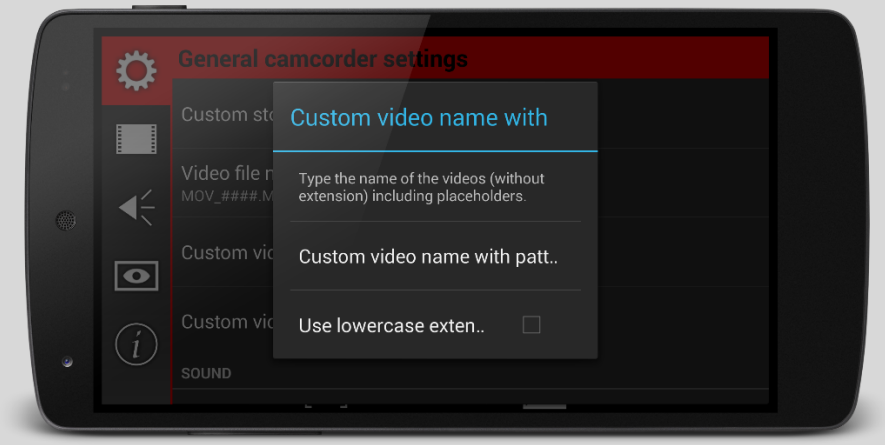
In ***Settings > General camcorder settings > Video storage & numbering > Video file name pattern*** you can set the video name to one of the following patterns (all of them complying with the DCIM standard):



- MOV_####.MP4
- MOV0####.MP4
- VID_####.MP4
- MVI_####.MP4
- Custom. This one lets you customize the prefix with the 4 letters of your choice (for instance your initials or the four first letters of your name). After setting this option, tap on the *Custom video prefix* setting and type the 4 letters of the prefix. If you provide less than 4, the prefix will be padded with underscores ("_") to fill 4 letters, and if you provide more, the first 4 will be taken.
- Custom with patterns. If you select this option, you will have to configure everything explained on the next section, otherwise the default pattern (*MOV_####*) will be used instead. This won't be DCIM compliant.

Custom file names with patterns

If need more customization of the file naming scheme, you can select the option *Custom with patterns* in the setting *Video numbering pattern*. Then, go to *Custom video name with patterns* option and another panel will open. Tap on *Custom video name with patterns* to compose your own pattern.



The file name pattern is composed of fixed and dynamic text. For instance, the file naming scheme MOV_####.MP4, has a fixed part ("MOV_") and a dynamic part (the video counter).

The dynamic part of the name pattern is specified with placeholders, which are pieces of special text that are replaced with their corresponding values in the moment of saving the video (when the file name is created). Those special pieces of text (placeholders) are written between angle brackets and are:

- <date>. Prints preformatted date. E.g. 2001-12-31.
- <time>. Prints preformatted time. E.g. 13-20-20.
- <day>. Prints the current day with 2 digits. E.g. 31.
- <month>. Prints the current month with 2 digits. E.g. 12.
- <year>. Prints the current year with 2 digits. E.g. 01.
- <year4>. Prints the current year with 4 digits. E.g. 2001.
- <hour>. Prints the current hour with 2 digits in 24-hours format. E.g. 13.
- <minute>. Prints the current minute with 2 digits. E.g. 20.
- <second>. Prints the current second with 2 digits. E.g. 20.
- <counter>. Prints the current clip counter with 4 digits. E.g. 0001.

Furthermore, it is possible to control the case (uppercase of lowercase) of the file extension in this mode by using the option Use lowercase extension.

Some examples of custom patterns:

- <date>_<time> would produce 2001-12-31_13-20-20.
- <day><month><year><hour><minute><second> would produce 311201132020.
- CINEMA<counter> would produce CINEMA0001.

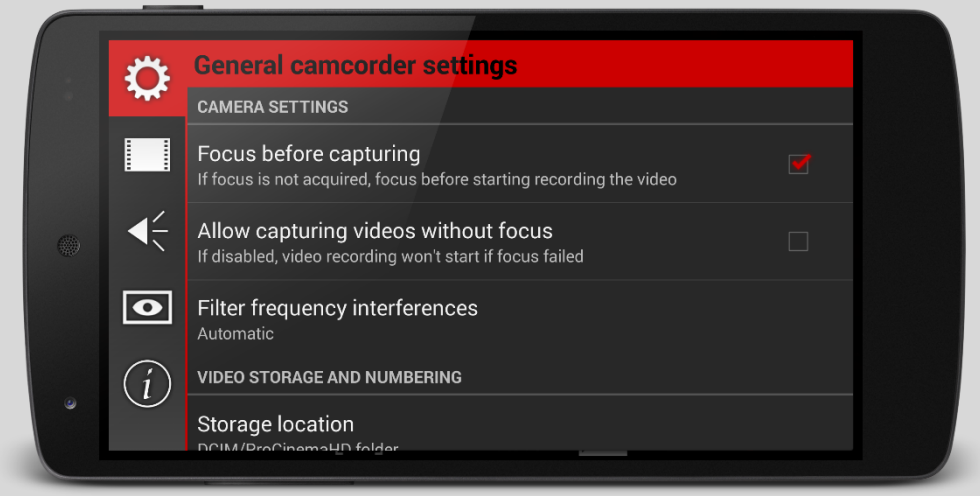
Note

In the case that two file names collide because the patterns defined are not specific enough or change during the time, Cinema FV-5 automatically adds an extra number of 4 digits to prevent the new file to overwrite the old one. That counter will be increased as much as needed to prevent always file name collision. You might want to design the file name pattern in a way that avoids collisions so that Cinema FV-5 doesn't need to add an extra, non-configurable counter.

Camcorder settings

The settings panel, accessible by tapping on the gear icon on the top left corner of the screen, reveals much of the functionality of Cinema FV-5. The options are divided on four tabs: **General camcorder settings**, **Video**, **Audio** and **Viewfinder**.

General camcorder settings

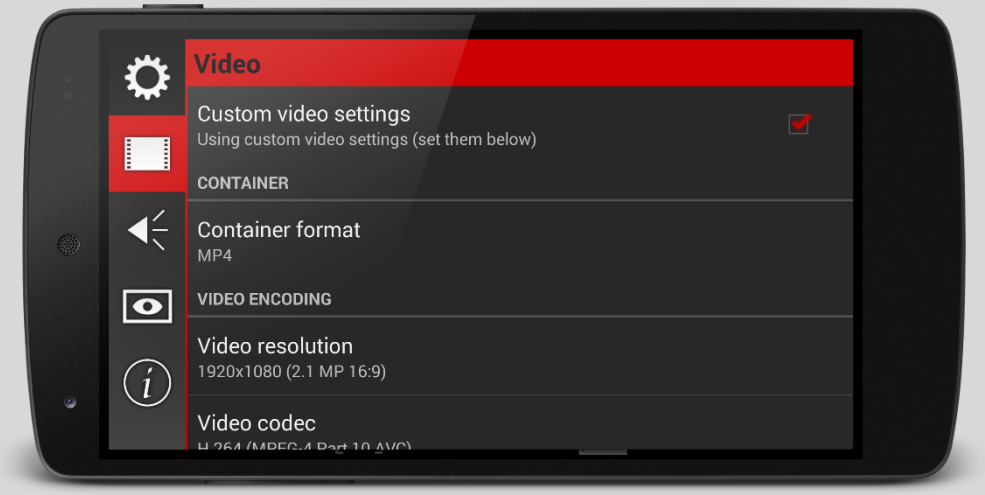


Camera settings	
Focus before capturing	*If focus is not acquired, focus before starting recording the video.*
Allow capturing videos without focus	*If disabled, video recording won't start if focus failed.*
Filter frequency interferences	• Automatic • 50 Hz (Europe) • 60 Hz (USA)

	• Disable
Video storage and numbering	
Storage location	• DCIM folder • DCIM/100_CINE folder (default) • Custom location
Custom storage folder	*A dialog will pop up to select a custom storage folder. This setting is mandatory if you select "Custom location" for the previous setting.* ***This setting has no effect is "Storage location" setting has anything other than "Custom location".***
Video file name pattern	• MOV_#### (default) • MOV0#### • VID_#### • MVI_#### • Custom (XXXX####)
Custom video prefix	*A dialog will pop up to choose a custom video prefix.*
Custom video name with patterns	• Custom video name with patterns • User lowercase extension
Sound	
Play camera sounds	*Plays or mutes all sounds coming from the app. It might happen that for security reasons and OEM enforcement, other sounds are played during the camera operation. In that case, those sounds cannot be muted and Cinema FV-5 is not responsible for them.*
Camera sounds volume	Low, Medium (default), High
Hardware controls	
Volume keys function	None (default), Record start stop/focus, EV+/EV-, ISO+/ISO-, WB color temperature warmer/colder, Zoom +/-
Invert volume keys	*Inverts the behavior of the volume keys (volume + will be mapped to volume – and vice versa).*
Metadata	
Geotagging	• Use GPS only, if enabled • Use GPS, coarse location otherwise • Coarse location, if available • Do not generate location tags (default)
Other	
Prefer external applications	*If enabled, a dialog will pop up to ask which application to use to switch to still camera mode. Otherwise, if Camera FV-5 is installed on the system, this application will be used by default.*

Application settings	
Reset settings	*Resetting all setting will return the app settings to their defaults as they were just after installation. However, it won't remove any previously recorded clip. Specifically, the clip counter will be reset, but no existing or future clip will be overwritten (the counter will be increased while existing, conflicting names exist).*

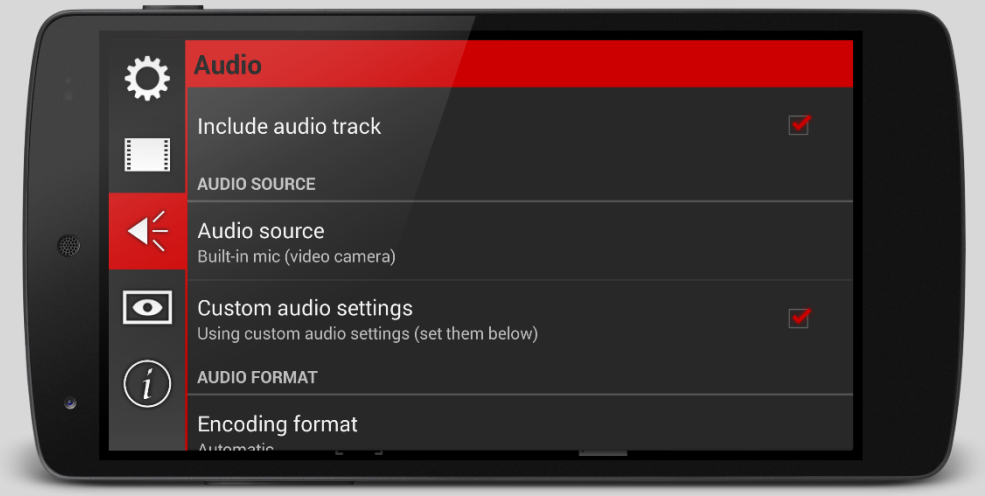
Video



Custom video settings	*Enabled custom video encoding settings. If disabled, device's default parameters for video encoding will be used.*
Container	
Container format	• MP4 • 3GPP
Video encoding	
Video resolution	*Device dependent. 4K video recording is currently not supported by Android OS for third party applications, but Cinema FV-5 includes per-device support for specific Android devices for 4K recording. If your device is able to record in 4K but Cinema FV-5 does not list 4K resolution, this might come with a future Android OS update.*
Show extended video resolutions	*Displays non-standard video resolutions.*

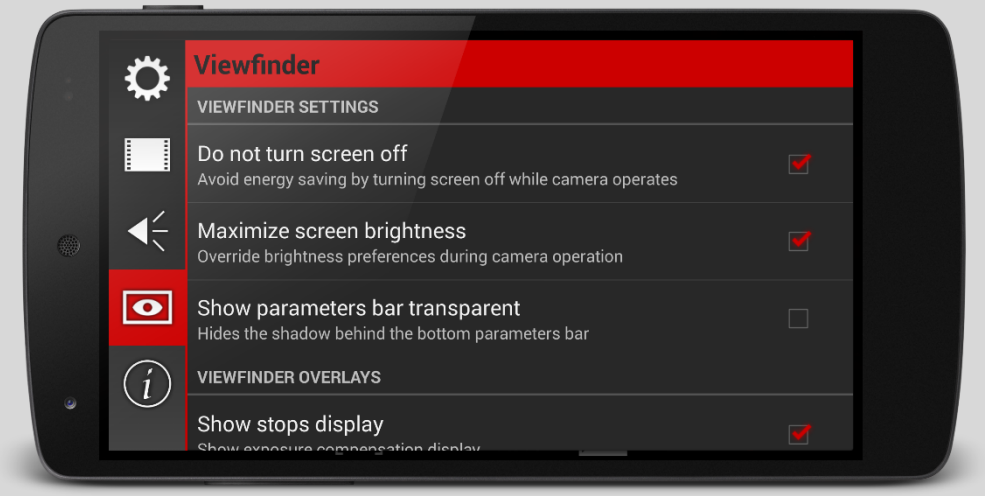
Video codec	• Auto (device primary codec) • H.264 (MPEG-4 Part 10 AVC) (default) • H.263 • MPEG4-SP (Part 2 Simple Profile)
Video bit rate	Device dependent.
Frame rate	Device dependent. • 30 (NTSC) • 25 (PAL) • 24 (film) • 15 (low frame rate)
Image parameters	
Set image parameters…	• Contrast • Saturation • Sharpness *(Support for those parameters are device dependent and adjusting them might have no effect on the picture.)*
Color channels	• RGB (default) • Luminance (black and white)
Video image settings	
Lock exposure during recording	*If enabled, the exposure time metered at the time of capture will be used for the entire clip.*
Lock white balance during recording	*If enabled, color temperature metered at the time of capture will be used for the entire clip.*
Recording limits	
Limit recording length	*If enabled, the clip will be automatically stopped after a defined duration.*
Recording length limit	
Limit recording size	*If enabled, the clip will be automatically stopped after a defined clip size in megabytes.*
Recording size limit	

Audio



Include audio track	*If disabled, clips will be recorded without sound. All the settings on this tab take effect only if you enable this setting.*
Audio source	
Audio source	• Built-in mic (video camera) (default) • External mic • Bluetooth mic
Custom audio settings	*Enables additional audio settings. Otherwise, the device's default audio settings will be used.*
Audio format	
Encoding format	• Automatic (default) • AMR Narrowband • AMR Wideband • AAC-LC (low complexity) • AAC-ELD (enhanced low delay) • AAC-HE (high efficiency)
Audio channels	• Automatic (default) • Mono (1) • Stereo (2)
Audio bitrate	Device dependent.
Sampling rate	Device dependent.

Viewfinder



Viewfinder settings	
Do not turn screen off	*Avoid energy saving by turning screen on while camera operates.*
Maximize screen brightness	*Override brightness preferences during camera operation.*
Show parameters bar transparent	*Hides the shadow behind the bottom parameters bar.*
Viewfinder overlays	
Show stops display	
Show camera parameters	
Show remaining recording time	
Show battery indicator	
Live histogram	
Show histogram	*Shows or hides the live histogram.*
Histogram type	• RGB (3 color channels) (default) • Luminance
Histogram size	• Normal (default) • Mini
Histogram style	• Transparent (default) • Solid
Overlays	
Composition grid	• None (default) • Rule of thirds • One quarter • Crosshair • Triangles (top-left/bottom-right) • Triangles (bottom-left/top-right)

	• Golden spiral (top right) • Golden spiral (bottom right) • Golden spiral (top left) • Golden spiral (bottom left)
Grid thickness	• Thin (default) • Thick • Thicker
Crop guides	• None (default) • Square format (1:1) • Classic 35mm (3:2) • Widescreen 16:9 • Widescreen 16:9 (upper part) • Widescreen 16:9 (lower part) • Cinema 2.35:1 • Widescreen multiformat (grid for cinema) • Widescreen multiformat (grid for 16:9) • Safe areas • Safe areas (action safe grid) • Safe areas (title safe grid) • Cinema 2.35:1 + safe areas • Cinema 2.35:1 + safe areas (action safe grid) • Cinema 2.35:1 + safe areas (title safe grid)