

FILMMAKER

GUERRILLA

# User Manual

03.07.16



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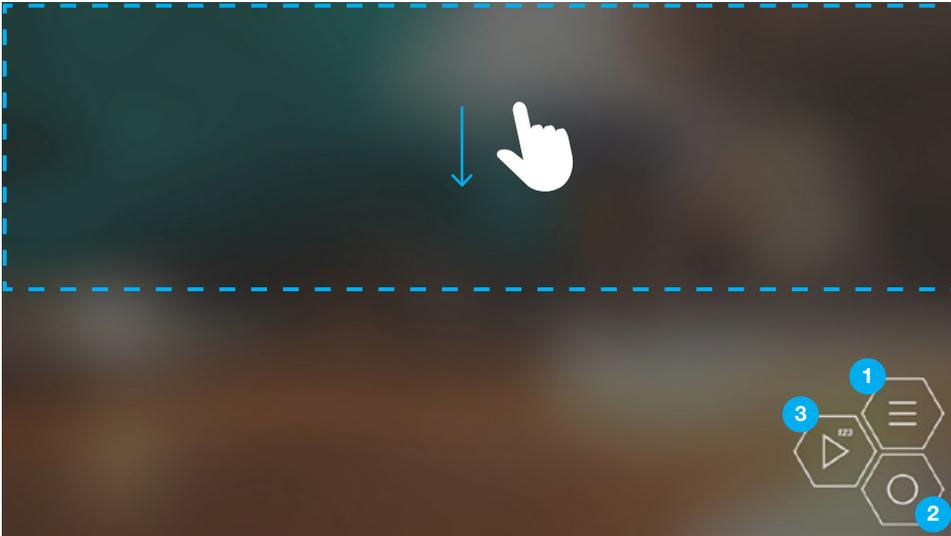
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## MAIN CONTROLS



1. Show / hide top control panel
2. Start / stop video recording
3. Play / stop automated sequences

## GESTURE CONTROLS

Use touch gestures to quickly show and hide interface elements and access shortcuts to useful functionality.

The screen is divided into many regions that will react differently to certain gestures.

Swipe down within the blue line shown to activate control panel.

Swipe up within the blue line to hide control panel.

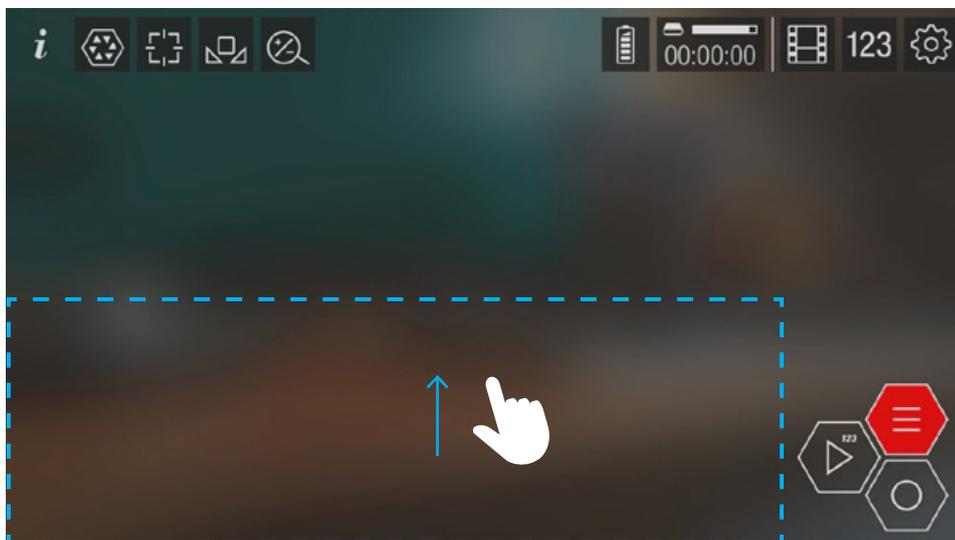
## TOP CONTROL PANEL



- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Help and info</li> <li>2. Exposure</li> <li>3. Manual mode indicator</li> <li>4. Focus</li> <li>5. Automated sequence ready indicator</li> <li>6. White balance</li> <li>7. Zoom</li> </ol> | <ol style="list-style-type: none"> <li>8. Battery indicator</li> <li>9. Storage indicator</li> <li>10. Recording duration</li> <li>11. Recorded clips library</li> <li>12. Automated sequence creator</li> <li>13. Settings</li> </ol> |
|---|--|

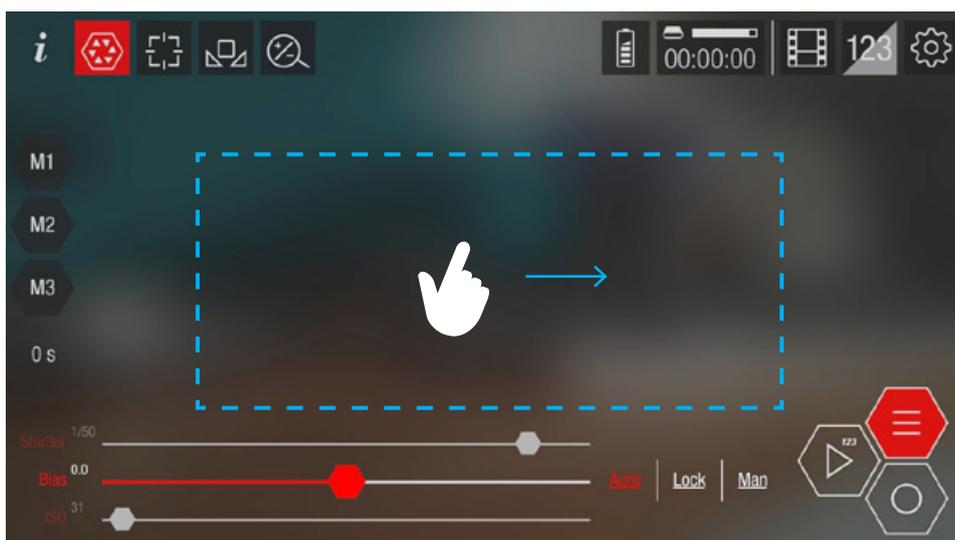


## MAIN CONTROLS

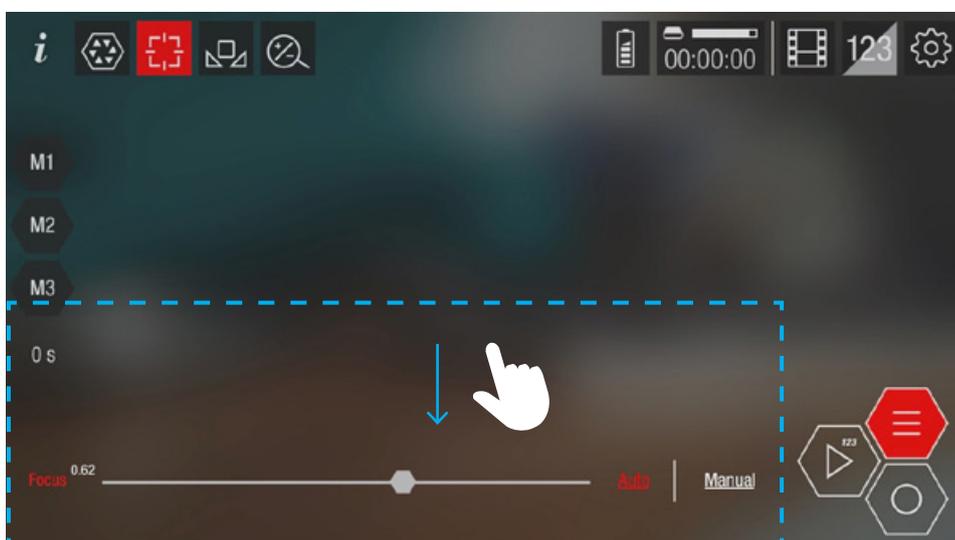


### GESTURE - FUNCTION CONTROL

Swipe up within blue line shown to activate function controls.



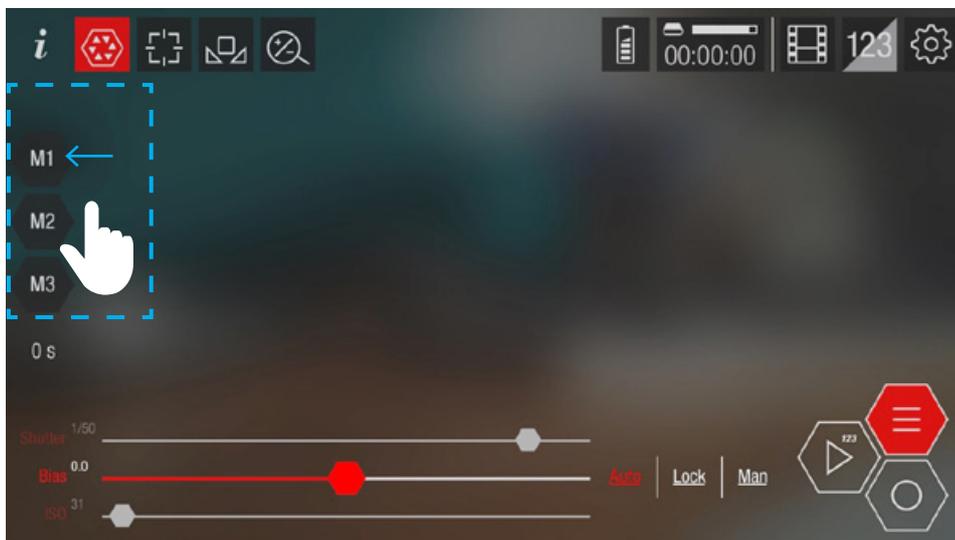
Swipe right or left within blue line shown when function controls is activated to cycle through active functions.



Swipe down within blue line to hide function controls.

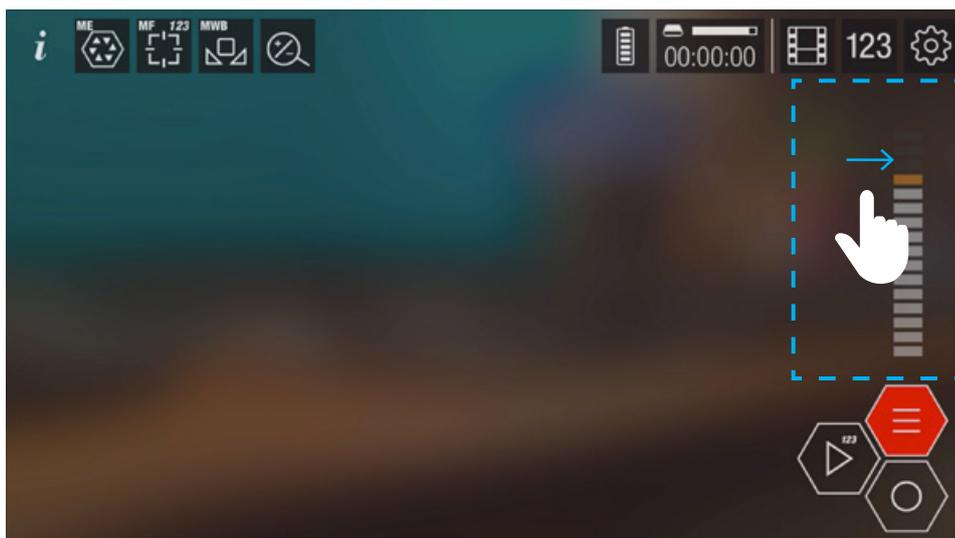


## MAIN CONTROLS



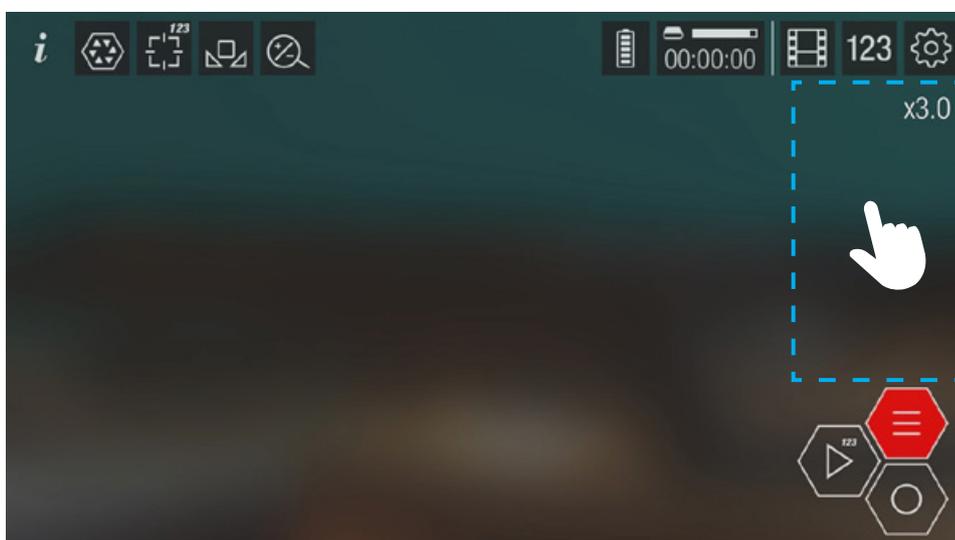
### GESTURE - FUNCTION MEMORY CONTROL

Swipe left or right within blue line shown to quickly hide or show memory controls.



### GESTURE - AUDIO INDICATOR

Swipe left or right within blue line shown to quickly hide or show audio indicator.



### GESTURE - ACTIVATE QUICK ZOOM

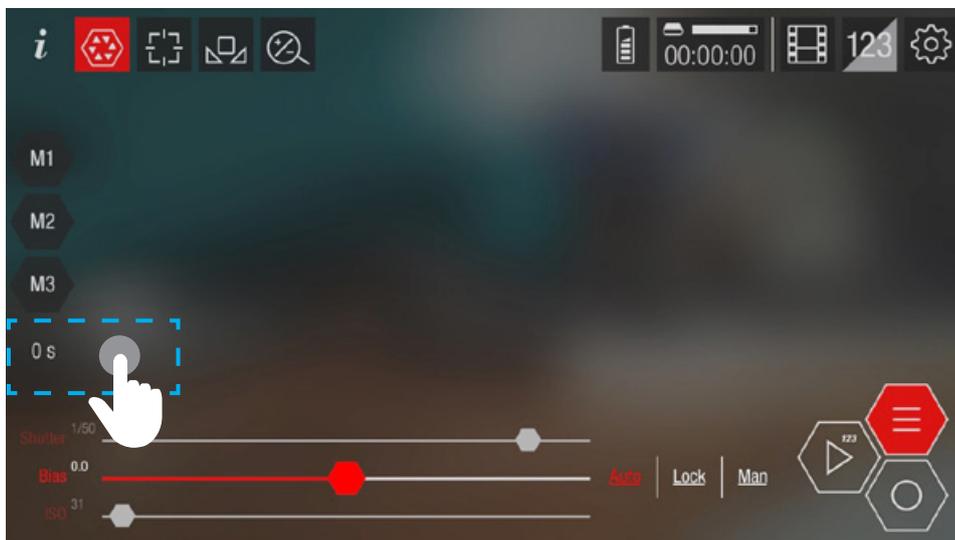
Double tap on right to activate first quick zoom.

Double tap again to activate second quick zoom.

Double tap again to reset.

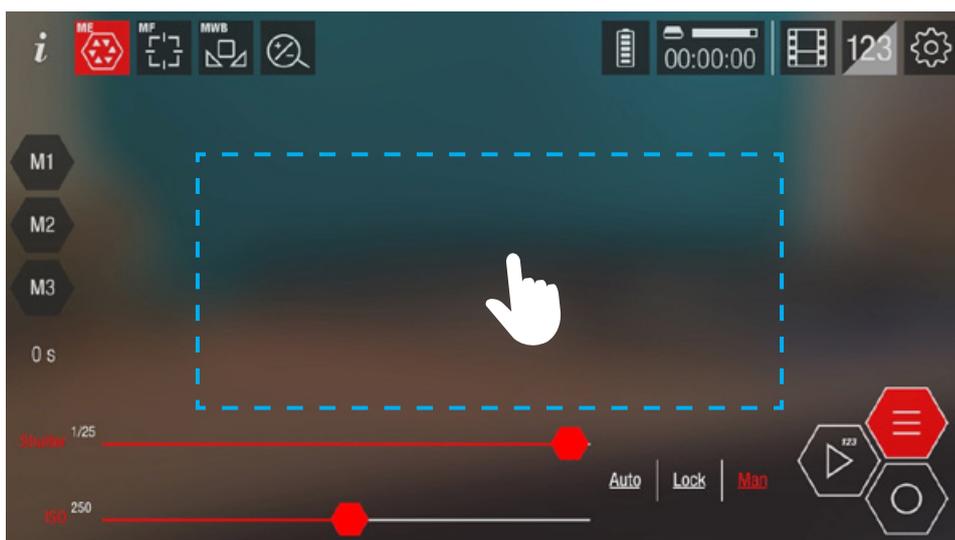


## MAIN CONTROLS



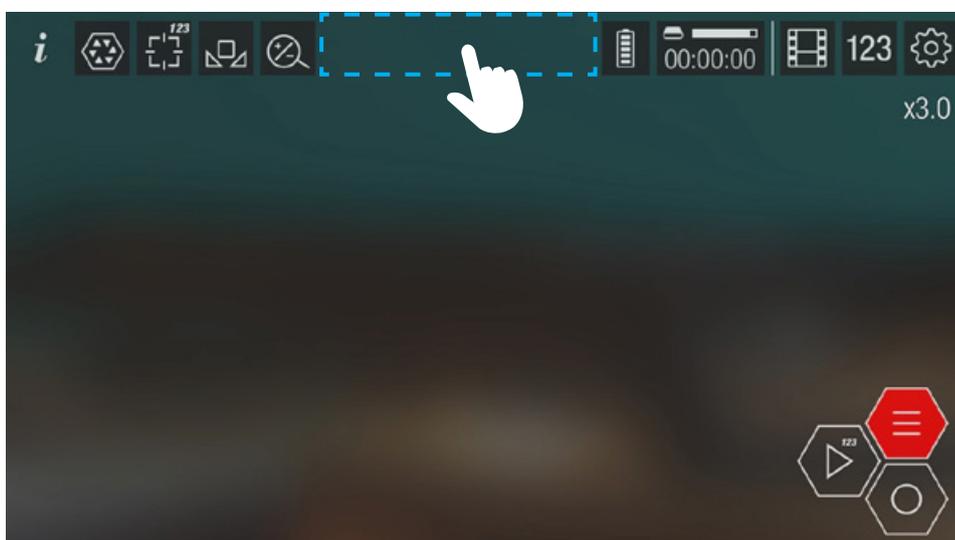
### GESTURE - CLEAR FUNCTION MEMORY

Long press within blue line shown to clear function memory.



### GESTURE - LOCK FUNCTIONS TO MANUAL MODE

Double tap within blue line shown to lock all functions to manual mode



### GESTURE - RESET ALL FUNCTIONS TO AUTO MODE

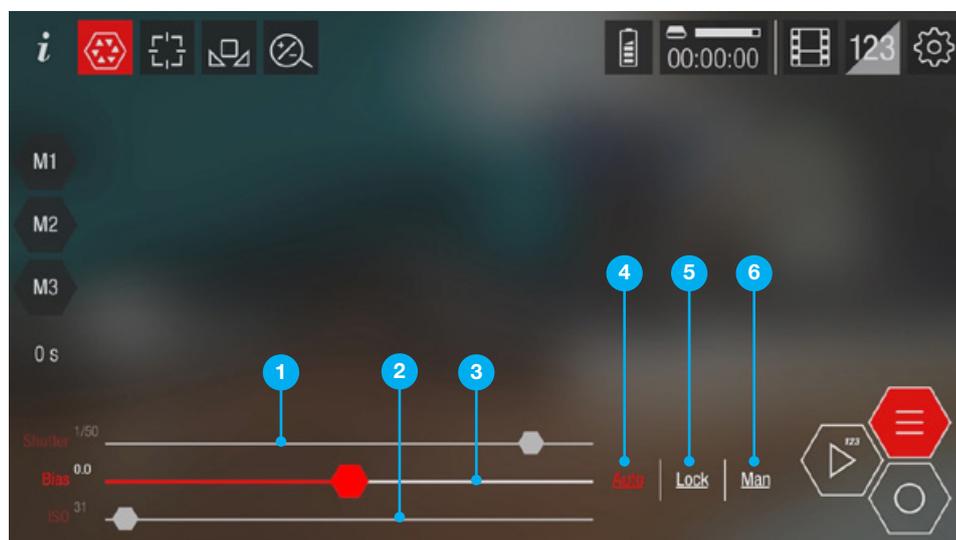
Double tap control panel to reset all functions to auto mode.

Two finger long press control panel to reset all automation.

WARNING.  
Save all wanted automated sequences first.



## CAMERA FUNCTIONS



## EXPOSURE

Exposure determines how light or dark the captured video appears to be. In general, this is determined by just three camera settings: aperture, shutter speed and ISO. The aperture of an iOS device's camera cannot be changed, for Guerrilla Filmmaker this just leaves shutter speed and ISO.

### 1. Shutter speed

Shutter speed determines how long the camera sensor will remain on (capturing light) for each frame captured. The slower the shutter speed, the more light that falls on the sensor and therefore the lighter the image (greater exposure value).

Fast shutter speeds (left end of the slider) require more light for a good exposure and will capture quicker action without as much motion blur, but may look unnatural or "hyper real". Slow shutter speeds (right end of the slider) need less light but will create a blurred action effect.

For a film look, try to use a shutter speed of  $1/(2 \times \text{frame rate})$ . For example at 24fps set the shutter speed to  $1/48$ , this is the traditional frame rate and shutter speed of film. However, using different shutter speeds can be used for creative effect.

**Note: The slowest shutter speed that a particular frame rate can have is  $1/(\text{frame rate})$ . Slower shutter speeds will change the frame rate. The "Limit shutter speed" setting under "CAPTURE HELP" in the settings will prevent the shutter speed slider from changing the frame rate. The default for this setting is ON.**

### 2. ISO

ISO determines how sensitive the camera is to incoming light. The higher the ISO (right end of the slider) the less light is required for a proper exposure but the more digital noise will be visible in the image.

### 3. Bias

When using "auto exposure" or "lock exposure" the bias can be changed so that the image will be under (darker) or over (lighter) exposed from what the auto exposure mechanism determines to be a proper exposure. Negative values (left end of the slider) will under expose and positive values (right end of the slider) will over expose. The scale is in EV units (1EV equals 1 f-stop of a traditional camera).

### 4. Auto exposure

The operating system will automatically adjust the shutter speed and ISO values to try to properly expose the image. It will then apply any "bias" to darken or lighten the exposure. This auto exposure will happen continuously as the amount of light in the scene changes.

### 5. Lock exposure

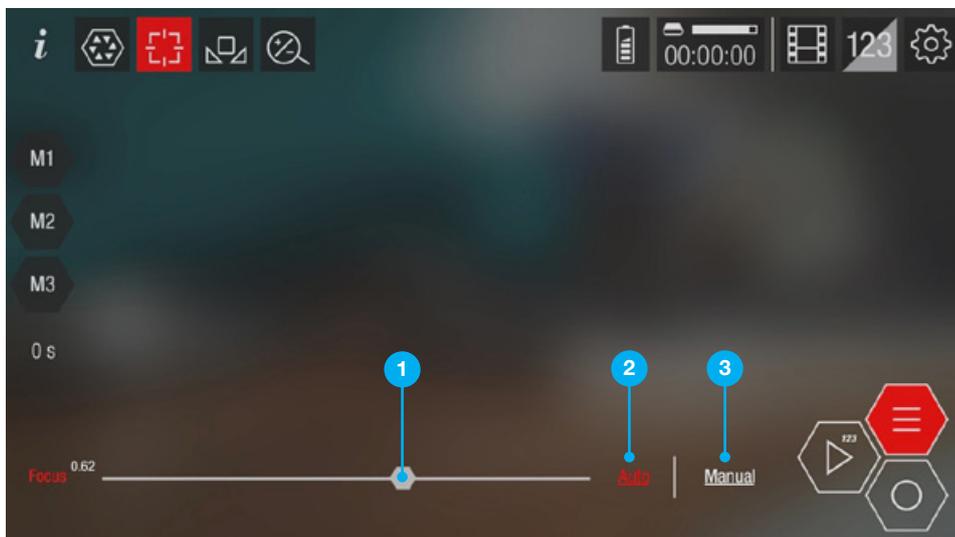
This will lock in whatever the current auto exposure determined shutter speed and ISO values are. They will not update as the light in the scene changes.

### 6. Manual exposure

Manually set the shutter speed and ISO values to achieve the exposure you need. It is usually best practice to set the shutter speed you want and then adjust the ISO to get the correct exposure.



## CAMERA FUNCTIONS



### FOCUS

Focus on an iOS device is achieved by physically moving the camera lens back and forth using magnets and a spring. The lens position is defined as a value between 0 and 1.

#### 1. Focus lens position

The focus lens position is a value in the range of 0 to 1. Zero (left end of the slider) is the closest distance that the lens can focus at and one (right end of the slider) is the farthest distance (infinity) that the lens can focus at.

**Note that some cameras on some devices don't support focusing.**

#### 2. Auto focus

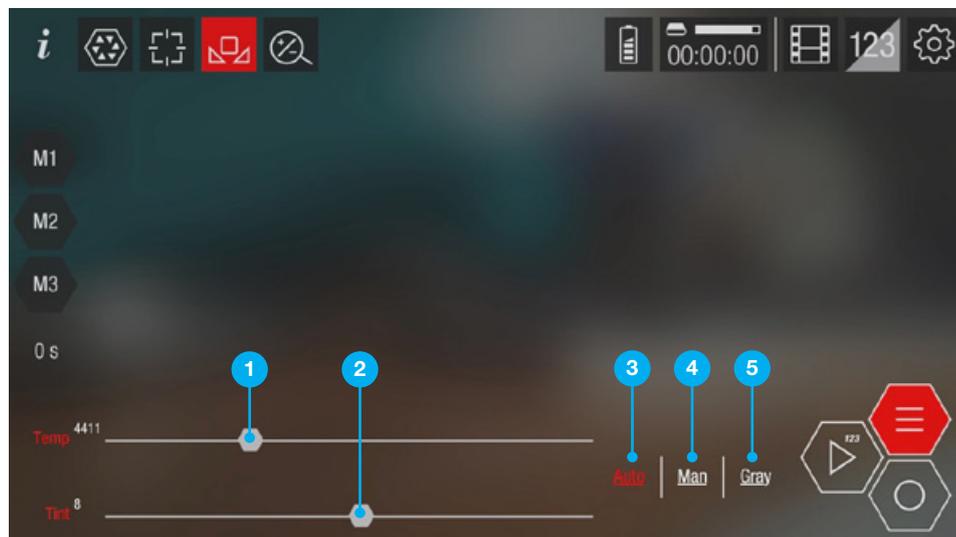
The operating system continually evaluates the scene and decides what to focus on.

#### 3. Manual focus

Manually set the lens position to achieve the focus you need.



## CAMERA FUNCTIONS



### WHITE BALANCE

White balance is the process of removing unrealistic color casts, so that objects which appear white in person are rendered white in your video. Proper camera white balance has to take into account the “color temperature” of a light source, which refers to the relative warmth or coolness of white light.

#### 1. Color Temperature (Temp)

Color temperature controls how different sources of light are interpreted by the camera as white light. Lower color temperatures give a warmer yellow color while higher color temperatures give a cooler blue.

A color temperature of about 3200K is for tungsten light (standard indoor light bulbs) while a color temperature of about 5500K is for daylight (on a clear day).

#### 2. Tint

Tint is used to correct color casts in the green to magenta range. Negative values add a green tint while positive values add a magenta tint.

For example, florescent lights can give a green tint when recorded. Adding a magenta (positive) tint will correct this back to white.

#### 3. Auto white balance

The operating system will continually evaluate the scene and adjust the color temperature and tint values to attempt to create a balanced color where whites look white.

#### 4. Manual white balance

Manually adjust color temperature and tint values to achieve the look you require for the scene.

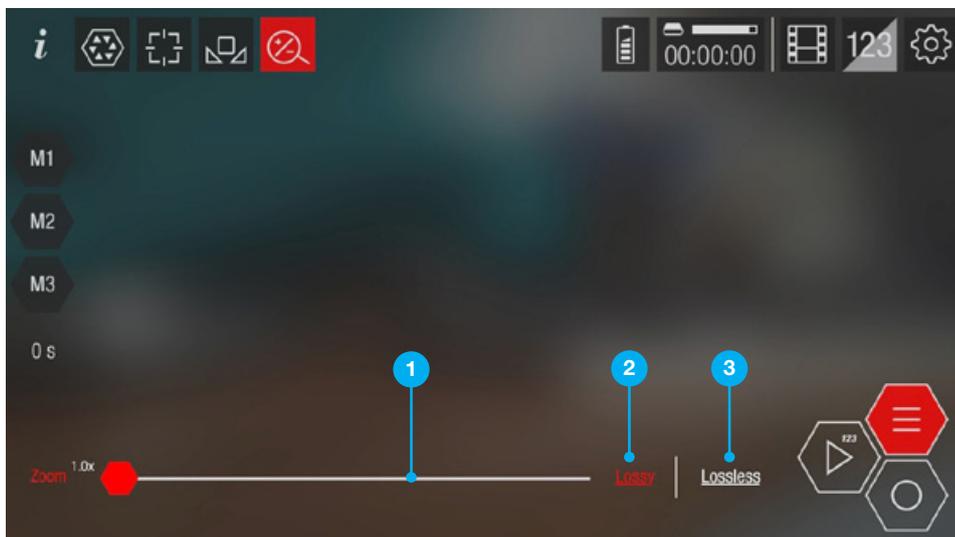
#### 5. Gray

Use this option to set the correct white balance based on a known gray color. Fill at least half the scene with an 18% gray card (available from photography suppliers, or a solid white piece of paper will give a decent approximation) and hit the “**gray**” option. The correct color temperature and tint values will be set and the mode set to “**manual**”

4 to avoid these values from changing.



## CAMERA FUNCTIONS



### ZOOM

Zooming on an iOS device is digital, not optical. This means that zooming in will crop around the center of the image captured by the sensor and enlarge it, usually resulting in a loss of picture quality. At low zoom factors, the cropped image is equal to or larger than the output size and therefore no loss of quality is incurred.

#### 1. Zoom magnification factor

The maximum zoom magnification factor is determined by the device and the resolution and frame rate chosen in the Guerrilla Filmmaker settings. Some combinations of resolution and frame rate will not allow zooming at all.

#### 2. Lossy zoom

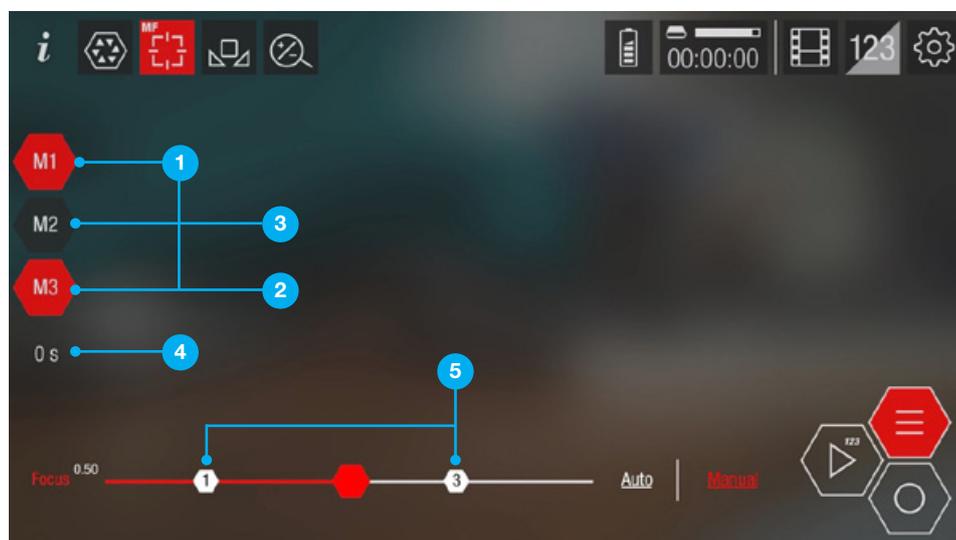
The image can be magnified to a large extent but the resulting image will undergo a loss in quality and at high zoom factors will be noticeably pixelated.

#### 3. Lossless zoom

The image will not suffer any loss in quality but the maximum magnification factor will be much less than lossy zoom. The maximum magnification factor is determined by the resolution and frame rate combination chosen in the Guerrilla Filmmaker settings.



## CAMERA FUNCTIONS



### MEMORY

For each camera function (exposure, focus, white balance, zoom) the current function values can be stored and quickly recalled. The timing can be changed from an instant change to a gradual change.

1. Memory slots
2. Full memory slot
3. Empty memory slot
4. Memory recall timing
5. Value for stored memory slot

Tap an empty memory slot to store the current camera function value. A marker **5** will appear on the slider/s to indicate which memory slot **1** this stored value belongs to.

Tap a full memory slot **2** to recall the camera function value that this memory slot is storing. The slider will move to this stored value (indicated by the slider marker **5**) over the time set for the “memory recall timing” **4**.

Long press a full memory slot to clear the stored camera function values.

Swipe right over the “memory recall timing” **4** to increment it and swipe left to decrement it.

Long press on the “memory recall timing” **4** to clear all memory slots and reset the timing back to zero.



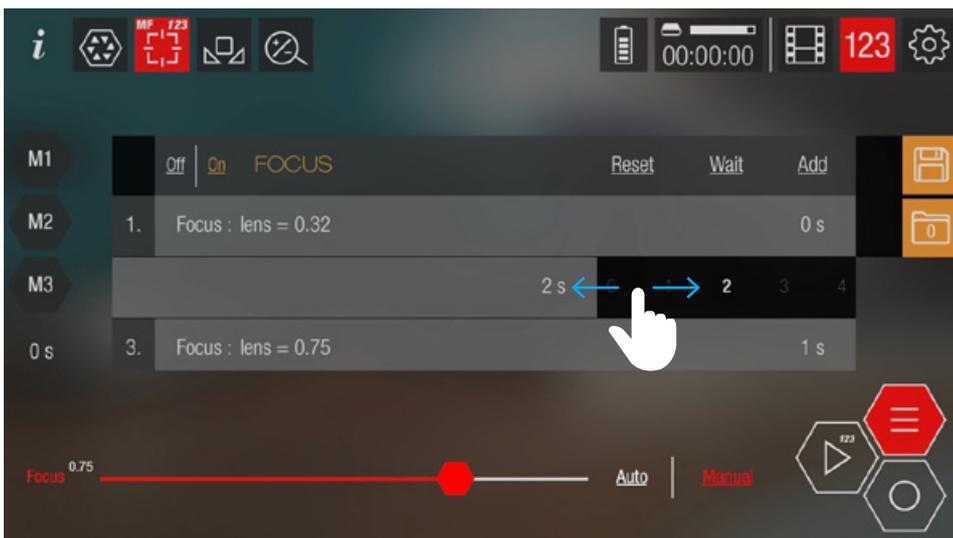
## AUTOMATED SEQUENCES



### AUTOMATED SEQUENCES PANEL

Create automated sequences for all camera functions (exposure, focus, white balance, zoom). Set up a sequence of automated steps to be played back while recording hands free.

1. Show / hide automated sequence creator
2. Enable / disable playback of this automated sequence
3. Camera function that this sequence applies to
4. Reset all automation steps
5. Add a waiting duration step
6. Add the current function values as a step
7. Automated sequence steps
8. Function value for this step
9. Waiting step
10. Function value recall timing for this step
11. Waiting duration for this step
12. Current function value
13. Tap an automation step to show the stored value on the function slider
14. Save this automated sequence
15. Load a saved automated sequence



### CREATING AN AUTOMATED SEQUENCE

Activate the camera function you would like to create an automated sequence for by either tapping the function icon in the control panel or swiping left or right in the center of the screen.

Tap the “sequence creator” **1** button in the control panel

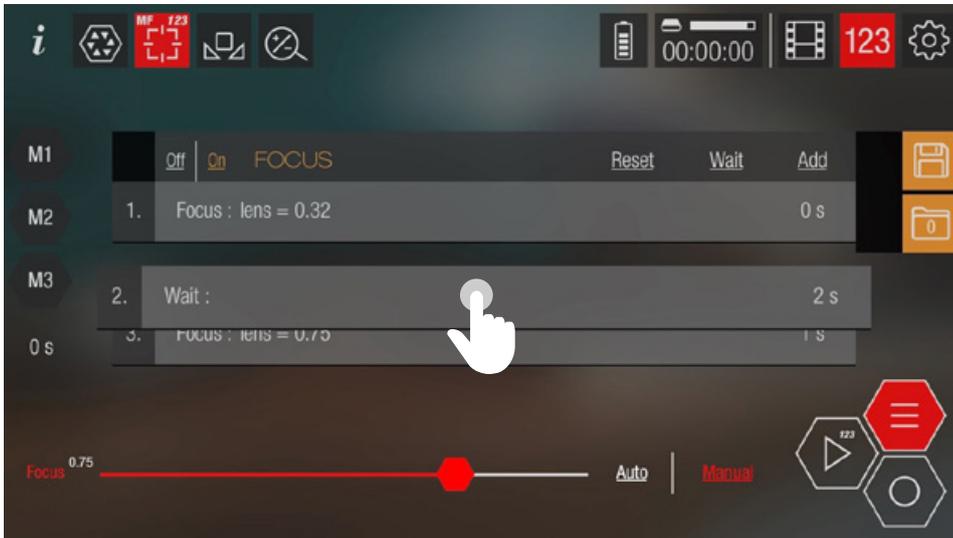
Tap “add” **6** to add the current function values as a step.

Tap “wait” **5** to add a wait step. The sequence will pause for the specified wait duration **11**.

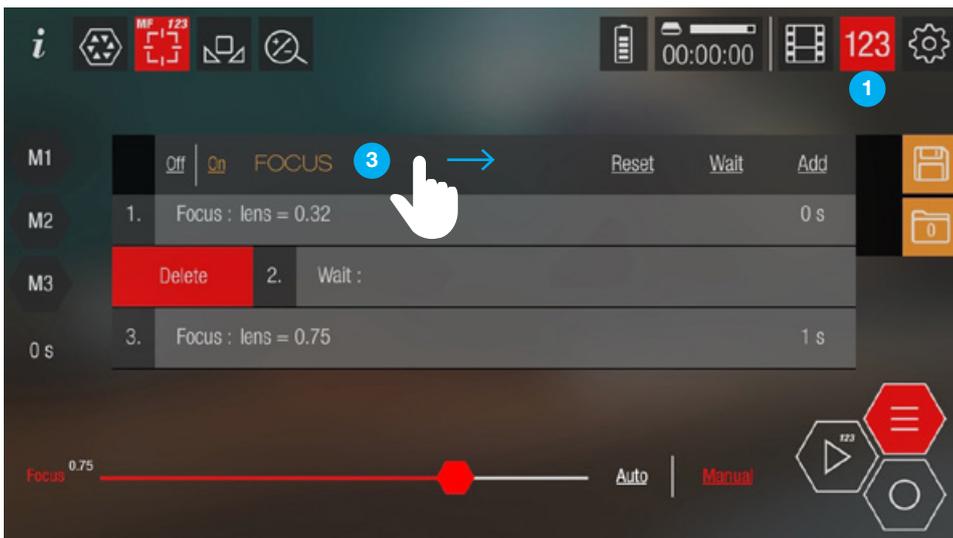
Set the step duration by swiping left on the sequence step to reveal the duration picker.



## AUTOMATED SEQUENCES

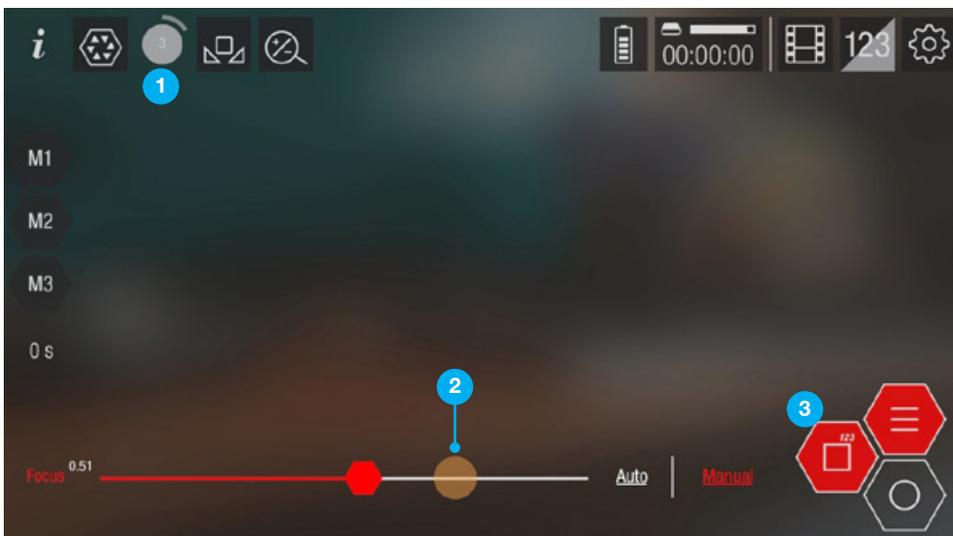


To reorder the steps, long press a step and then drag it to a new position.



To delete a step, swipe the step to the right and release.

Once you have created your automated sequence, hide the sequence creator by tapping the “sequence creator” **1** button or swiping right on the camera function title **3**.



To play your automated sequences tap the “play sequence” button **3**.

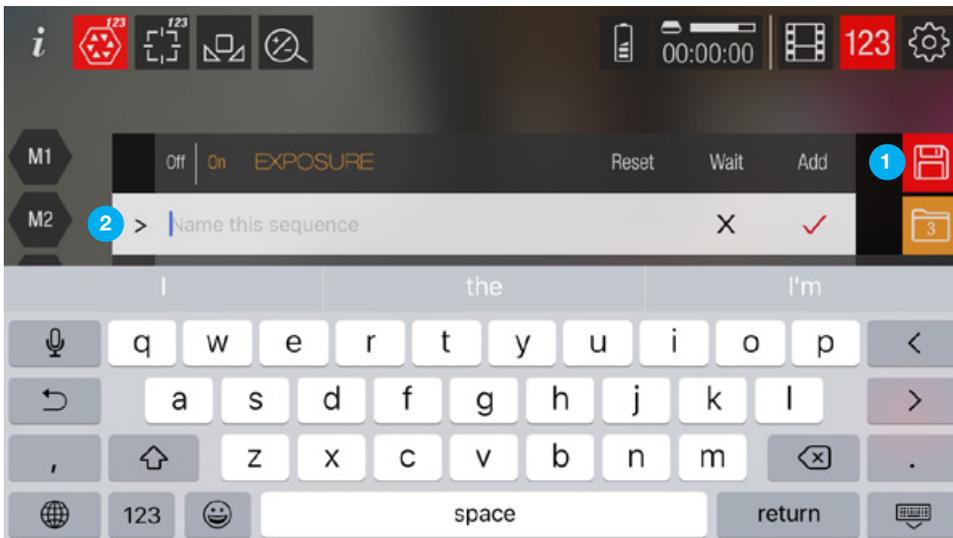
The camera function icon will become a timer **1** counting down each step in the sequence.

The automation step function value will be highlighted **2** on the function slider.

The automated sequence can be stopped by tapping the “play/stop sequence” **3** button again.

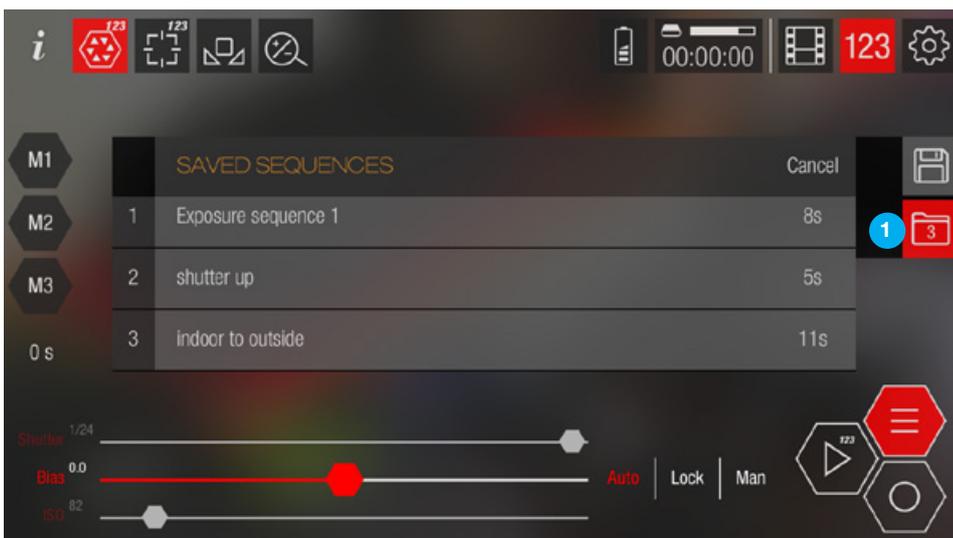


## AUTOMATED SEQUENCES



### SAVE AUTOMATED SEQUENCES

To save an automated sequence, tap the save icon **1** and enter a name for your sequence. Tap the chevron **2** to quickly add a default name.



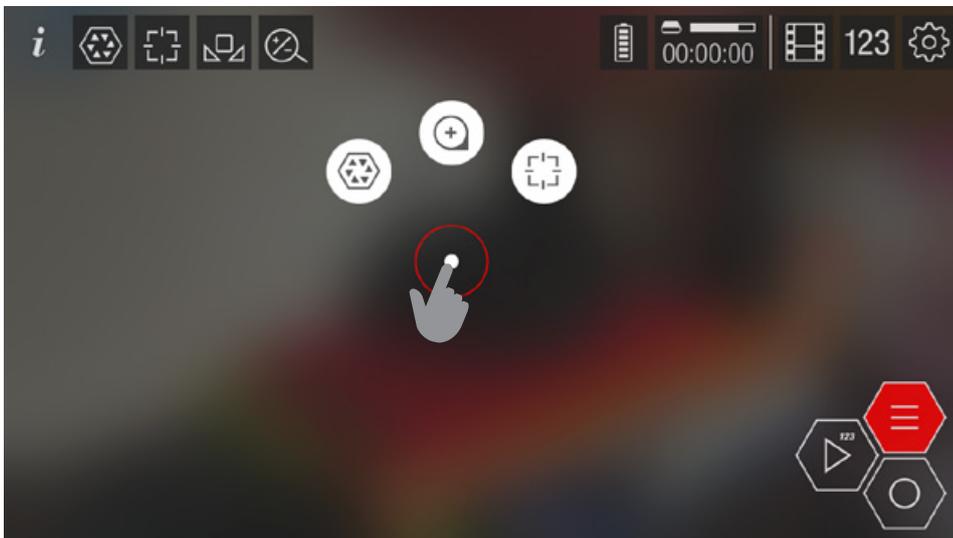
### LOAD AUTOMATED SEQUENCES

To load an automated sequence, tap the folder icon **1** to bring up a list of previously saved sequences.

Tap the name of the saved sequence you would like to load or cancel to return to the sequence creator panel.

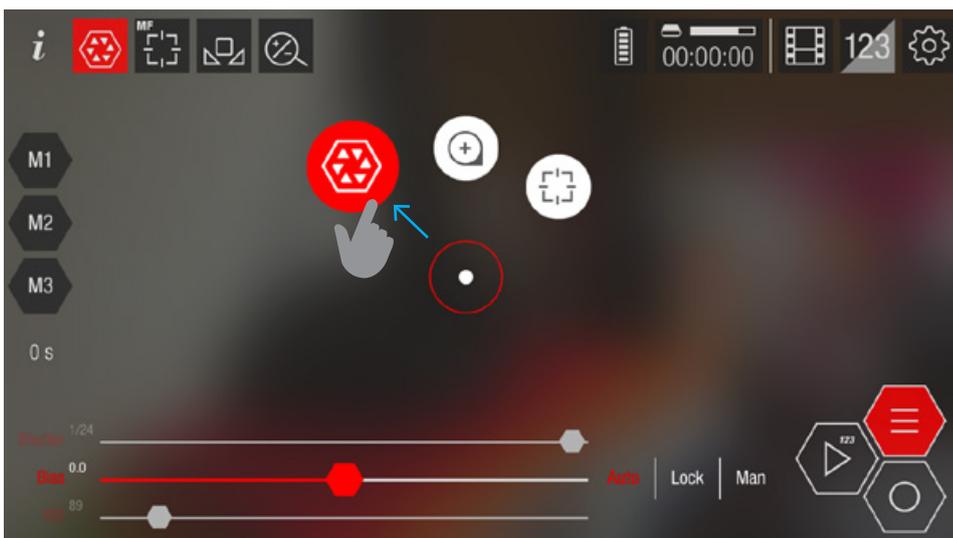


## CAPTURE HELP

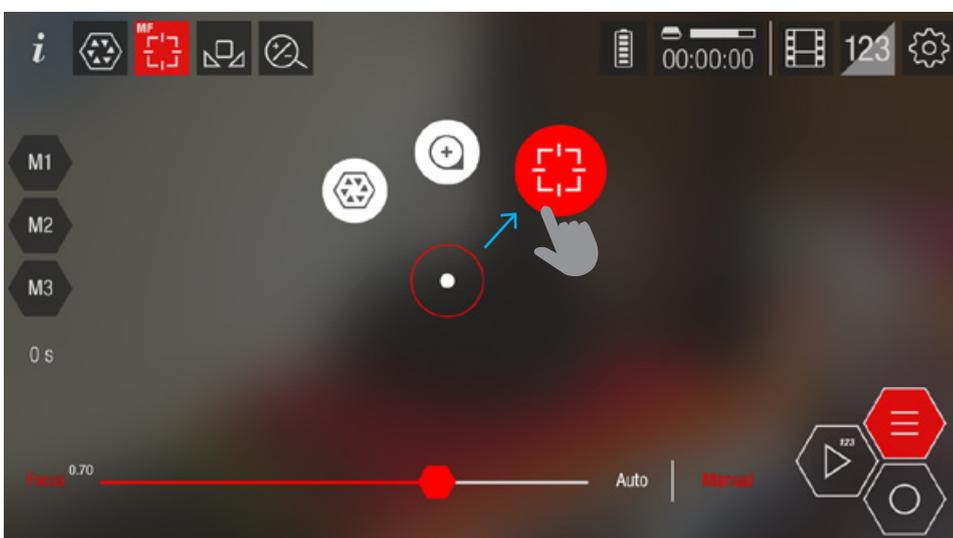


### CAPTURE HELP INTERFACE

Long press anywhere to bring up capture help tools for the touch point in your composition.



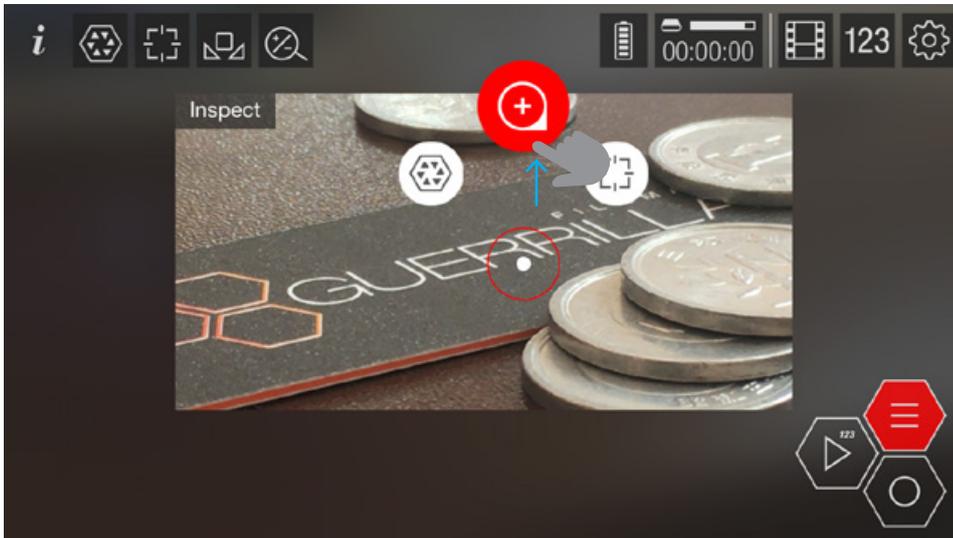
Automatically set exposure correctly for this point in your composition and then lock exposure to prevent further changes.



Automatically focus on this point in your composition and then lock the focus to manual to prevent further changes.



## CAPTURE HELP



### INSPECTION WINDOW

Bring up the inspection window depending on the current active function.

Tap the inspection window to cycle through available helper tools. The available helper tools will depend on the currently active function. Swipe left and right to change the active function.

With the focus function active, the available tools are:

1. Focus peaking
2. Focus lines
3. Inspect

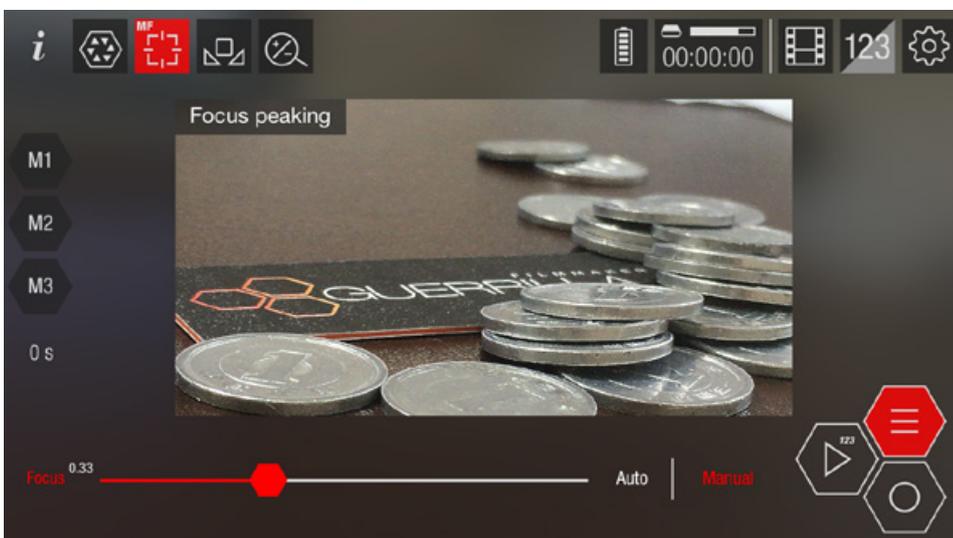
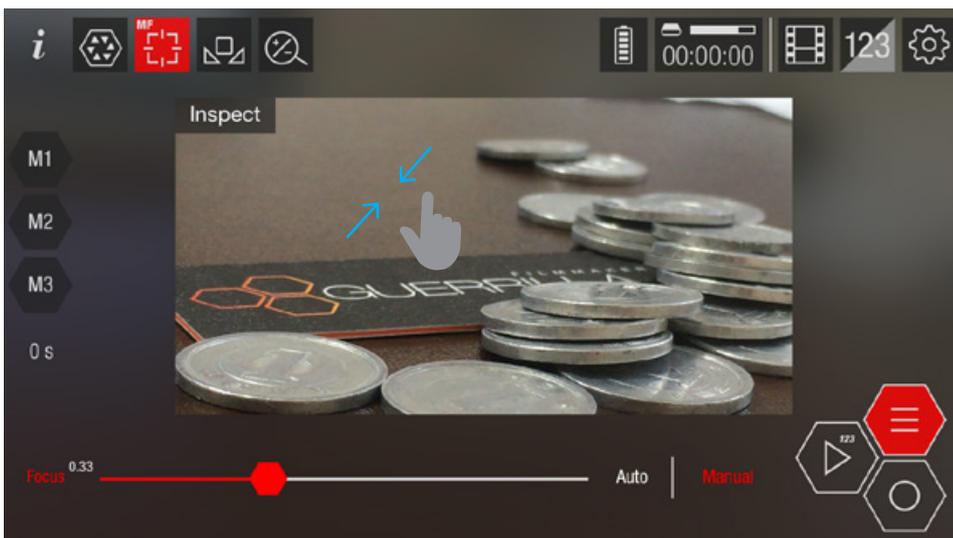
With the exposure function active, the available tools are:

1. False color
2. Inspect

With all other functions, only the "Inspect" tool is available.

Inspect mode shows the zoomed in image as it is without any overlays.

Pinch to zoom inspection window in and out. Fully zooming out will make the inspection window full screen.

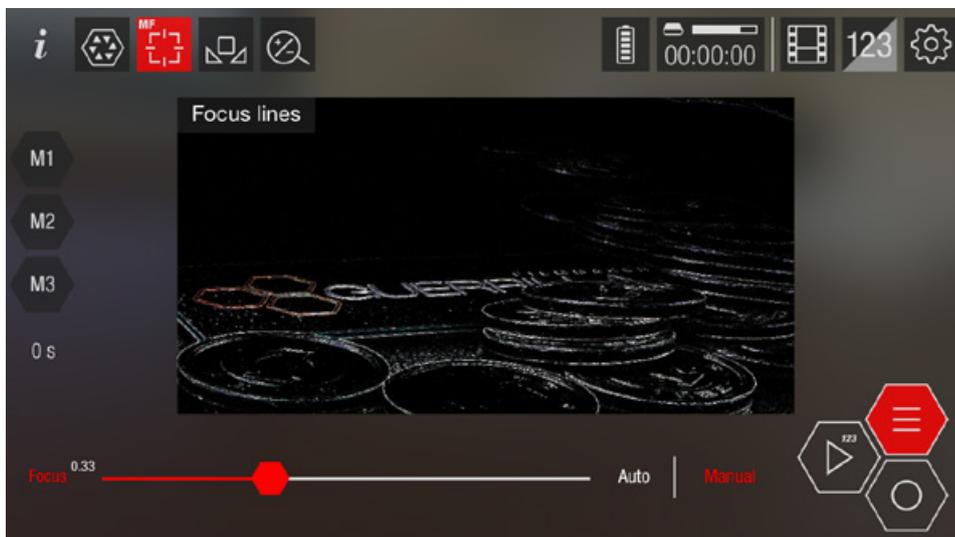


### FOCUS HELPER TOOLS

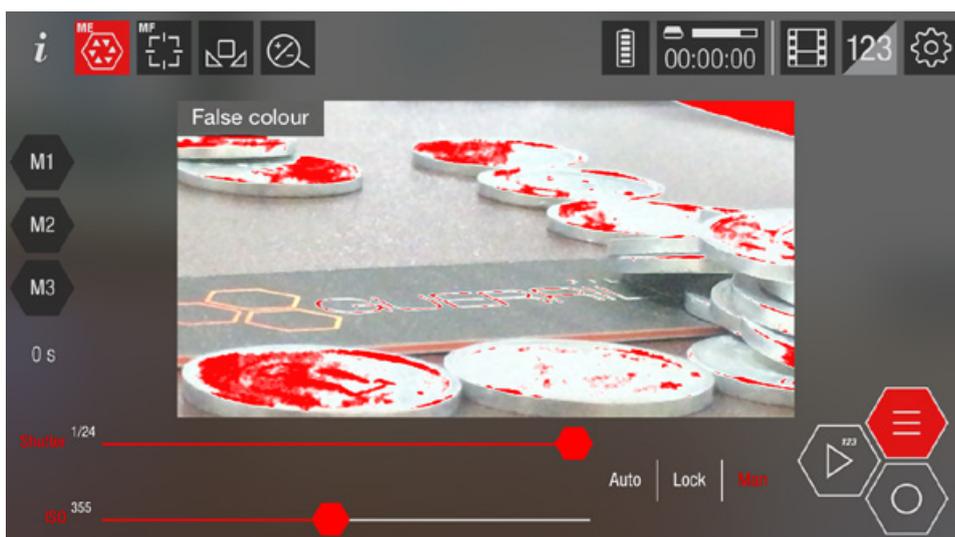
Focus peaking is a tool that highlights areas that are in sharp focus.



## CAPTURE HELP

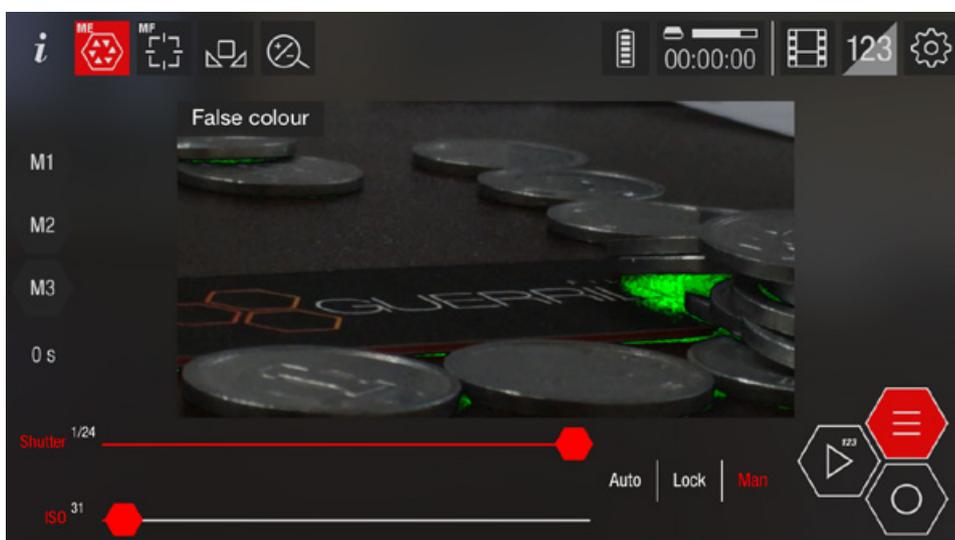


Focus lines allow you to see just an outline of the areas that are in focus.



## EXPOSURE HELPER TOOLS

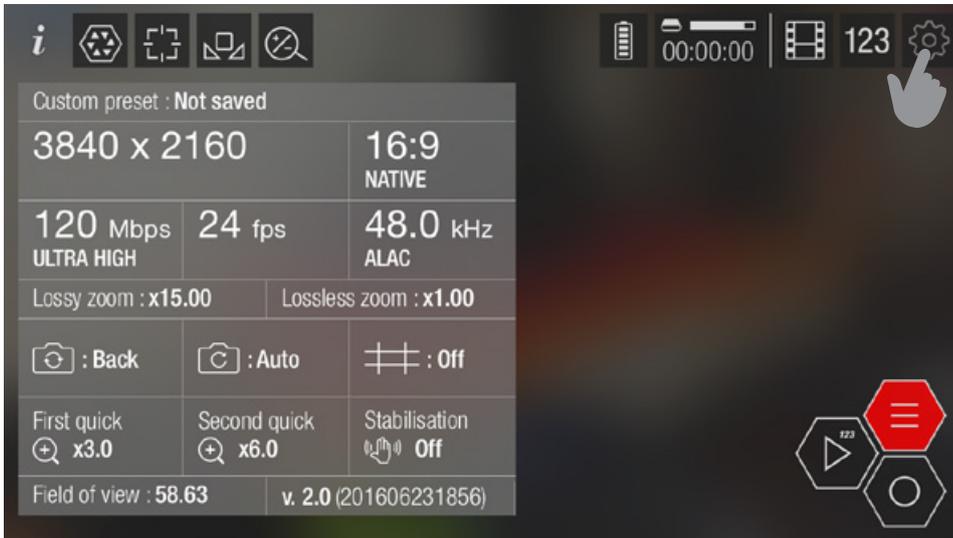
False color is a tool that will warn about loss of information due to blown out highlights and overly dark shadow areas. Blown out highlight regions will be colored red



Dark shadow areas will be colored green.



## SETTINGS PANEL



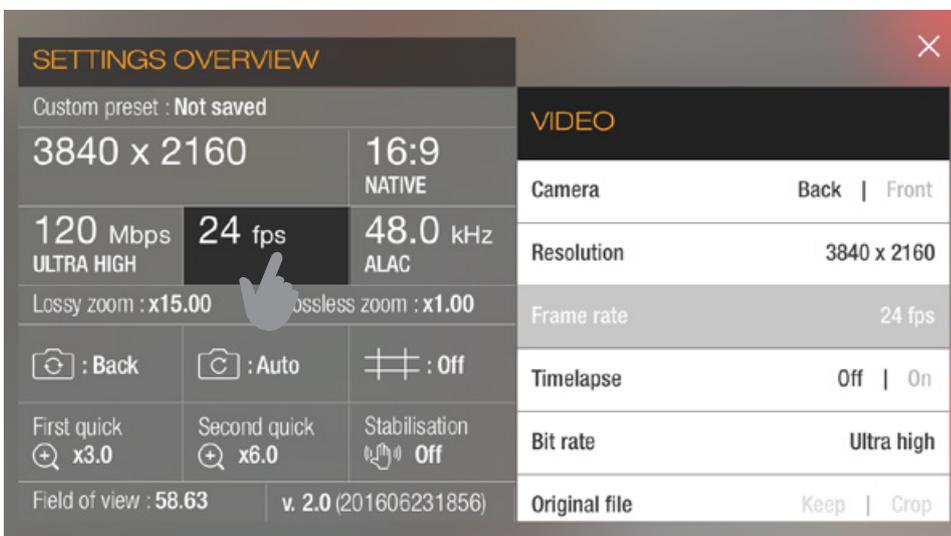
## SETTINGS INTERFACE

Tap the settings icon once to show an overview of your current settings. Tap the icon again to open the full settings screen or tap one of the settings to open the full settings and go directly to the chosen setting input.

Tap anywhere else to dismiss the settings overview. 3D touch to “peek” the settings overview. Further 3D touch to “pop” to the full settings screen or release 3D touch to dismiss the settings overview.



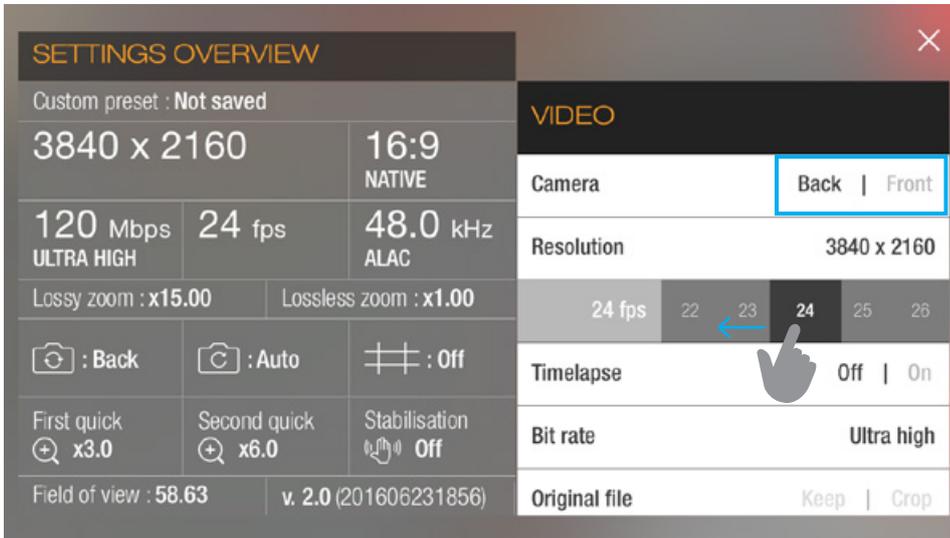
Tap any setting in the overview panel highlighted to show the input for this setting revealed on the right.



Example:  
Tapping on frame rate will activate the frame rate input.

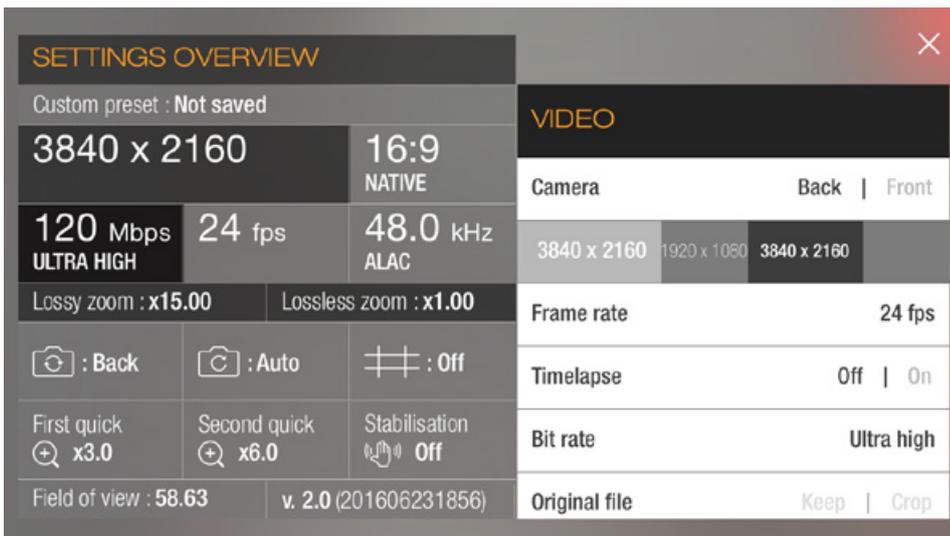


## SETTINGS PANEL



### SETTINGS INTERFACE

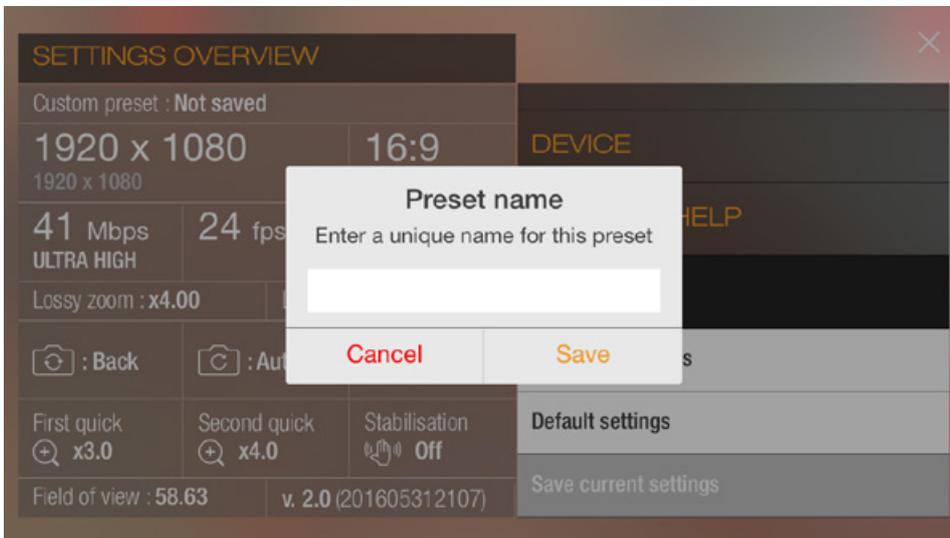
Settings can be changed by either a simple tap choice e.g. Camera – Back | Front or by tapping or dragging to reveal the value picker e.g. Frame rate.



When a setting is changed, all affected settings are highlighted in the left hand overview panel.



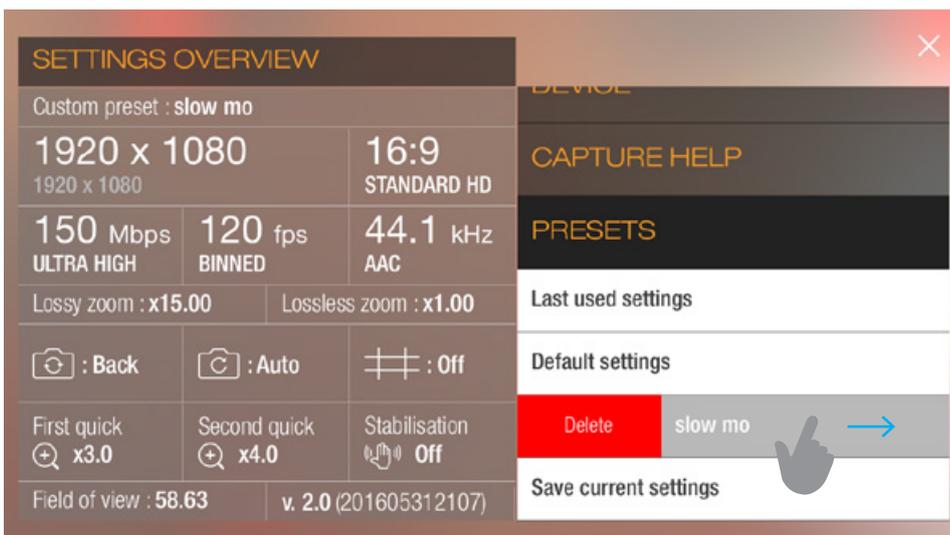
## SETTINGS PANEL



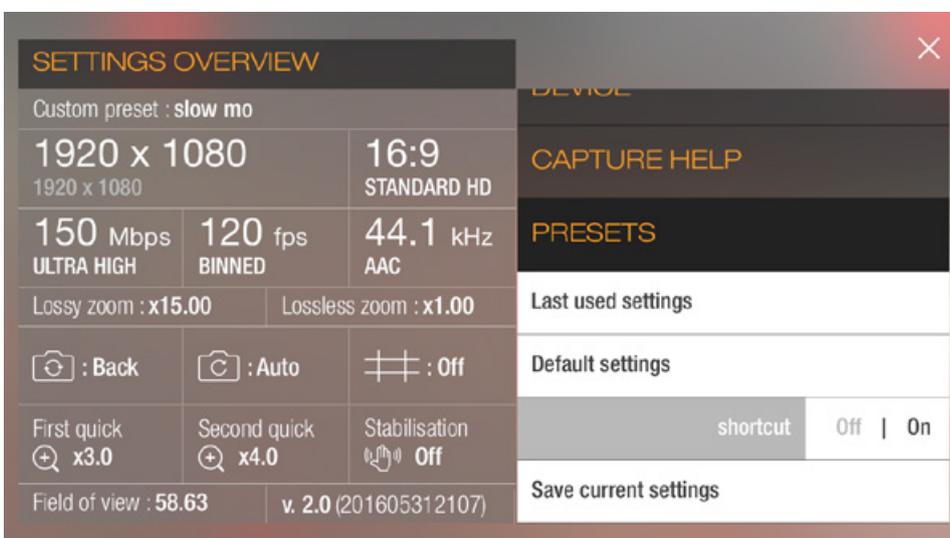
### CUSTOM PRESETS

Create and save as many custom presets as you need.

To create a new preset, change the settings to your desired configuration and then tap “**Save current settings**” and give your new preset a unique name.



To delete a custom preset slide the preset to the right and release.



On devices that support 3D touch you can add up to four custom presets as homescreen shortcuts that when selected will open Guerrilla Filmmaker with this preset and start recording immediately.

To add a preset as a home screen shortcut slide the preset to the left and activate the switch.



## SETTINGS PANEL

**SETTINGS OVERVIEW** [Close]

Custom preset : **Not saved**

<b>1920 x 1080</b> 1920 x 1080		<b>16:9</b> STANDARD HD
<b>43 Mbps</b> ULTRA HIGH	<b>25 fps</b>	<b>44.1 kHz</b> AAC
Lossy zoom : <b>x4.00</b>		Lossless zoom : <b>x1.94</b>
[Back] : Back	[Auto] : Auto	[Grid] : Off
First quick [+] x3.0	Second quick [+] x4.0	Stabilisation [Off]
Field of view : <b>58.63</b>		v. 2.0 (20160531 2107)

**PRESETS**

- Last used settings
- Default settings
- slow mo shortcut
- Save current settings

### SPECIAL PRESETS

“**Last used settings**” will return the settings configuration to how it was before opening the settings panel.

**SETTINGS OVERVIEW** [Close]

Custom preset : **Default settings**

<b>1920 x 1080</b>		<b>16:9</b> NATIVE
<b>17 Mbps</b> STANDARD	<b>30 fps</b>	<b>44.1 kHz</b> AAC
Lossy zoom : <b>x4.00</b>		Lossless zoom : <b>x1.94</b>
[Back] : Back	[Auto] : Auto	[Grid] : Off
First quick [+] x3.0	Second quick [+] x4.0	Stabilisation [Off]
Field of view : <b>58.63</b>		v. 2.0 (20160531 2107)

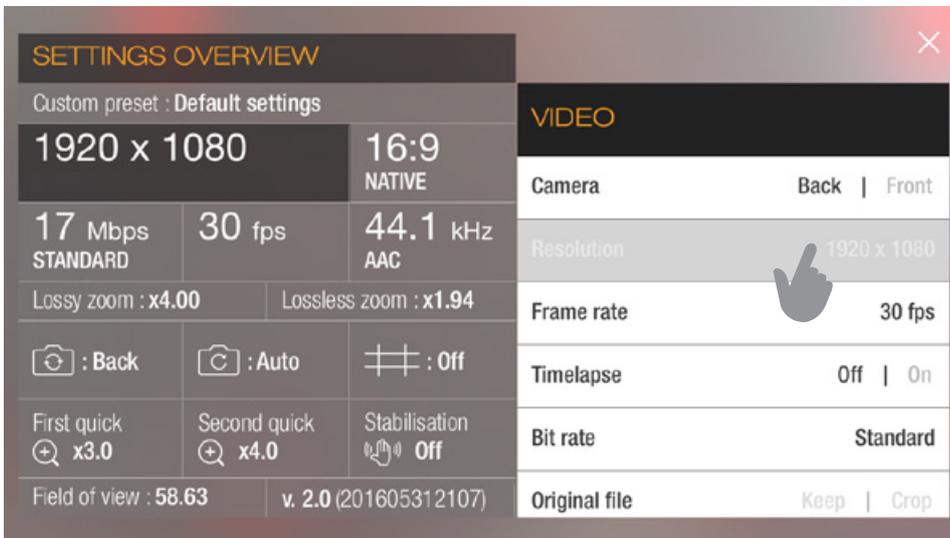
**PRESETS**

- Last used settings
- Default settings
- slow mo shortcut
- Save current settings

“**Default settings**” are the default camera settings for your iOS device and may differ between devices.



## SETTINGS PANEL



### RESOLUTION

Tap or slide the resolution setting to reveal the resolution picker.



Select from the available native resolutions (available resolutions will vary depending on device).



If you choose an aspect ratio that is different to the native resolution aspect ratio then the top displayed resolution 1 will be the new resolution with your chosen aspect ratio applied and the bottom resolution 2 will be the original native resolution.



## SETTINGS PANEL

**SETTINGS OVERVIEW**

Custom preset : Not saved

1920 x 804  
**1920 x 1080**

2.39:1  
CINEMASCOPE

17 Mbps  
STANDARD

30 fps

44.1 kHz  
AAC

Lossy zoom : x4.00      Lossless zoom : x1.94

📷 : Back      📷 : Auto      📏 : Off

First quick      Second quick      Stabilisation  
⊕ x3.0      ⊕ x4.0      🖱️ Off

Field of view : 58.63      v. 2.0 (20160531 2107)

**VIDEO**

Camera      Back | Front

Resolution      1920 x 1080

Frame rate      30 fps

Timelapse      Off | On

Bit rate      Standard

Original file      Keep | **Crop**

### RESOLUTION

The “**Original file**” setting is active when you choose an aspect ratio that is different to the native resolution aspect ratio.

“**Keep**” will keep the recorded file at the native resolution aspect ratio essentially using the chosen aspect ratio as a guide only.

**SETTINGS OVERVIEW**

Custom preset : Not saved

**1920 x 804**  
1920 x 1080

2.39:1  
CINEMASCOPE

17 Mbps  
STANDARD

30 fps

44.1 kHz  
AAC

Lossy zoom : x4.00      Lossless zoom : x1.94

📷 : Back      📷 : Auto      📏 : Off

First quick      Second quick      Stabilisation  
⊕ x3.0      ⊕ x4.0      🖱️ Off

Field of view : 58.63      v. 2.0 (20160531 2107)

**VIDEO**

Camera      Back | Front

Resolution      1920 x 1080

Frame rate      30 fps

Timelapse      Off | On

Bit rate      Standard

Original file      Keep | **Crop**

“**Crop**” will record the file at the chosen aspect ratio.



## SETTINGS PANEL

**SETTINGS OVERVIEW**

Custom preset : Not saved

1920 x 804  
1920 x 1080

2.39:1  
CINEMASCOPE

17 Mbps  
STANDARD

30 fps

44.1 kHz  
AAC

Lossy zoom : x4.00    Lossless zoom : x1.94

⏪ : Back    📷 : Auto    📏 : Off

First quick ⏩ x3.0    Second quick ⏩ x4.0    Stabilisation 📵 Off

Field of view : 58.63    v. 2.0 (20160531 2107)

**ASPECT RATIO**

Native resolution ratio	
Standard TV	4:3
Standard HD	16:9
SuperScope	2:1
CinemaScope	2.39:1
Cinerama	2.59:1

### ASPECT RATIO

Select from one of the premade aspect ratios or create your own custom aspect ratio.

Choosing an aspect ratio different to the native resolution aspect ratio will result in a new resolution.

**SETTINGS OVERVIEW**

Custom preset : Not saved

1920 x 804  
1920 x 1080

2.39:1  
CINEMASCOPE

17 Mbps  
STANDARD

30 fps

44.1 kHz  
AAC

Lossy zoom : x4.00    Lossless zoom : x1.94

⏪ : Back    📷 : Auto    📏 : Off

First quick ⏩ x3.0    Second quick ⏩ x4.0    Stabilisation 📵 Off

Field of view : 58.63    v. 2.0 (20160531 2107)

**VIDEO**

Timelapse	Off   On
Bit rate	Standard
Original file	Keep   Crop

**ASPECT RATIO**

**AUDIO**

You can choose whether Guerrilla Filmmaker should crop your recorded clips to this new resolution or just use the aspect ratio as a framing guide. The “**Original file**” setting in the VIDEO section controls this behavior.

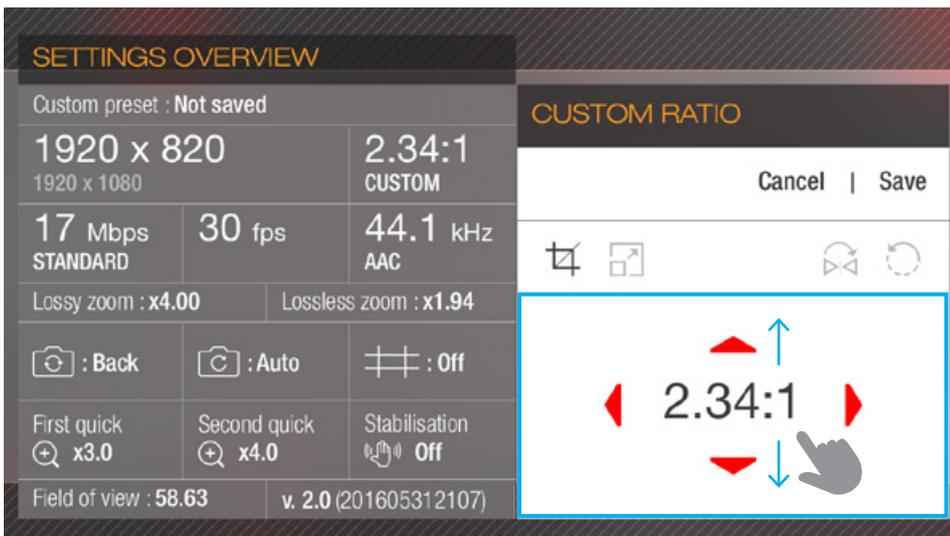


## SETTINGS PANEL

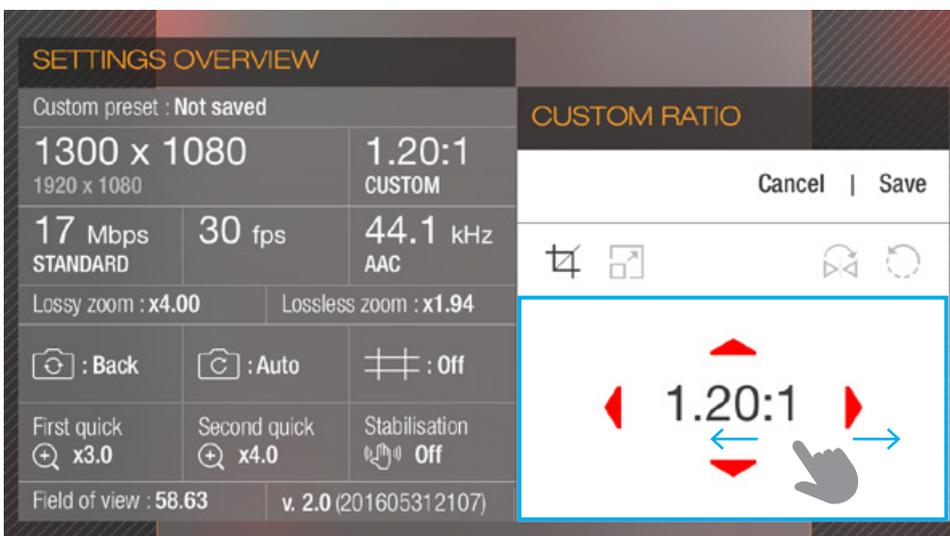


### CUSTOM ASPECT RATIO

Tap “Add custom ratio” to create a new custom aspect ratio.



Drag up and down to create a wide screen “letter box” ratio

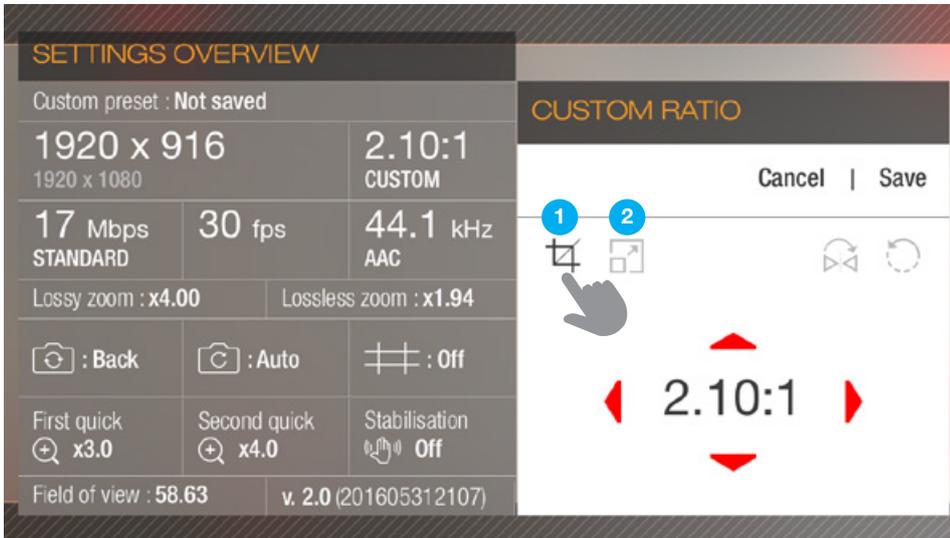


or left and right to create a squarer “pillar box” ratio.

Tap the arrows for fine grain adjustments.

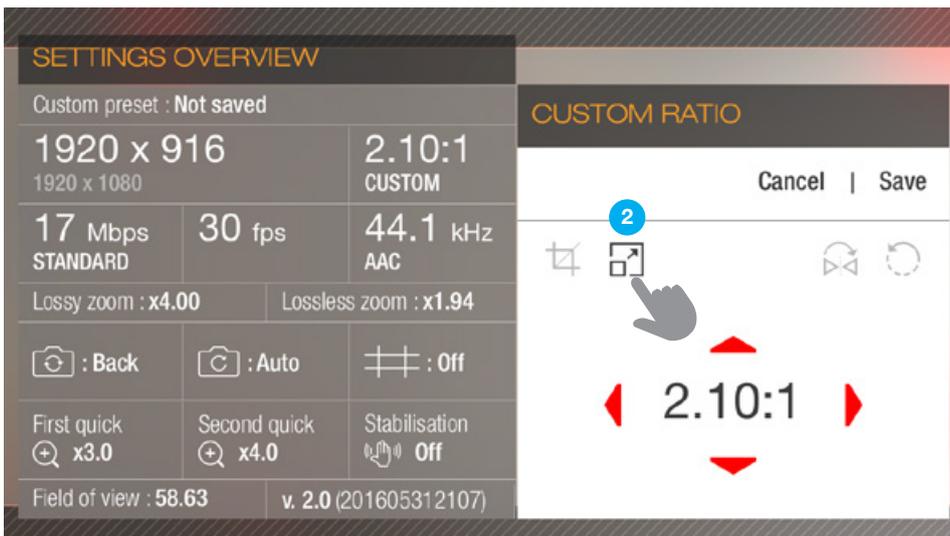


## SETTINGS PANEL

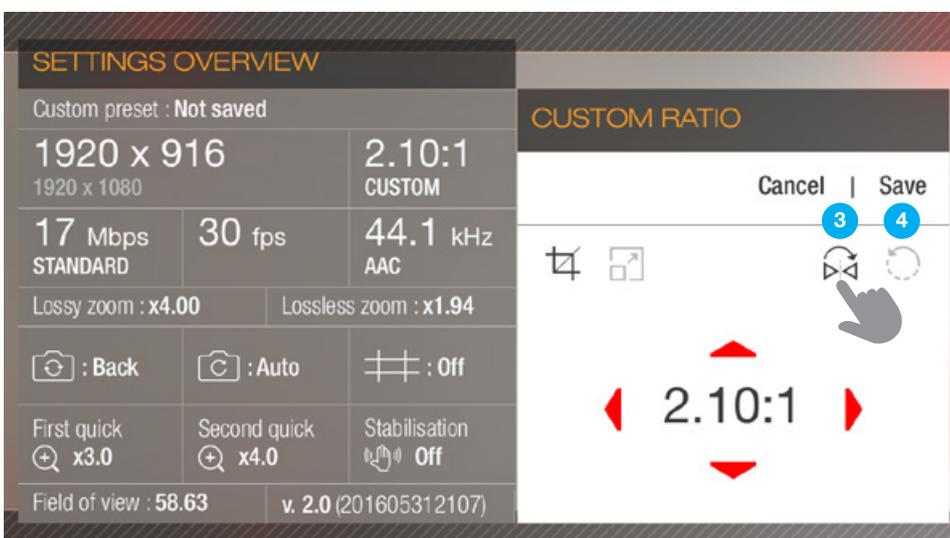


### CUSTOM ASPECT RATIO OPTIONS

Choose whether this aspect ratio should crop **1** the video or resize **2** to this new ratio.



The resize **2** option is useful when using an external lens that distorts the image such as an anamorphic lens.

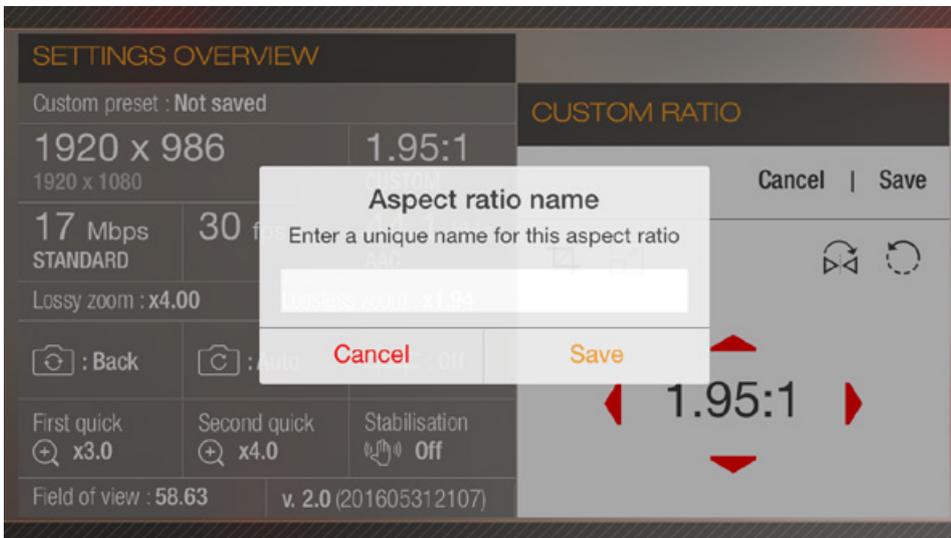


Choose to mirror **3** the image or rotate **4** the image.

These options are useful for external lenses that cause mirrored or rotated images.



## SETTINGS PANEL



### SAVE CUSTOM ASPECT RATIO

Save and name your custom aspect ratio.



Your saved custom aspect ratio will appear below the premade aspect ratio list.



To delete a custom aspect ratio, slide it to the right and release.



## SETTINGS PANEL

**SETTINGS OVERVIEW**

Custom preset : Not saved

3840 x 2160 | 16:9 NATIVE

25 Mbps LOW | 30 fps | 44.1 kHz AAC

Lossy zoom : x15.00 | Lossless zoom : x1.00

Back : Back | Auto : Auto | Grid : Off

First quick x3.0 | Second quick x4.0 | Stabilisation Off

Field of view : 58.63 | v. 2.0 (201606020225)

**VIDEO**

Camera: Back | Front

Resolution: 3840 x 2160

Frame rate: 30 fps

Timelapse: Off | On

Bit rate: Low (selected) | Std | High

Original file: Keep | Crop

### VIDEO BIT RATE

Video encoding bit rate is a function of resolution, frame rate and color depth. As color depth for an iOS device is constant, bit rate is only affected by the resolution and frame rate settings.

The available settings for bit rate in Guerrilla Filmmaker are:

“Low” this can be used when saving space is more important to you than quality. It is half the standard bit rate.

**SETTINGS OVERVIEW**

Custom preset : Not saved

3840 x 2160 | 16:9 NATIVE

50 Mbps STANDARD | 30 fps | 44.1 kHz AAC

Lossy zoom : x15.00 | Lossless zoom : x1.00

Back : Back | Auto : Auto | Grid : Off

First quick x3.0 | Second quick x4.0 | Stabilisation Off

Field of view : 58.63 | v. 2.0 (201606020225)

**VIDEO**

Camera: Back | Front

Resolution: 3840 x 2160

Frame rate: 30 fps

Timelapse: Off | On

Bit rate: Standard (selected) | Low | Std | High | Ultra

Original file: Keep | Crop

“Standard” This is the default bit rate set by the iOS device and is the same as the native camera app

**SETTINGS OVERVIEW**

Custom preset : Not saved

3840 x 2160 | 16:9 NATIVE

100 Mbps HIGH | 30 fps | 44.1 kHz AAC

Lossy zoom : x15.00 | Lossless zoom : x1.00

Back : Back | Auto : Auto | Grid : Off

First quick x3.0 | Second quick x4.0 | Stabilisation Off

Field of view : 58.63 | v. 2.0 (201606020225)

**VIDEO**

Camera: Back | Front

Resolution: 3840 x 2160

Frame rate: 30 fps

Timelapse: Off | On

Bit rate: High (selected) | Std | High | Ultra

Original file: Keep | Crop

“High” this is twice the standard bit rate with rates up to 100Mbps



## SETTINGS PANEL

SETTINGS OVERVIEW			VIDEO	
Custom preset : <b>Not saved</b>				
<b>3840 x 2160</b>		<b>16:9</b> NATIVE	Camera <b>Back</b>   Front	
<b>150 Mbps</b> ULTRA HIGH	<b>30 fps</b>	<b>44.1 kHz</b> AAC	Resolution <b>3840 x 2160</b>	
Lossy zoom : <b>x15.00</b>		Lossless zoom : <b>x1.00</b>	Frame rate <b>30 fps</b>	
: Back	: Auto	: Off	Timelapse <b>Off</b>   On	
First quick <b>x3.0</b>	Second quick <b>x4.0</b>	Stabilisation <b>Off</b>	<input checked="" type="radio"/> Ultra high <input type="radio"/> High <input type="radio"/> Ultra	
Field of view : <b>58.63</b>		v. 2.0 (201606020225)	Original file <b>Keep</b>   Crop	

### VIDEO BIT RATE

“Ultra high” this is three times the standard bit rate with rates up to 150Mbps.

Please note that the bit rate shown is an estimate of what the average bit rate of the recorded file will be. The actual bit rate will vary depending on the video recording.



## SETTINGS PANEL

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1280 x 720</b>		<b>16:9</b> NATIVE
<b>26 Mbps</b> ULTRA HIGH	<b>30 fps</b>	<b>44.1 kHz</b> AAC
Lossy zoom : <b>x15.00</b>		Lossless zoom : <b>x2.91</b>
📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👉 Off
Field of view : <b>58.63</b>		v. 2.0 (201606020225)

**VIDEO**
✕

Camera Back | Front

1280 x 720	960 x 540	1280 x 720	1920 x 1080
------------	-----------	------------	-------------

Frame rate 30 fps

Timelapse Off | On

Bit rate Ultra high

Original file Keep | Crop

### FRAME RATE

The available frame rates are determined by the resolution setting. If you need to use a higher frame rate for slow motion effects try lowering the resolution first.

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1280 x 720</b>		<b>16:9</b> NATIVE
<b>39 Mbps</b> ULTRA HIGH	<b>50 fps</b>	<b>44.1 kHz</b> AAC
Lossy zoom : <b>x15.00</b>		Lossless zoom : <b>x2.91</b>
📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👉 Off
Field of view : <b>58.63</b>		v. 2.0 (201606020225)

**VIDEO**
✕

Camera Back | Front

<b>Resolution</b>		<b>1280 x 720</b>	
50 fps	48	49	50

Timelapse Off | On

Bit rate Ultra high

Original file Keep | Crop

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1280 x 720</b>		<b>16:9</b> NATIVE
<b>70 Mbps</b> ULTRA HIGH	<b>120 fps</b> BINNED	<b>44.1 kHz</b> AAC
Lossy zoom : <b>x15.00</b>		Lossless zoom : <b>x1.45</b>
📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👉 Off
Field of view : <b>58.63</b>		v. 2.0 (201606020225)

**VIDEO**
✕

Camera Back | Front

<b>Resolution</b>		<b>1280 x 720</b>	
120 fps	118	119	120

Timelapse Off | On

Bit rate Ultra high

Original file Keep | Crop

Higher frame rates can result in pixel binning. Binning is a pixel-combining process that can result in greater low light sensitivity at the cost of reduced resolution. Pixels are being combined and read as one pixel value, reducing the effective resolution but increasing the signal to noise ratio.



## SETTINGS PANEL

SETTINGS OVERVIEW		
Custom preset : Not saved		
1920 x 1080	16:9 NATIVE	
143 Mbps ULTRA HIGH	114 fps BINNED	44.1 kHz AAC
Lossy zoom : x15.00		Lossless zoom : x1.00
📷 : Back	📷 : Auto	📏 : Off
First quick 🔍 x3.0	Second quick 🔍 x4.0	Stabilisation 👉 Off
Field of view : 58.63		v. 2.0 (201606020225)

VIDEO	
Camera	Back   Front
Resolution	1920 x 1080
114 fps   112   113   114   115   116	
Timelapse	Off   On
Bit rate	Ultra high
Original file	Keep   Crop

### FRAME RATE

Frame rate is also a factor involved in determining the video encoding bit rate. If the frame rate is doubled but the bit rate remains constant (like many other apps do) then you are effectively halving the data per frame. This is why Guerrilla Filmmaker increases bit rate as the frame rate increases.

SETTINGS OVERVIEW		
Custom preset : Not saved		
1920 x 1080	16:9 NATIVE	
41 Mbps ULTRA HIGH	24 fps	44.1 kHz AAC
Lossy zoom : x4.00		Lossless zoom : x1.94
📷 : Back	📷 : Auto	📏 : Off
First quick 🔍 x3.0	Second quick 🔍 x4.0	Stabilisation 👉 Off
Field of view : 58.63		v. 2.0 (201606020225)

CAPTURE HELP	
Show framing guide	Off   On
First quick zoom factor	x3.0
Second quick zoom factor	x4.0
Limit shutter speed	Off   On

The “Limit shutter speed” option in the CAPTURE HELP section will limit the manual exposure shutter speed slider to  $1/(\text{frame rate})$ . This means the frame rate will not change when shutter speed is changed.

SETTINGS OVERVIEW		
Custom preset : Not saved		
1920 x 1080	16:9 NATIVE	
41 Mbps ULTRA HIGH	24 fps	48.0 kHz AAC
Lossy zoom : x4.00		Lossless zoom : x1.94
📷 : Back	📷 : Auto	📏 : Off
First quick 🔍 x3.0	Second quick 🔍 Off	Stabilisation 👉 Off
Field of view : 58.63		v. 2.0 (201606020225)

CAPTURE HELP	
Show framing guide	Off   On
First quick zoom factor	x3.0
Second quick zoom factor	Off
Limit shutter speed	Off   On

If “Limit shutter speed” is off then a shutter speed of greater than  $1/(\text{frame rate})$  will result in the frame rate being reduced to  $1/(\text{shutter speed})$ .



## SETTINGS PANEL

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1920 x 1080</b>	<b>16:9</b> NATIVE	
<b>41 Mbps</b> ULTRA HIGH	<b>1 spf</b> TIMELAPSE	<b>0 kHz</b> NO AUDIO

Lossy zoom : **x4.00**      Lossless zoom : **x1.94**

📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👁 Off

Field of view : **58.63**      v. **2.0** (201606020225)

**VIDEO**

Camera	Back   Front
Resolution	<b>1920 x 1080</b>
Time rate	1 spf
<b>Timelapse</b>	Off   <b>On</b>
Bit rate	<b>Ultra high</b>
Original file	Keep   Crop

### TIMELAPSE

Timelapse allows you to record a long period of time and play it back in a short period of time.

Turning on “Timelapse” will change the “Frame rate” setting from frames per second (fps) to a “Time rate” setting of seconds per frame (spf).

The playback rate will be 24fps.

Please note, no audio will be recorded in timelapse mode.

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1920 x 1080</b>	<b>16:9</b> NATIVE	
<b>41 Mbps</b> ULTRA HIGH	<b>24 fps</b>	<b>44.1 kHz</b> AAC

Lossy zoom : **x4.00**      Lossless zoom : **x1.94**

📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👁 Off

Field of view : **58.63**      v. **2.0** (201606020225)

**AUDIO**

Format	AAC   <b>ALAC</b>   PCM
Sample rate	Standard   High

**DEVICE**

**CAPTURE HELP**

**PRESETS**

### AUDIO FORMAT

Supported audio formats are **AAC**, **ALAC** and **PCM**.

**AAC** (Advanced Audio Coding) is a lossy compressed format that will produce the lowest file size but will suffer a loss of quality when compressed.

**AAC** has a comparable file size to MP3 but slightly better quality.

**SETTINGS OVERVIEW**
✕

Custom preset : **Not saved**

<b>1920 x 1080</b>	<b>16:9</b> NATIVE	
<b>41 Mbps</b> ULTRA HIGH	<b>24 fps</b>	<b>44.1 kHz</b> ALAC

Lossy zoom : **x4.00**      Lossless zoom : **x1.94**

📷 : Back	📷 : Auto	⏏ : Off
First quick ⏏ x3.0	Second quick ⏏ x4.0	Stabilisation 👁 Off

Field of view : **58.63**      v. **2.0** (201606020225)

**AUDIO**

Format	AAC   <b>ALAC</b>   PCM
Sample rate	Standard   High

**DEVICE**

**CAPTURE HELP**

**PRESETS**

**ALAC** (Apple Lossless Audio Codec) is, as the name suggests, a lossless compressed audio format that will be about half the size of the uncompressed audio but should not lose quality in the compression.



## SETTINGS PANEL

**SETTINGS OVERVIEW** [Close]

Custom preset : **Not saved**

**1920 x 1080** | **16:9**  
NATIVE

**41 Mbps** | **24 fps** | **44.1 kHz**  
ULTRA HIGH | | PCM

Lossy zoom : **x4.00** | Lossless zoom : **x1.94**

[Back] : Back | [Auto] : Auto | [Grid] : Off

First quick [x3.0] | Second quick [x4.0] | Stabilisation [Off]

Field of view : **58.63** | v. **2.0** (201606020225)

**AUDIO**

Format **AAC** | ALAC | **PCM**

Sample rate **Standard** | High

**DEVICE**

**CAPTURE HELP**

**PRESETS**

**PCM** (Pulse-code modulation) is uncompressed audio that will require the most storage space.

**SETTINGS OVERVIEW** [Close]

Custom preset : **Not saved**

**1920 x 1080** | **16:9**  
NATIVE

**41 Mbps** | **24 fps** | **44.1 kHz**  
ULTRA HIGH | | AAC

Lossy zoom : **x4.00** | Lossless zoom : **x1.94**

[Back] : Back | [Auto] : Auto | [Grid] : Off

First quick [x3.0] | Second quick [x4.0] | Stabilisation [Off]

Field of view : **58.63** | v. **2.0** (201606020225)

**AUDIO**

Format **AAC** | ALAC | PCM

Sample rate **Standard** | High

**DEVICE**

**CAPTURE HELP**

**PRESETS**

### AUDIO SAMPLE RATE

There are two audio sample rates to choose from.

“**Standard**” sample rate is 44.1kHz

**SETTINGS OVERVIEW** [Close]

Custom preset : **Not saved**

**1920 x 1080** | **16:9**  
NATIVE

**41 Mbps** | **24 fps** | **48.0 kHz**  
ULTRA HIGH | | AAC

Lossy zoom : **x4.00** | Lossless zoom : **x1.94**

[Back] : Back | [Auto] : Auto | [Grid] : Off

First quick [x3.0] | Second quick [x4.0] | Stabilisation [Off]

Field of view : **58.63** | v. **2.0** (201606020225)

**AUDIO**

Format **AAC** | ALAC | PCM

Sample rate **Standard** | High

**DEVICE**

**CAPTURE HELP**

**PRESETS**

“**High**” sample rate is 48.0kHz



## SETTINGS PANEL

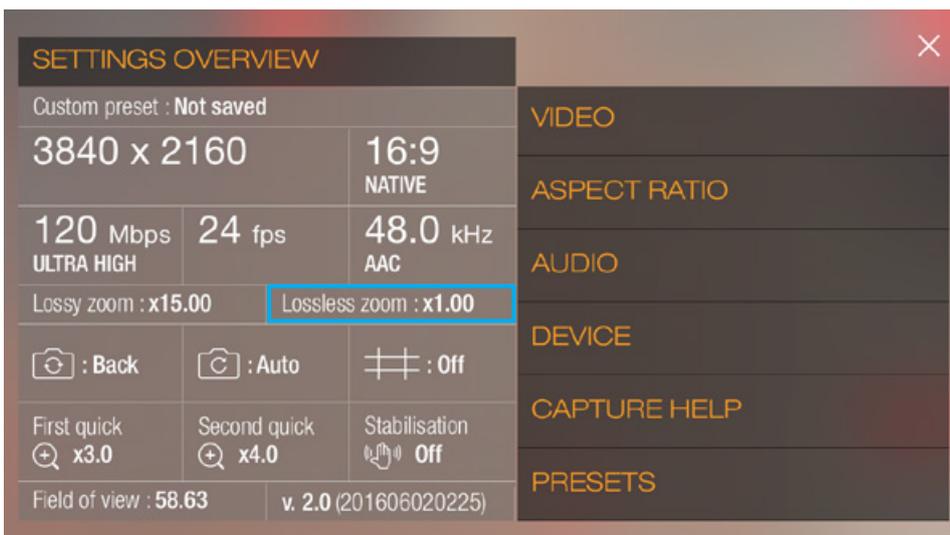


### LOSSY AND LOSSLESS ZOOM

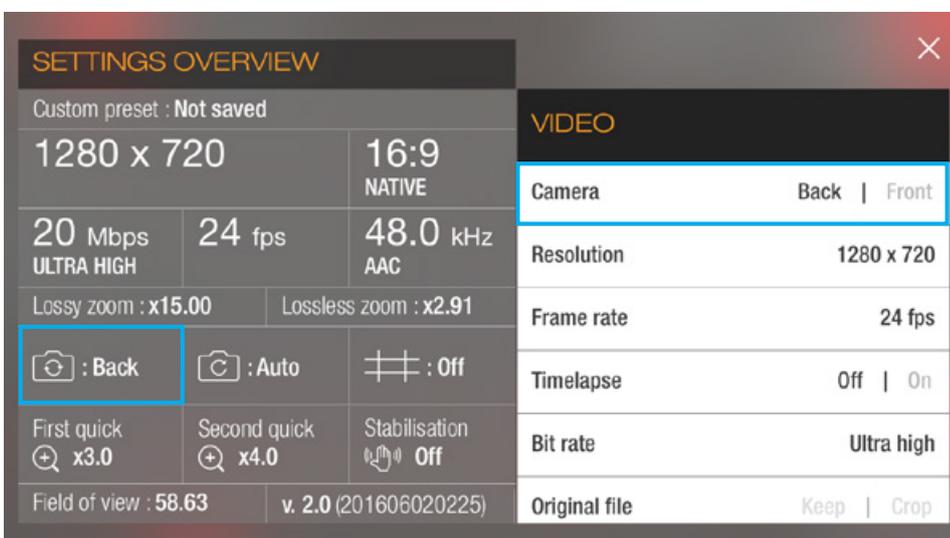
“Lossy zoom” and “Lossless zoom” show the maximum zoom magnifications available.

These settings are not set directly but are determined by the resolution and frame rate combination.

The zoom function can be set to either the full available magnification range of 1 to “Lossy zoom” or can be capped to just the “Lossless zoom” range.



A factor of x1.00 here means that there is no lossless zoom available for the current resolution and frame rate combination.



### CAMERA

Use this setting to switch between the front camera and the back camera of your iOS device.

Changing camera will affect the available resolutions and frame rates as well as certain features such as manual focus.



## SETTINGS PANEL

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      AAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : **Auto**    : Off

First quick **x3.0**      Second quick **x4.0**      Stabilisation **Off**

Field of view : **58.63**      v. **2.0** (201606020225)

**AUDIO**

**DEVICE**

Stabilisation      Off | On

**Orientation**      Auto | Left | Right

**CAPTURE HELP**

**PRESETS**

### DEVICE ORIENTATION

Choose between “Auto”, “Left” or “Right” device orientations.

“Auto” orientation will rotate the screen as you rotate the device but will lock the orientation once recording has started.

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      AAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : **Left**    : Off

First quick **x3.0**      Second quick **x4.0**      Stabilisation **Off**

Field of view : **58.63**      v. **2.0** (201606020225)

**AUDIO**

**DEVICE**

Stabilisation      Off | On

**Orientation**      Auto | **Left** | Right

**CAPTURE HELP**

**PRESETS**

“Left” locks the screen orientation so that the device home button is on the left.

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      AAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : **Right**    : Off

First quick **x3.0**      Second quick **x4.0**      Stabilisation **Off**

Field of view : **58.63**      v. **2.0** (201606020225)

**AUDIO**

**DEVICE**

Stabilisation      Off | On

**Orientation**      Auto | Left | **Right**

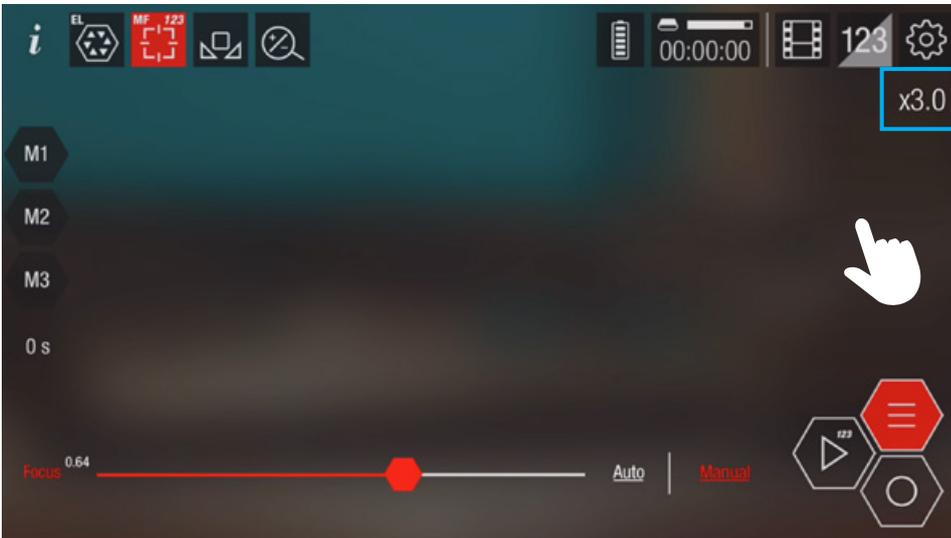
**CAPTURE HELP**

**PRESETS**

“Right” locks the screen orientation so that the device home button is on the right.

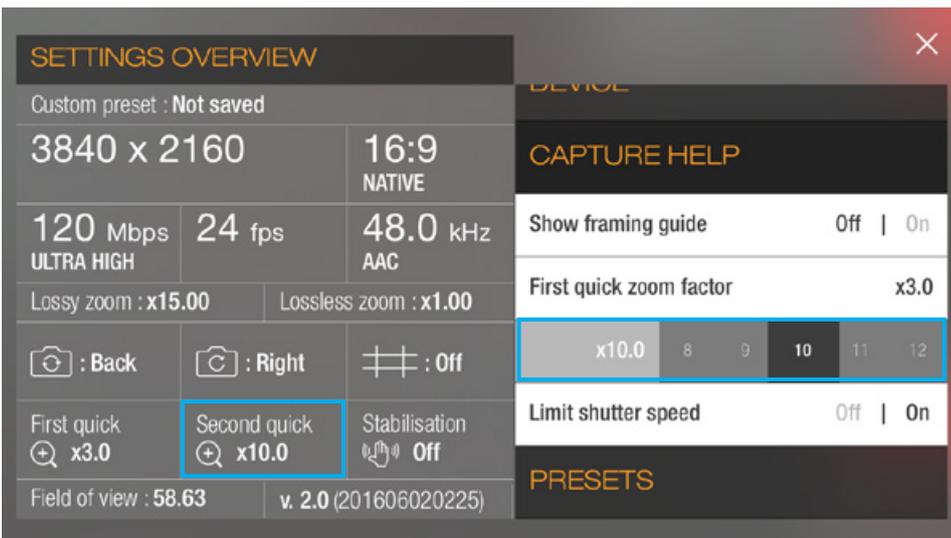


## SETTINGS PANEL



### QUICK ZOOM

“Quick zoom” allows you to quickly zoom to a preset magnification level by double tapping on the right of the view finder.



This is useful for checking focus before recording or as a tool to instantly zoom in a documentary / “mojo” style situation.

You can set up to two quick zoom steps and toggle between them by double tapping.



You can also switch either or both steps off.

Please note, this uses the actual zoom functionality of the camera so the zoomed view will be recorded as opposed to the long press “Inspect” tool that just magnifies a section of the view finder.



## SETTINGS PANEL

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      AAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : Auto    : Off

First quick **x3.0**      Second quick **Off**      **Stabilisation** **Off**

Field of view : **58.63**      v. 2.0 (201606020225)

**AUDIO**

**DEVICE**

**Stabilisation**      Off | On

**Orientation**      Auto | Left | Right

**CAPTURE HELP**

**PRESETS**

### STABILIZATION

Stabilization can be switched on or off. Turning stabilization on will automatically apply the highest level of stabilization supported for the device and current settings.

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      AAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : Auto    : Off

First quick **x3.0**      Second quick **Off**      **Stabilisation** **On**

Field of view : **58.63**      v. 2.0 (201606020225)

**AUDIO**

**DEVICE**

**Stabilisation**      Off | On

**Orientation**      Auto | Left | Right

**CAPTURE HELP**

**PRESETS**

Digital stabilization will crop the image by approximately 10%. It is recommended to leave stabilization off when the device is attached to a tripod or gimbal.

**SETTINGS OVERVIEW**

Custom preset : **Not saved**

**3840 x 2160**      **16:9**  
NATIVE

**120 Mbps**    **24 fps**      **48.0 kHz**  
ULTRA HIGH      ALAC

Lossy zoom : **x15.00**      Lossless zoom : **x1.00**

: Back    : Auto    : Off

First quick **x3.0**      Second quick **x6.0**      **Stabilisation** **Off**

**Field of view : 58.63**      v. 2.0 (201606231856)

**VIDEO**

**ASPECT RATIO**

**AUDIO**

**DEVICE**

**CAPTURE HELP**

**PRESETS**

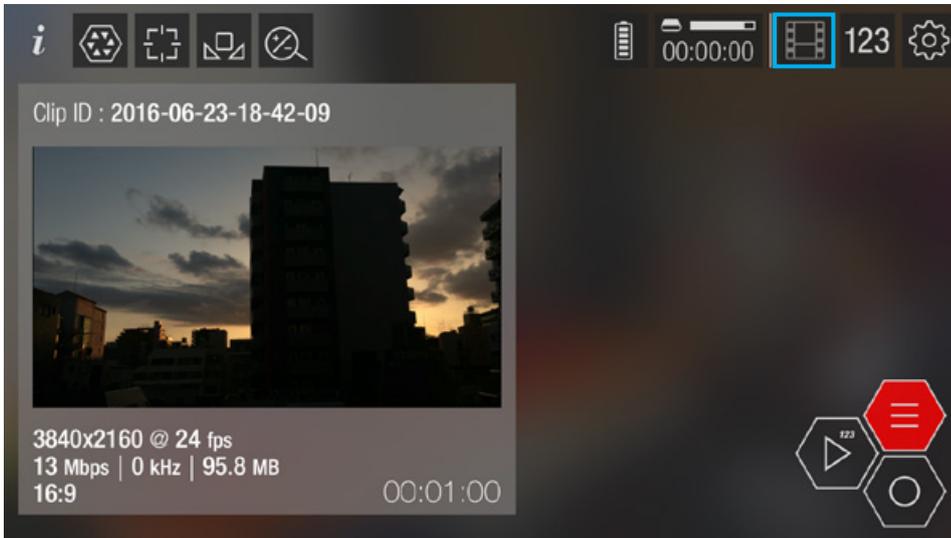
### FIELD OF VIEW

This is the horizontal field of view in degrees for the currently selected resolution.

This setting is not directly set but is determined by the current resolution setting.

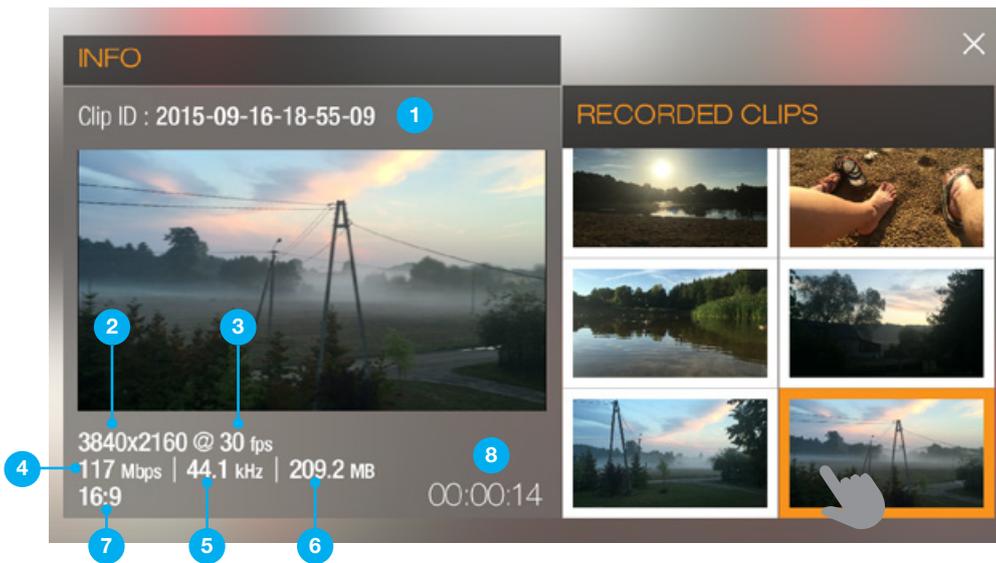


## FILM LIBRARY



### RECORDED CLIPS

Open the film library by tapping the film library icon. 3D touch the film library icon to “peek” at the last recorded clip information. Release 3D touch to dismiss the info view or further 3D touch to “pop” to the full film library.



Scroll through all your recorded clips in the right hand panel. Tap a clip to show the info for this clip.

All clip information is read from the file NOT from the input settings, so you can be sure the file was recorded correctly.

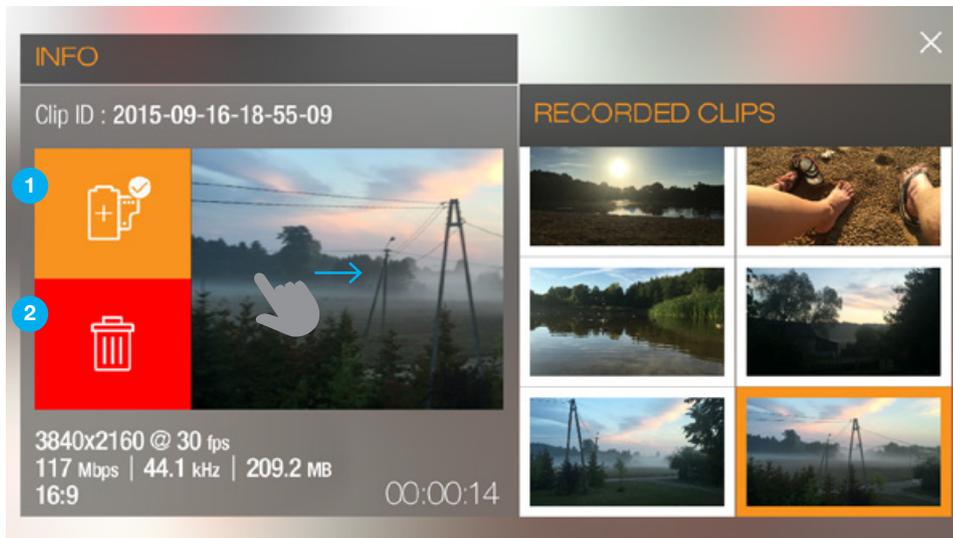
- |                                    |                      |
|------------------------------------|----------------------|
| 1. File name of this recorded clip | 5. Audio sample rate |
| 2. Resolution                      | 6. File size         |
| 3. Frame rate                      | 7. Aspect ratio      |
| 4. Video bit rate                  | 8. Clip duration     |

**NOTE:**

The video bit rate selected in the Guerrilla Filmmaker settings is an estimate of what the average bit rate that the recorded clip should be. The actual bit rate that is shown in the clip info will differ from the settings bit rate chosen depending on what is being recorded. If the video is very static then compression will be more efficient and require less data and therefore have a lower bit rate. This does not mean it is of lower overall quality.



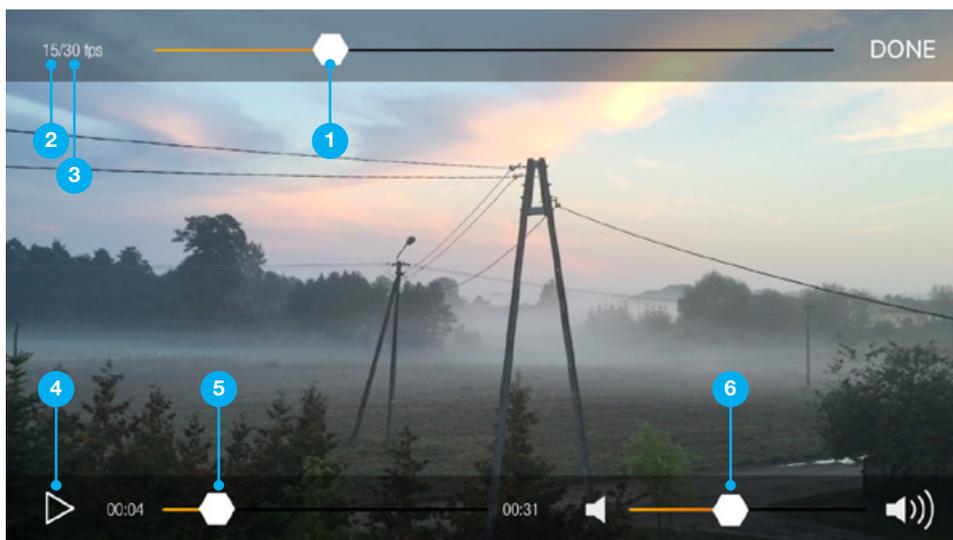
## FILM LIBRARY



### RECORDED CLIPS

Swipe right to reveal the clip options.

- 1 Copy this clip to the devices photo library. Copied clips will be indicated with a tick mark.
- 2 Delete this clip. WARNING this action cannot be undone.



### PLAY BACK RECORDED CLIPS

Tap the large info thumbnail to play the clip in the custom video player. Tap anywhere to show and hide the player controls.

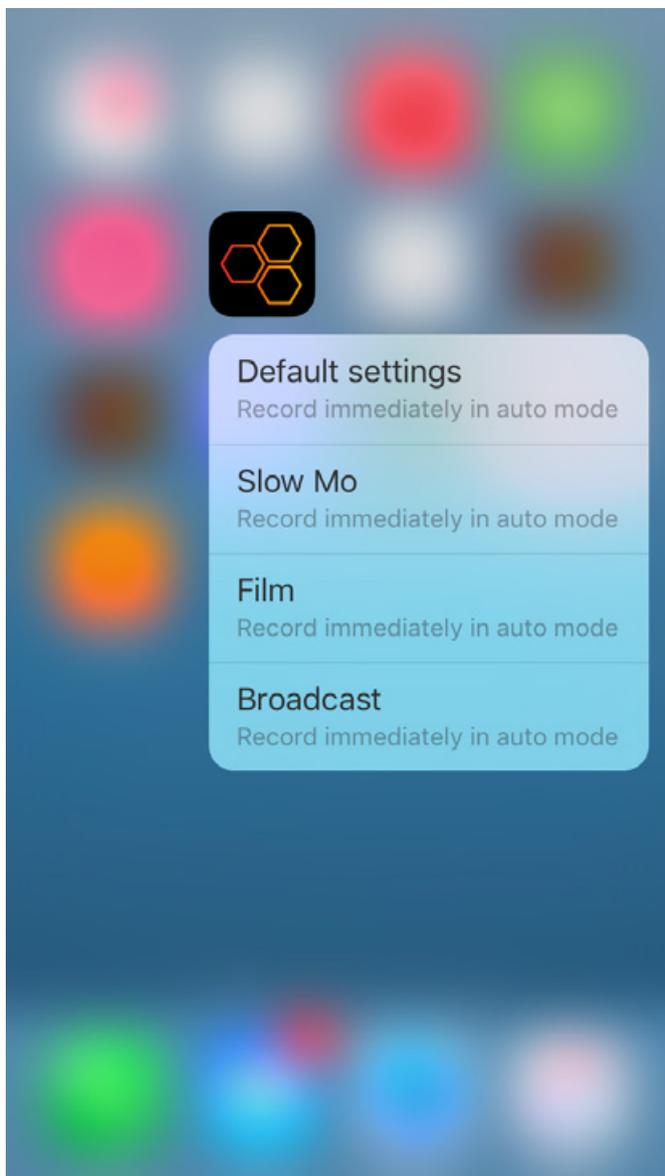
The clip can be played back in fast or slow motion by adjusting the playback frame rate with the frame rate control 1.

Quickly scrub back and forth through your clip by using the scrubber control 5.

- |                        |                        |
|------------------------|------------------------|
| 1. Frame rate control  | 4. Play / pause button |
| 2. Playback frame rate | 5. Scrubber control    |
| 3. Recorded frame rate | 6. Volume control      |



## HOME SCREEN SHORTCUTS



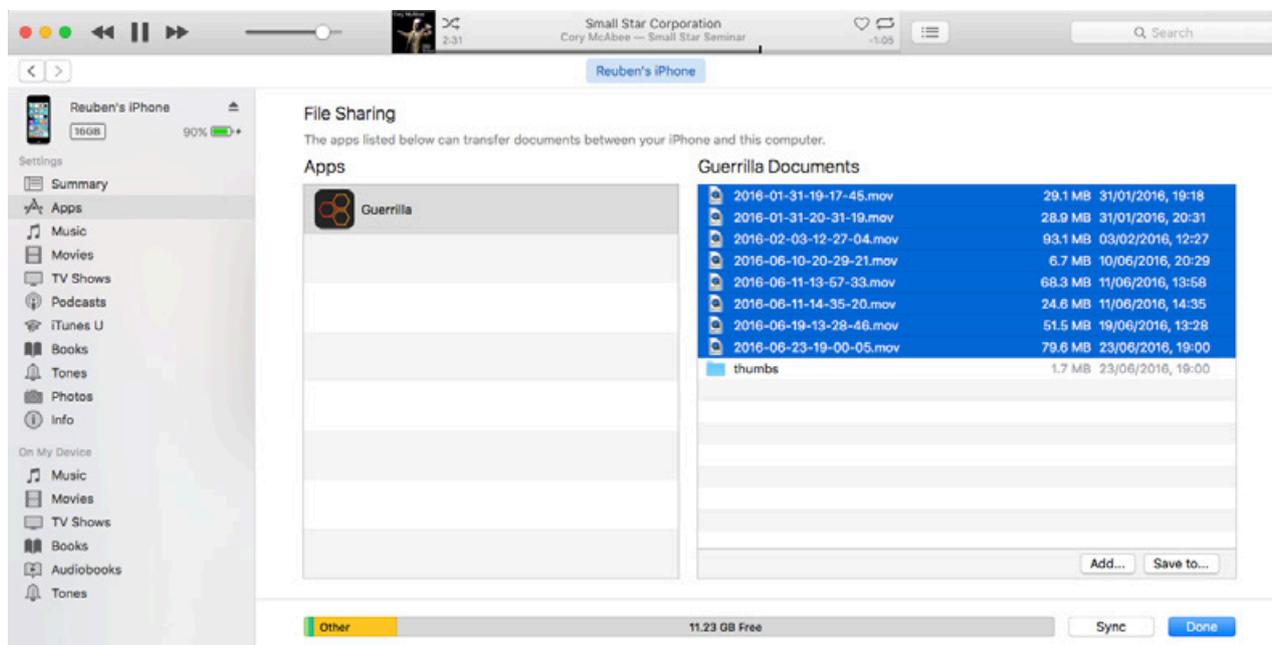
### **3D TOUCH HOME SCREEN**

3D touch the home screen app icon to show the settings presets you have marked as home screen shortcuts.

Select a preset to open the app and begin recording immediately using this preset.



## iTUNES FILE SHARING



### SAVING RECORDED CLIPS TO YOUR COMPUTER

The recommended method of moving recorded clips from Guerrilla Filmmaker to your computer is to do so via iTunes File Sharing. Follow these steps to copy files to your computer:

1. Connect your device to your computer
2. Open iTunes and select your device
3. Select "Apps" from the left hand menu
4. Scroll down to "File Sharing"
5. Select Guerrilla Filmmaker

Here you will find all your recorded clips. You can then easily drag them onto your computer or delete them to free up space on your device.

