

**LH7C**

**Operation Instruction**

# UI Operation Introduction

## 1.1



### Initial Page

- 1、3D LUT    2、Vertical Extension    3、Buttons  
4、Function    5、Setting



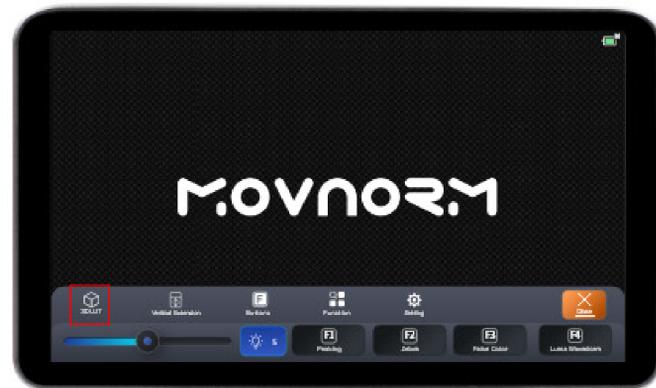
### 2、 Vertical Stretch

Enable vertical stretch, adjust the starting line parameters to the desired stretch position, and simply modify the vertical stretch parameters to complete the adjustment.



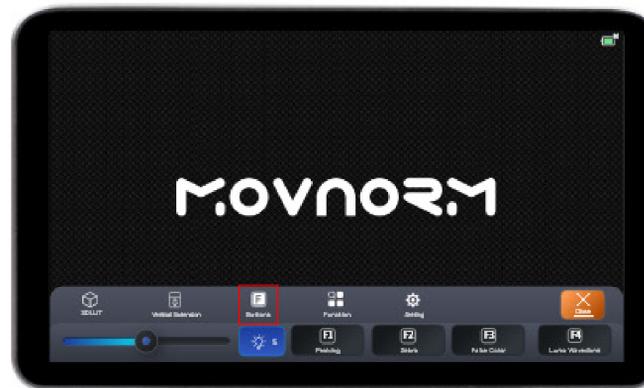
### 4、 Function

For details, please refer to "Function Introduction".



### 1、 3D LUT

Used to store the created LUT file, which can be directly applied to the screen.



### 3、 Buttons

Frequently used functions can be set as shortcut keys for one-touch activation

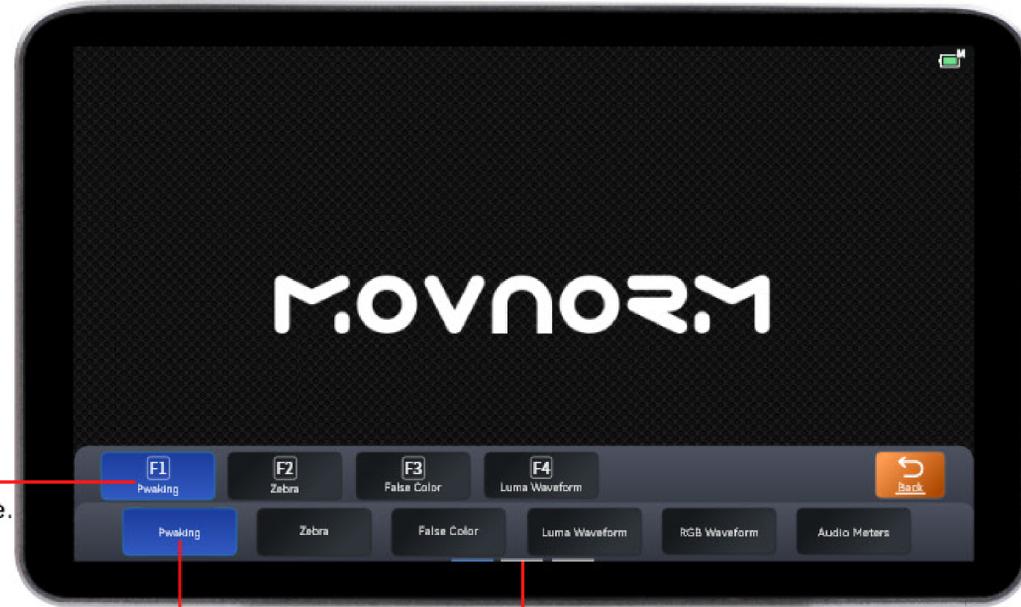


### 5、 Setting

For details, please refer to "Settings Introduction".

# Shortcut key introduction

## 2.1



Click on the shortcut you want to replace.

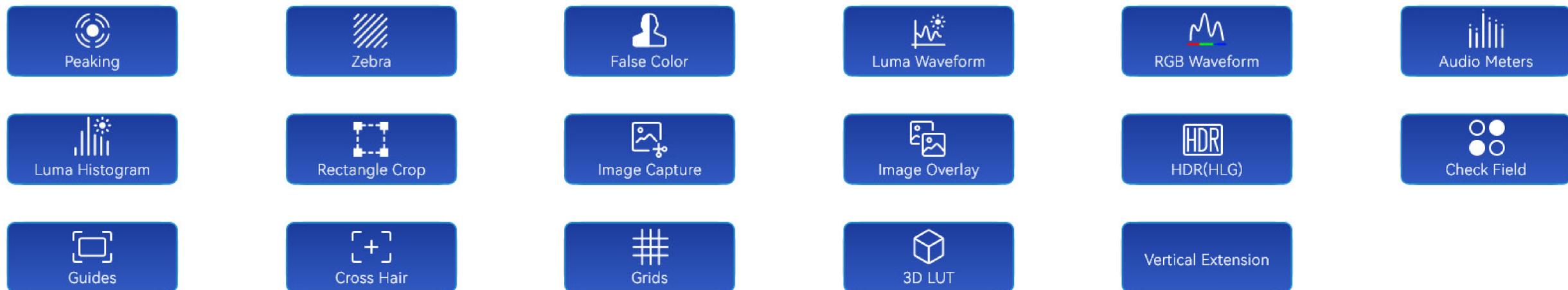
Then click on the desired shortcut to complete the replacement

Slide to change pages



Preset the completed shortcut

The following functions can each be set up as quick-access features.



# 3.1 Peaking



## Introduction of Peaking

It's a technique used to help photographers better assess image focus during shooting. The principle involves using image processing to highlight high-contrast areas (typically the sharp parts) with specific colors or edge lines, allowing photographers to quickly identify which parts are in focus and which are blurry.

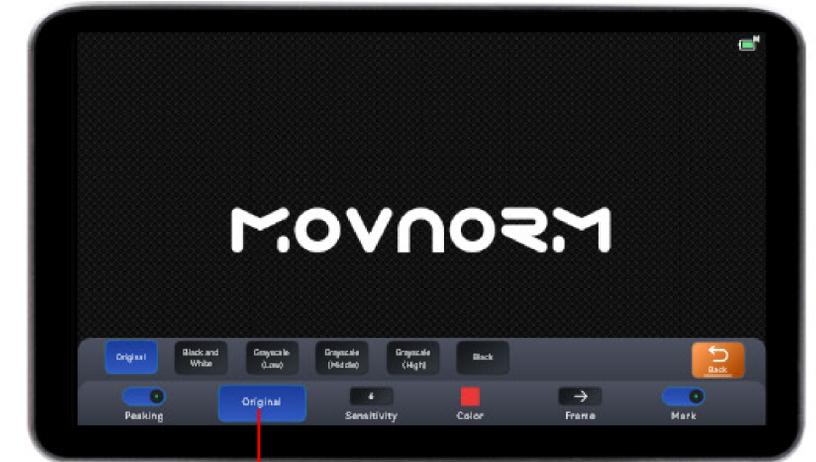
Enable Peaking



Click to enable focus assist

The focus areas are displayed on the image in highlighted colors.

Peaking-Original



Click to enable original image

Original image can switch the display styles of the image, including six styles: original image, black and white, grey scale (low), grey scale (medium), grey scale (high) and black.

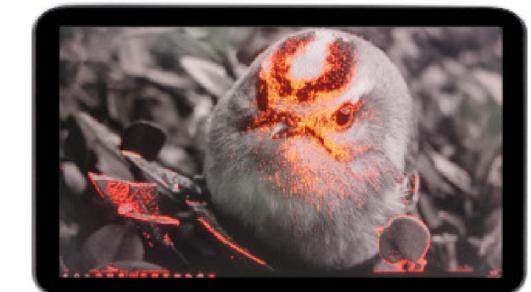
Peaking-Style Effects



Focus Assist Feature



Black and White



Grayscale (Low)



Grayscale (Middle)

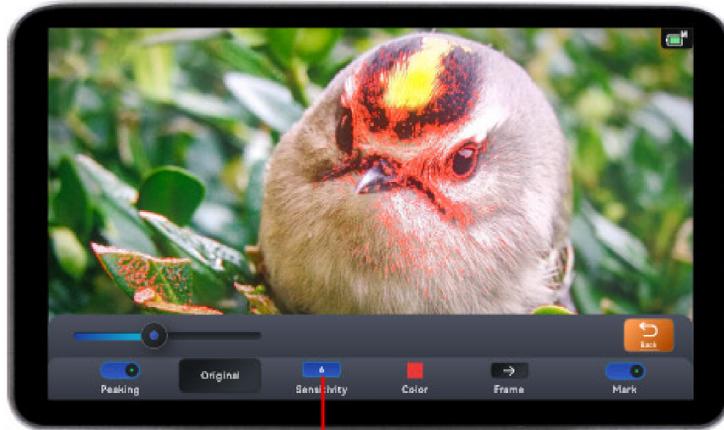


Grayscale (High)



Black

## Peaking-Sensitivity



Click to enable sensitivity

Drag the sensitivity slider to adjust the sensitivity level, ranging from 1 to 15. A higher sensitivity value increases the focus capture range, while a lower value decreases it.

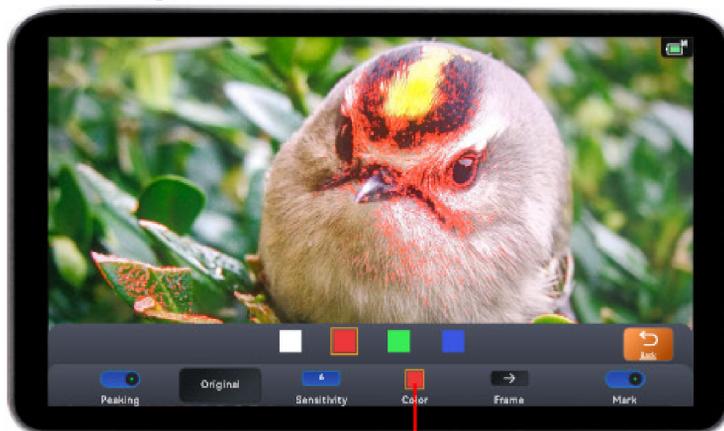


Low sensitivity value



High sensitivity value

## Peaking -Color



Click to change colors

The focus color can be chosen as needed (White, Red, Green, or Blue)

## Focus Color Styles



White



Red



Green



Blue

## Peaking - Peak Frame



Before enabling the peak frame



After enabling the peak frame.

1.The peak frame includes Horizontal Start, Vertical Start, Width, Height, Reset,Return and so on.

2.After enabling the peak frame, the focus will only be displayed in it.

3.Click the peak frame to enter the next screen, where you can adjust parameters to change the size and position of the peak frame, as well as reset its settings.

0%

X Start: Horizontallly move the peak box and check Increase to move the peak box by touching the screen.

0%

Y Start: Vertically move the peak frame and choose Increase Value to drag the frame on the screen.

100%

Width: Increase the width value to expand the peak frame.

100%

Height: Increase the height value to increasethe height of the peak frame.



Reset: Restore all values of focus assist to their original settings.



Return: Click the back button to return to the previous page

## 3.2 Zebra



### Introduction of Zebra

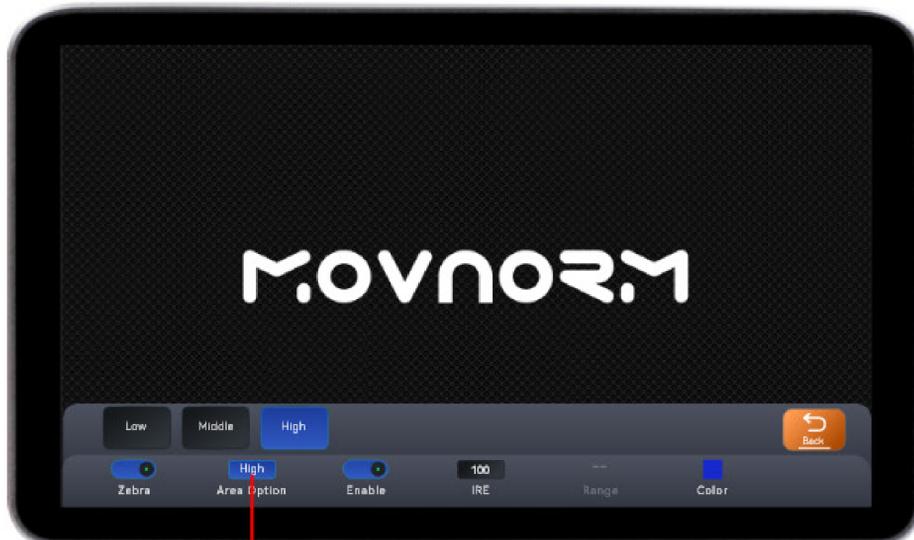
Display stripes in overexposed areas or specific brightness ranges, helping photographers identify and adjust exposure settings in real-time to retain image details

### Zebra - Enable



Enable controls the display of low, mid, and high zones. You can toggle each zone individually or enable all three simultaneously.

### Zebra - Zone Options



Click to enable zone options

Zebra zone options include Low Zone, Middle Zone and High Zone



Low Zone



Middle Zone

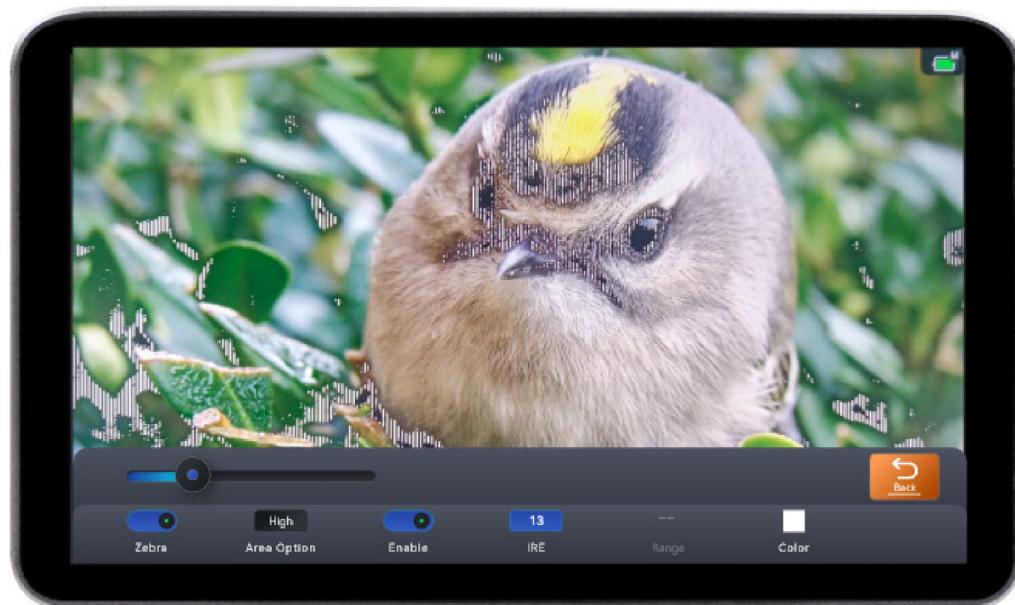


High Zone

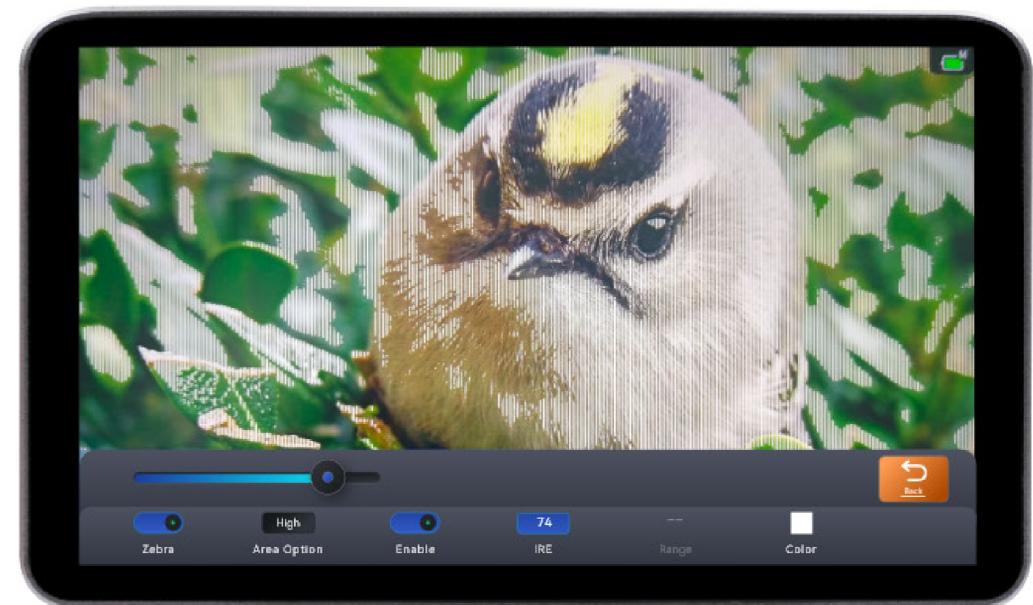
## Zebra - IRE



The display range of zebra stripes in the image has an adjustable IRE value for the middle zone option with a tolerance of  $\pm 0-30$ .

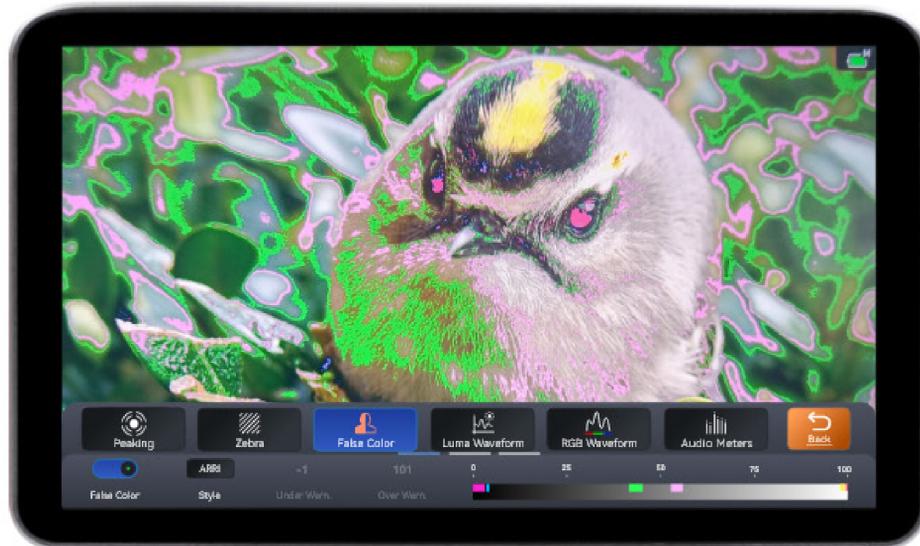


Low IRE Effect Reference



High IRE Effect Reference

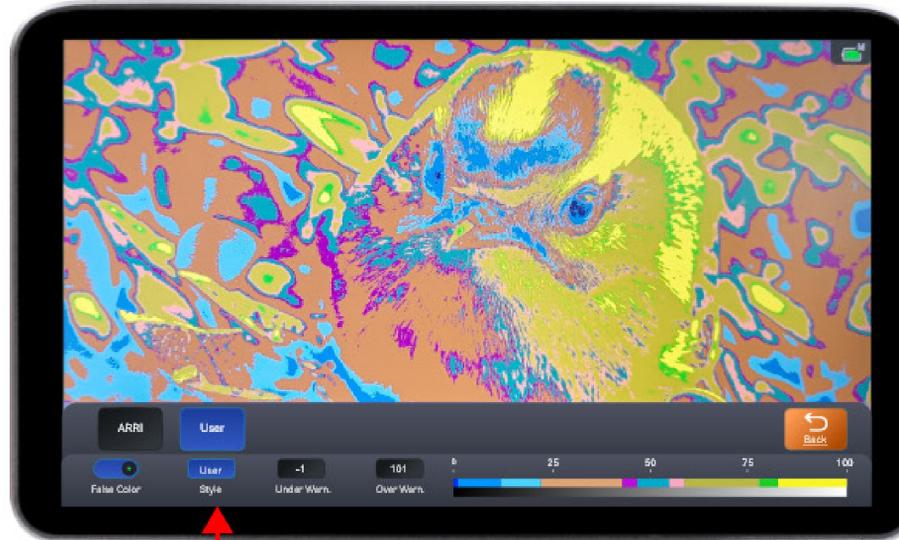
### 3.3 False Color



#### Introduction of False Color

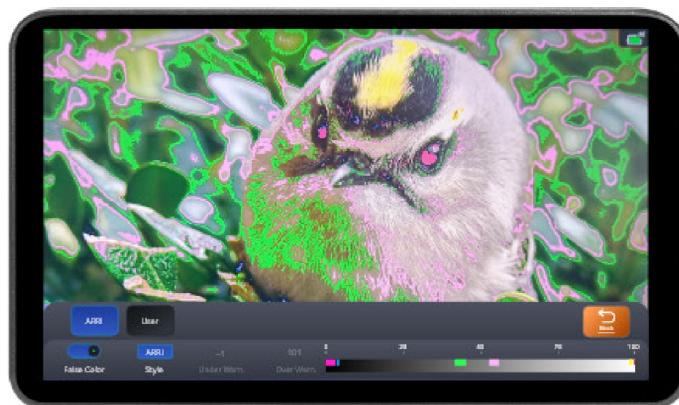
False color feature maps different brightness levels in the image to various colors.

### False Color - User Style



Users can freely adjust the exposure distribution peaks for highlighted areas (overexposed settings) and shadow areas (underexposed settings).

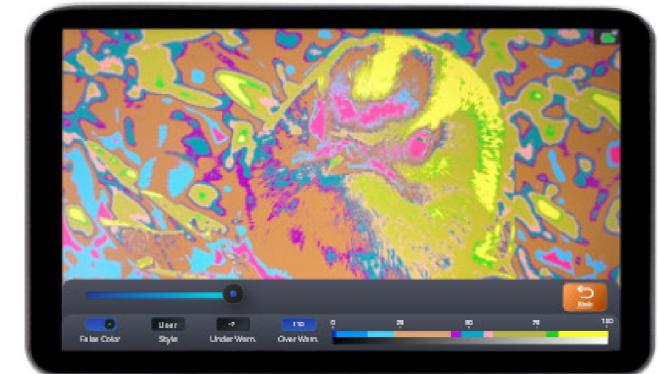
### False Color - ARRI



This false color feature is designed for ARRI cameras, highly integrated with other functions to provide a consistent and professional workflow.



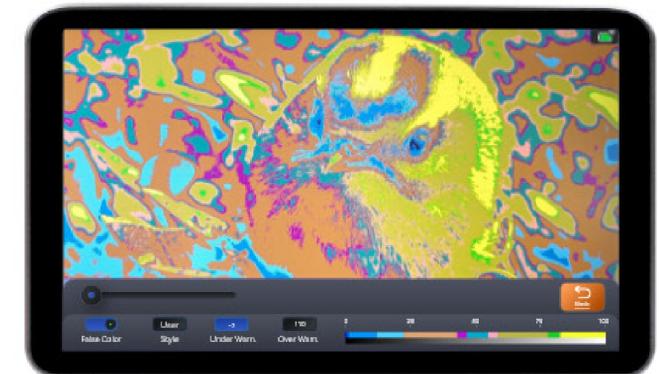
Overexposure Effect Comparison



Overexposure Effect Comparison

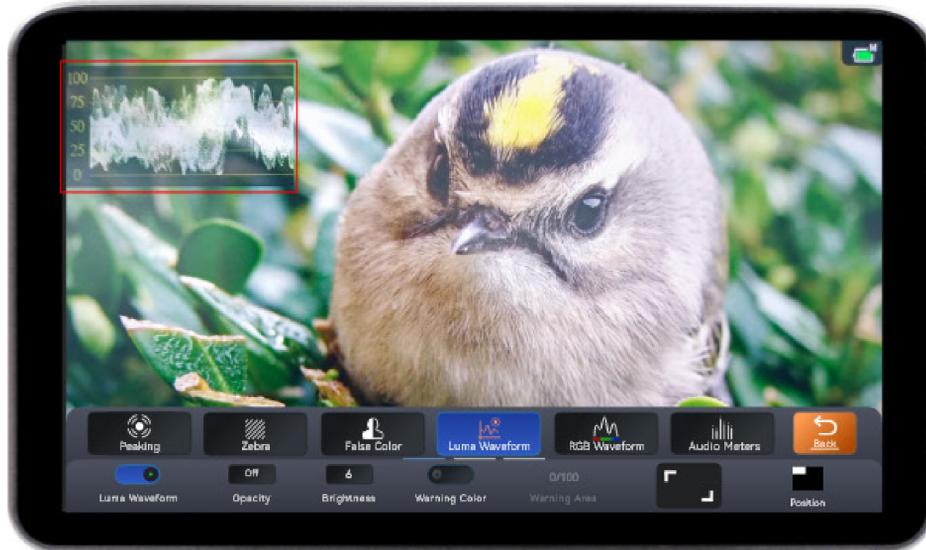


Underexposure Effect Comparison



Underexposure Effect Comparison

## 3.4 Luma Waveform



### Introduction of Luma Waveform

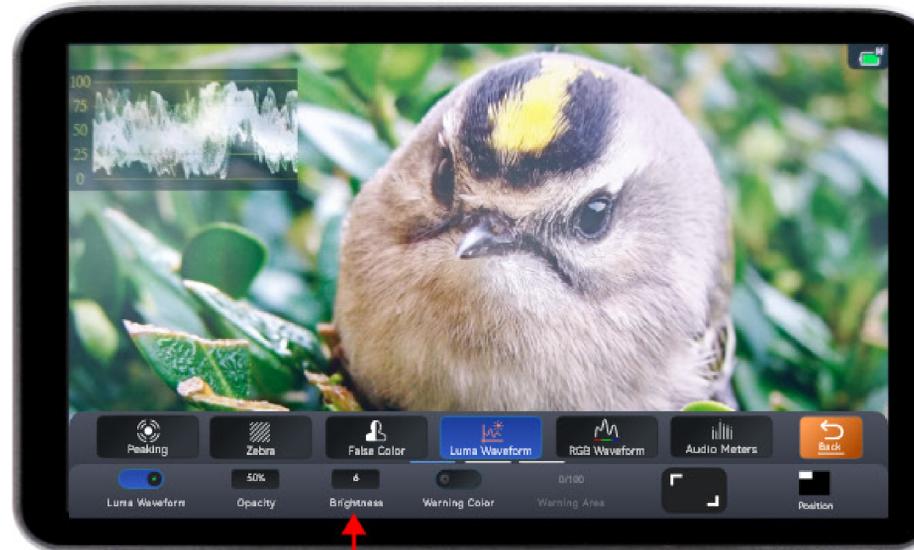
The graphical waveform display shows the distribution of brightness in the image, helping users analyze exposure levels and contrast. The horizontal axis represents the horizontal position in the image, while the vertical axis indicates brightness values.

### Luma Waveform-Transparency



The Luma Waveform transparency includes four options: Off, 25%, 50%, and 75%. Select the corresponding values to adjust the transparency of the waveform.

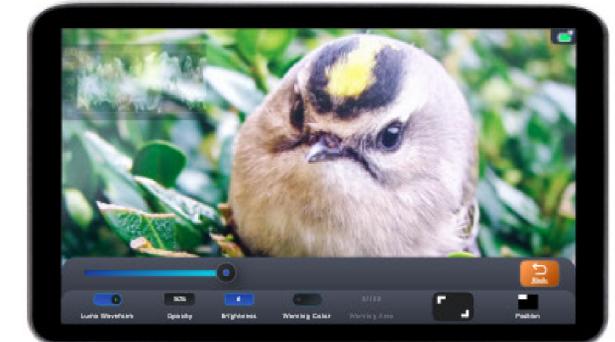
### Luma Waveform-Brightness



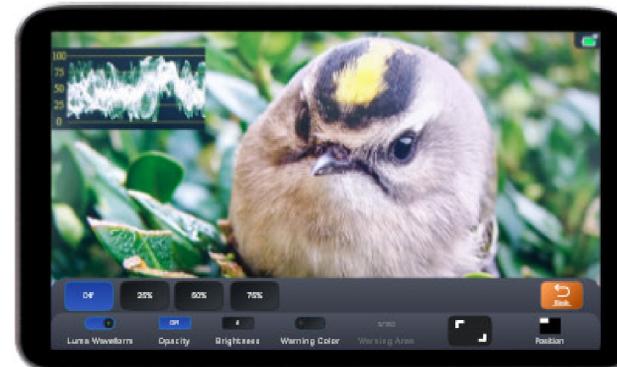
Click the brightness button to access the next screen. Swipe left or right to adjust the brightness of the waveform.



Low brightness



High brightness



Transparency-Off



Transparency-25%



Transparency- 50%



Transparency- 75%

## Luma Waveform - Excessive Color



The overexposed and underexposed areas of the Luma Waveform can be customized and marked in red.

Slide the low area slider left or right to adjust the bottom out-of-range peak, with a range of -7-109.



Overlow Area Effect Comparison



Overlow Area Effect Comparison

Slide the high area slider left or right to adjust the top out-of-range peak, with a range of -7-109.

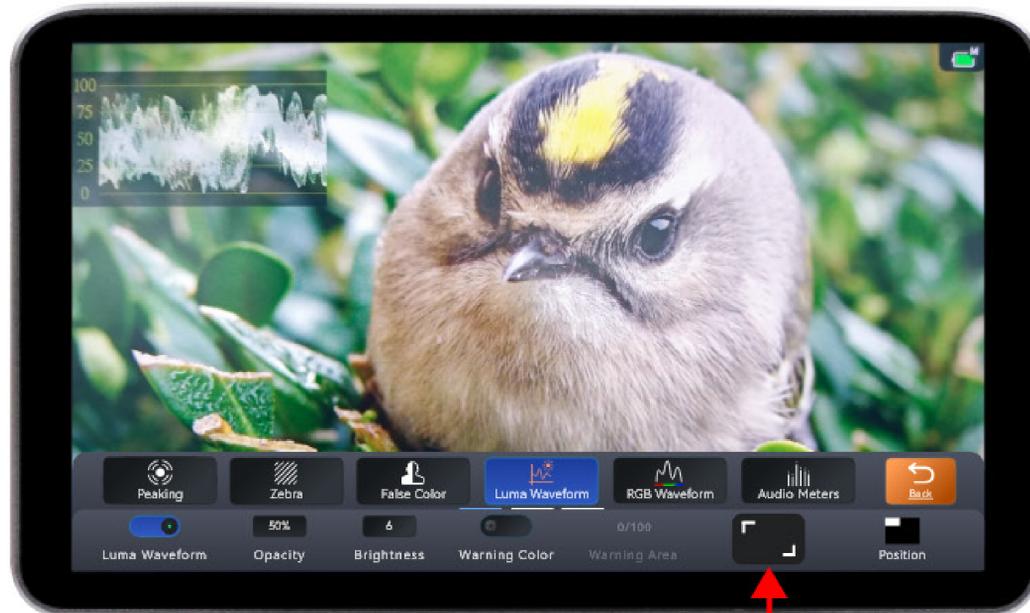


Overhigh Effect Comparison

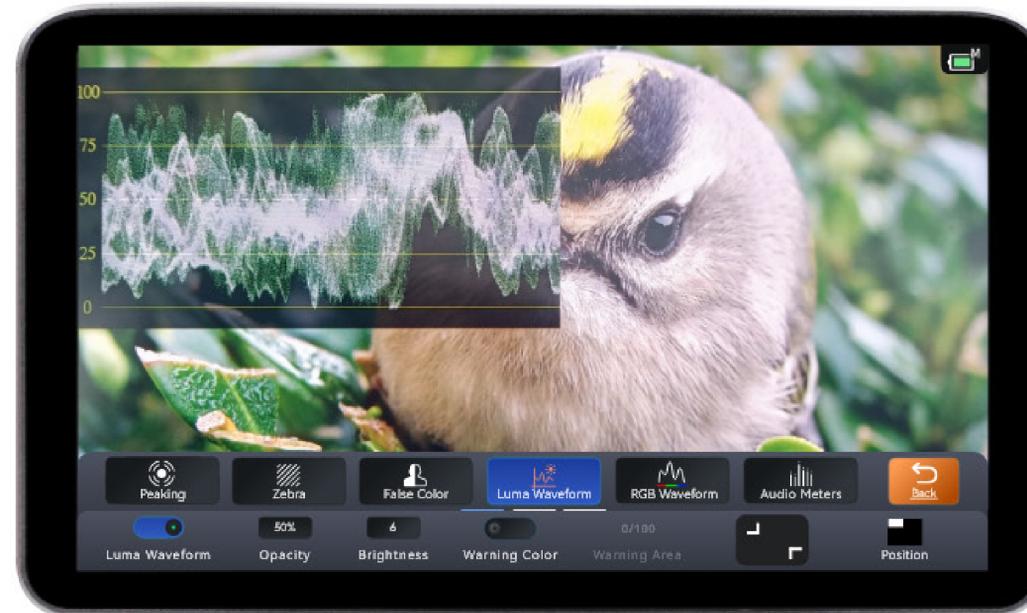


Overhigh Effect Comparison

## Luma Waveform - Zoom



Click the zoom button to zoom in or out the Luma Waveform



After Zooming In

## Luma Waveform - Position

The Luma Waveform can be positioned in one of the following areas: top left, top right, bottom left or bottom right.

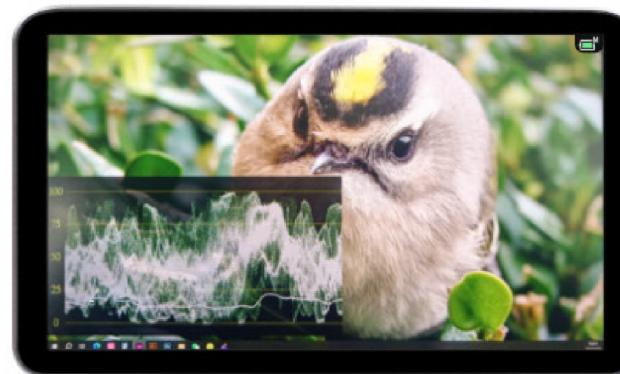
Click the position button to select the corresponding location for the Luma Waveform



top left



top right



bottom left



bottom right

## RGB Waveform - Excessive Color



The overexposure and underexposure areas of the RGB waveform can be customized and marked in red.

Slide the low area slider left or right to adjust the bottom out-of-range peak, with a range of -7-109.



Overlow Area Effect Comparison



Overlow Area Effect Comparison

Slide the high area slider left or right to adjust the top out-of-range peak, with a range of -7-109.

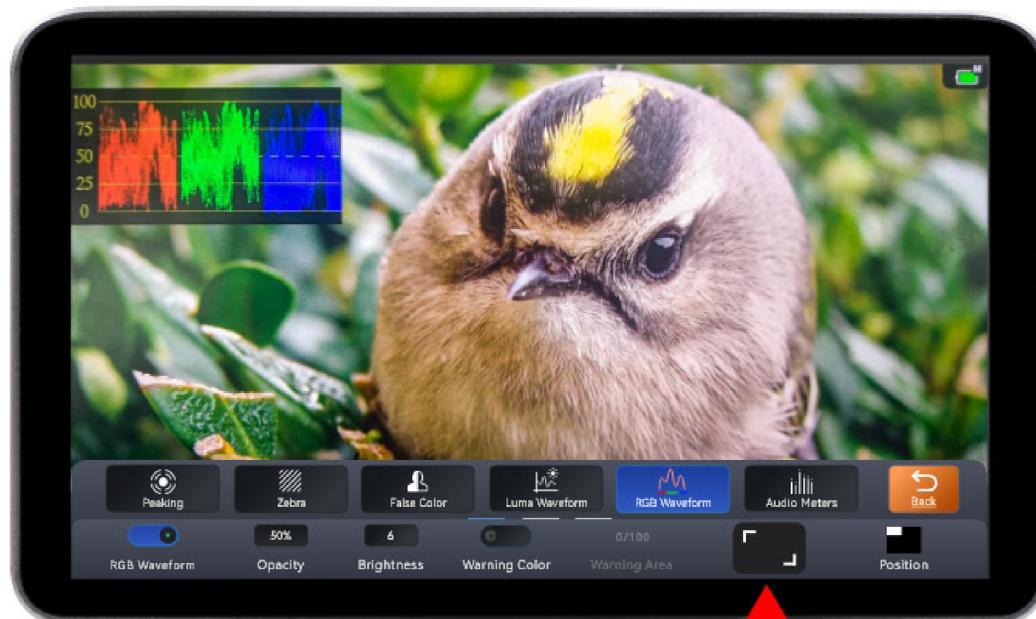


Overhigh Area Effect Comparison



Overhigh Area Effect Comparison

## RGB Waveform - Zoom



Before Zooming



After Zooming In

Click the zoom button to zoom in or out the RGB waveform.

## RGB Waveform - Position

1. The RGB waveform can be positioned in one of the following areas: top left, top right, bottom left or bottom right.
2. Click the position button to select the corresponding location for the RGB waveform.



top left



top right

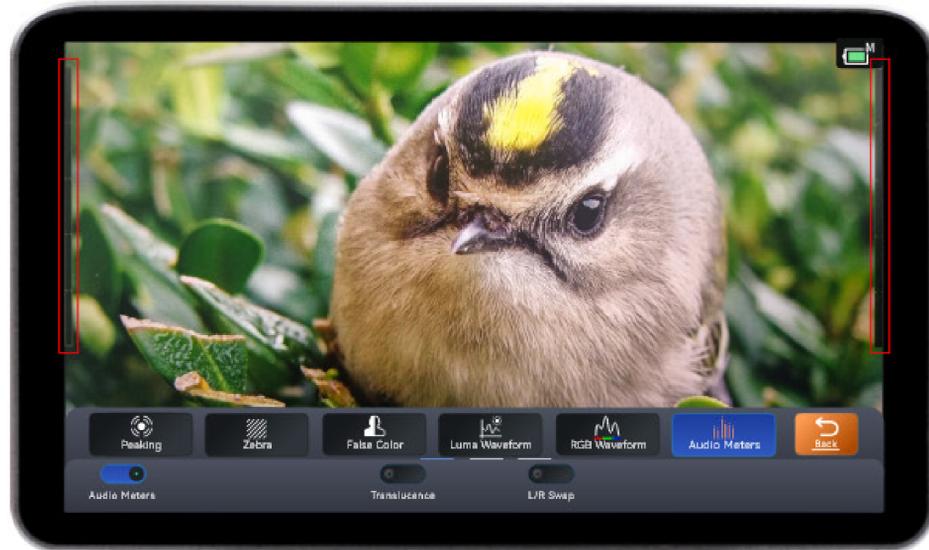


bottom left



bottom right

### 3.6 Volume Indicator



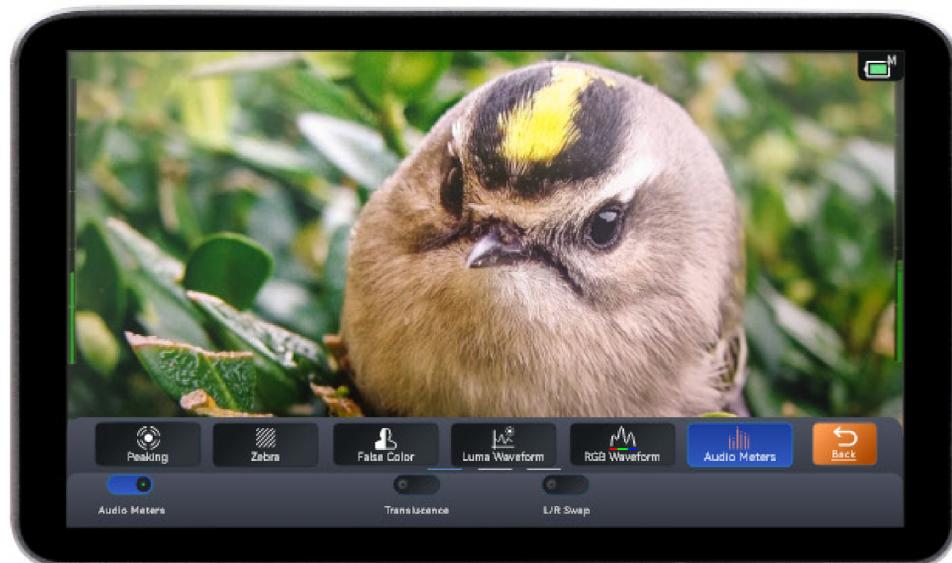
**Channel Switching:** Click the channel button to choose between left or right playback.

#### Introduction of Volume Indicator

Monitor the input sound volume in real time.

#### Volume Indicator - Semi-transparency

Click the semi-transparent button to display audio over the screen in a semi-transparent state.



semi-transparency off



semi-transparency on

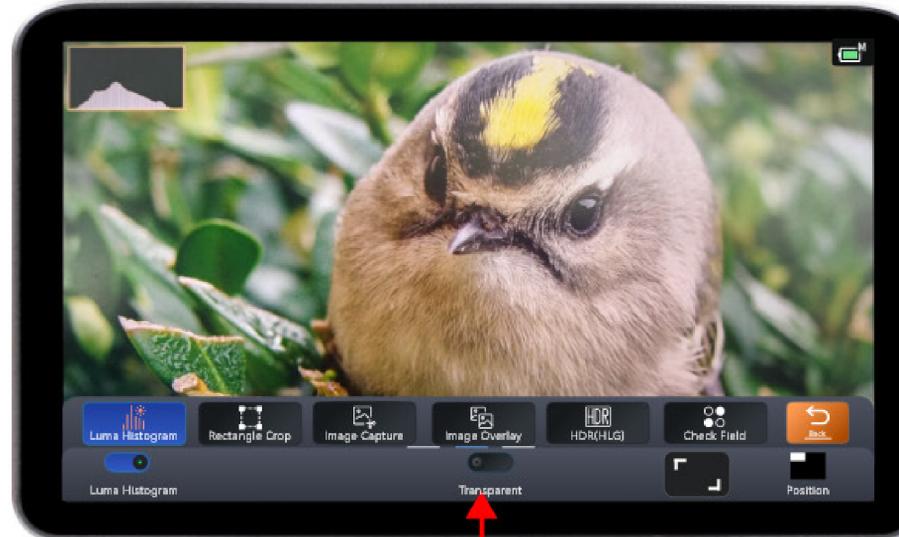
## 3.7 Brightness Histogram



### Introduction of Brightness Histogram

The image brightness is displayed as a histogram at the top of the screen.

## Brightness Histogram- Transparency



Click the transparent button to display the brightness histogram transparently.



Transparency off

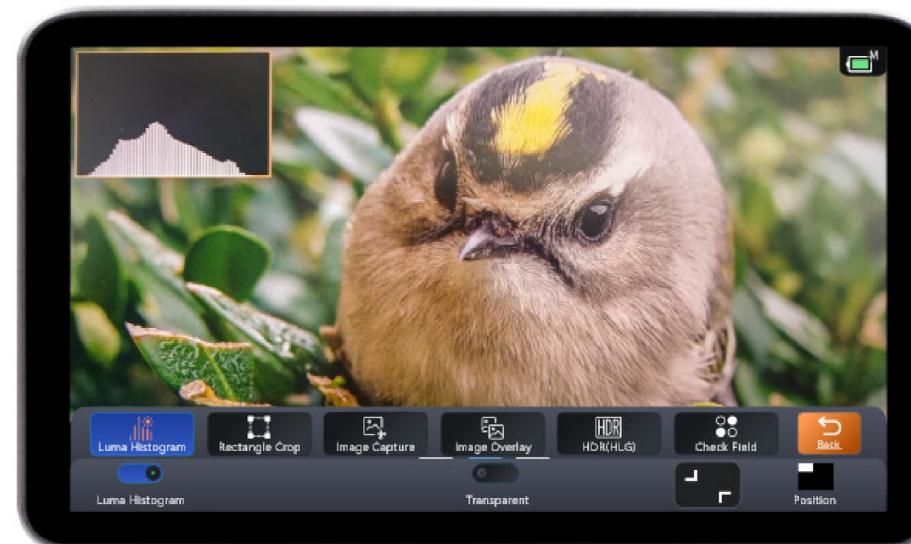


Transparency on

## Brightness Histogram - Zoom

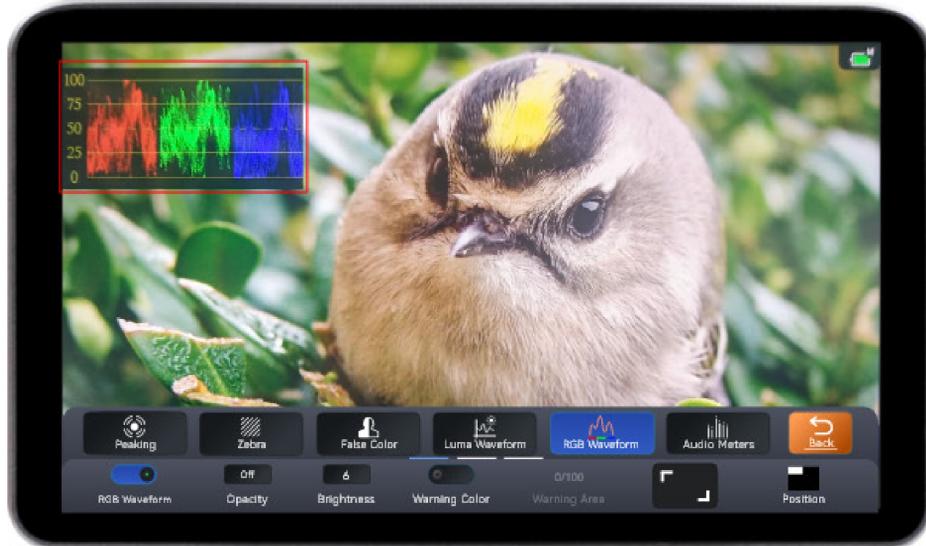


Click the Zoom button to zoom in and out of the brightness histogram.



After Zooming In

### 3.5 RGB Waveform



#### Introduction of RGB Waveform

Display the red, green, and blue channels of the image as separate waveforms. These waveforms show the brightness distribution of each color channel, allowing you to check and adjust the exposure and contrast of each channel.

### RGB Waveform- Brightness



Click the brightness button to enter the next screen. Swipe left or right to adjust the brightness of the waveform, with a range of 1-6.

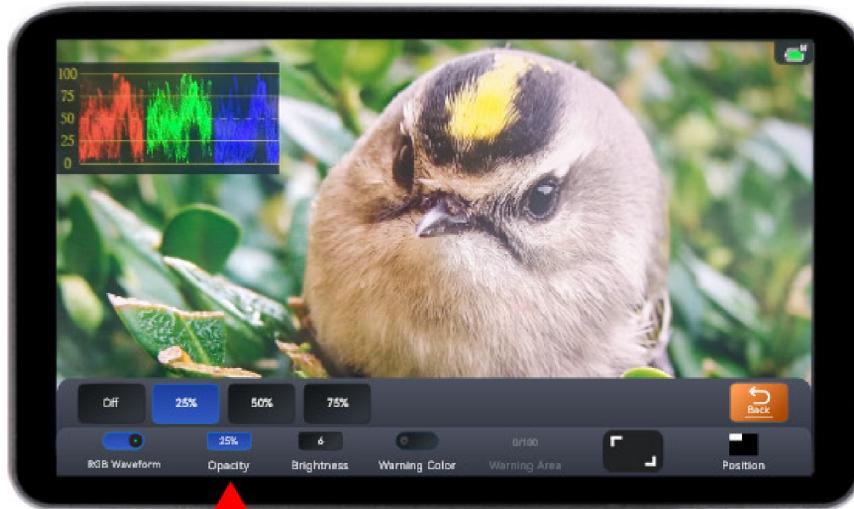


Low brightness



High brightness

### RGB Waveform - Transparency



RGB waveform transparency including off, 25%, 50%, 75% four numerical options. You can click on the transparency button, select the corresponding value to adjust the transparency of the RGB waveform.



Transparency Off



Transparency 25%



Transparency 50%



Transparency 75%

## Brightness Histogram - Position



The brightness histogram can be positioned in one of the following areas:  
top left, top right, bottom left or bottom right.

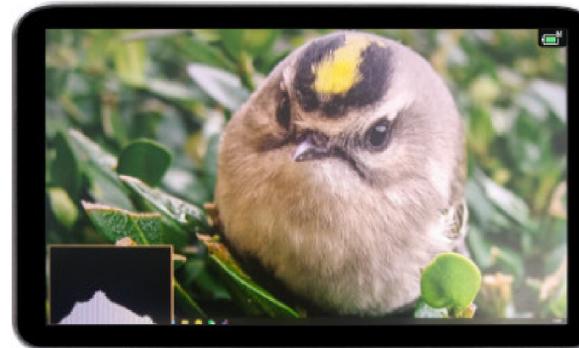
Click the position button to select the corresponding location for the  
brightness histogram.



top left



top right



bottom left



bottom right

## 3.8 Rectangular Crop



### Rectangular Crop



Before enabling



After enabling

### Introduction of Rectangular Crop

After enabling cropping, adjust the size parameters to crop the image.

### Rectangular Crop - Resize



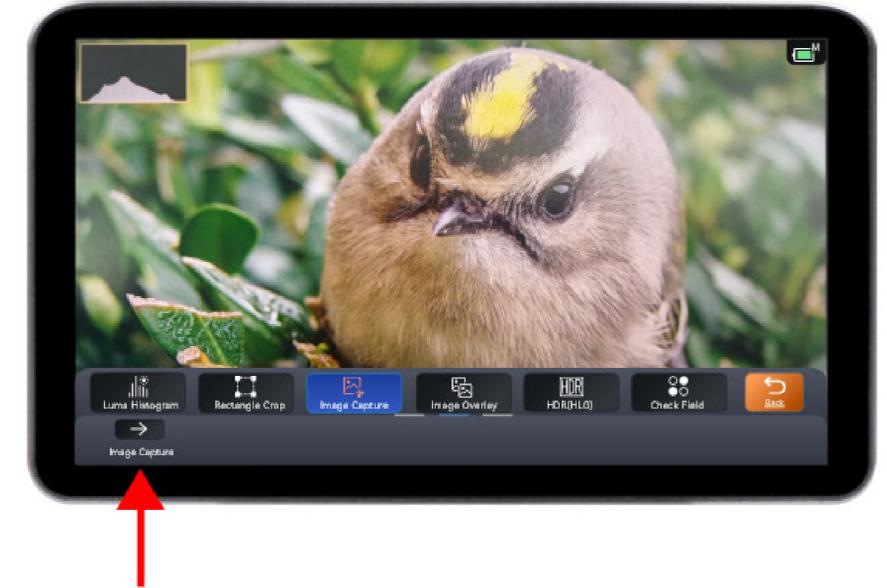
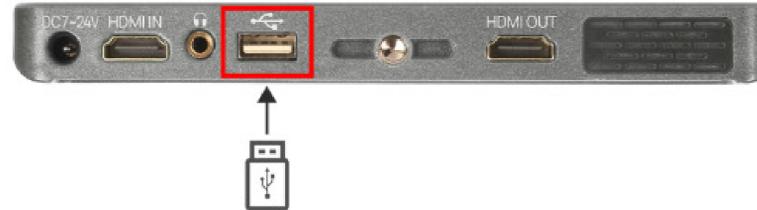
- 0% X Start: Horizontally move the cropping frame left or right and choose Increase Value to drag the frame on the screen.
- 0% Y Start: Vertically move the cropping frame up or down and choose Increase Value to drag the frame on the screen.
- 100% Width: Increase the width values to expand the cropping frame.
- 100% Height: Increase the height values to increase the height of cropping frame.
- Reset: Restore all cropping values to their original settings.
- Back: Click the back button to return to the previous page

## 3.9 Capture Image

### Instructions

Step 1: Insert the USB drive into the monitor's USB-A port.

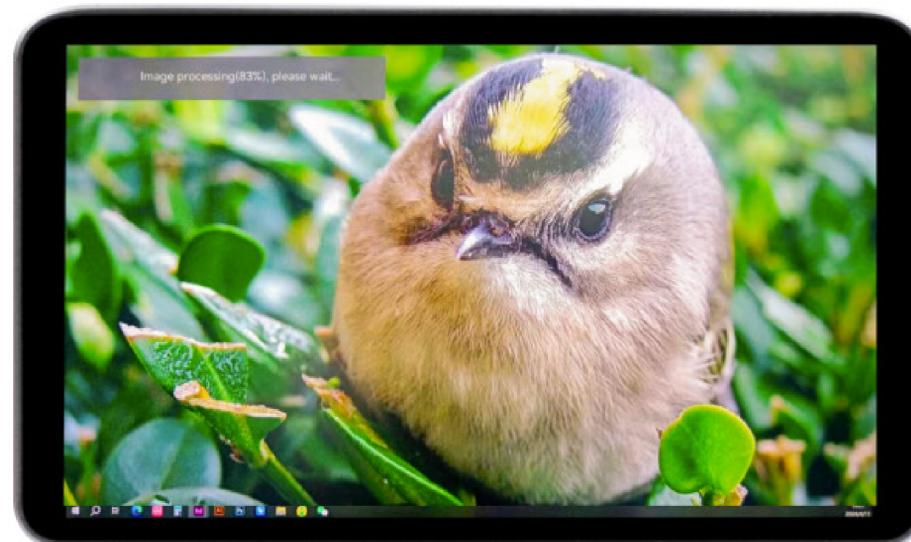
Step 2: Click on "Capture Image".



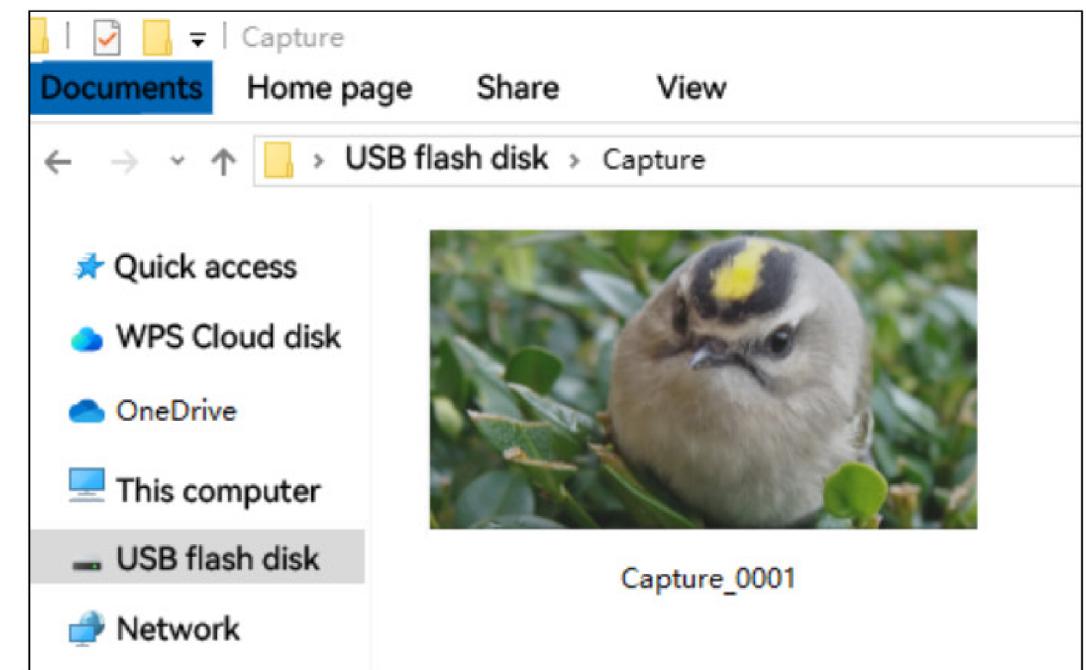
### Introduction of Capture Image

Arbitrarily capture any frame and save it to a USB drive.

Step 3: Wait for Image Capture.



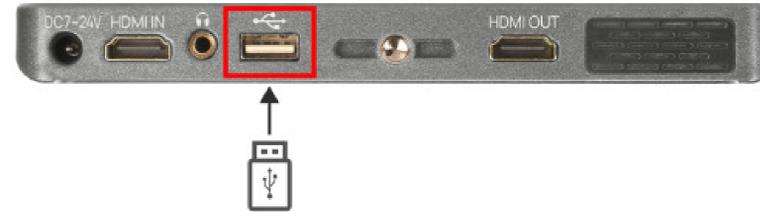
Step 4: Image Capture is finished.



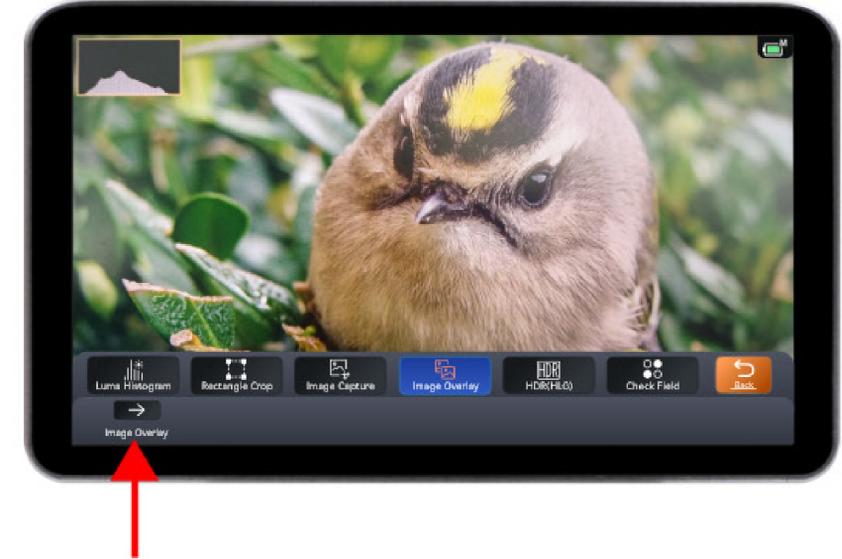
# 3.10 Image Overlay

## Instructions

Step 1: Insert the USB drive into the monitor's USB-A port.



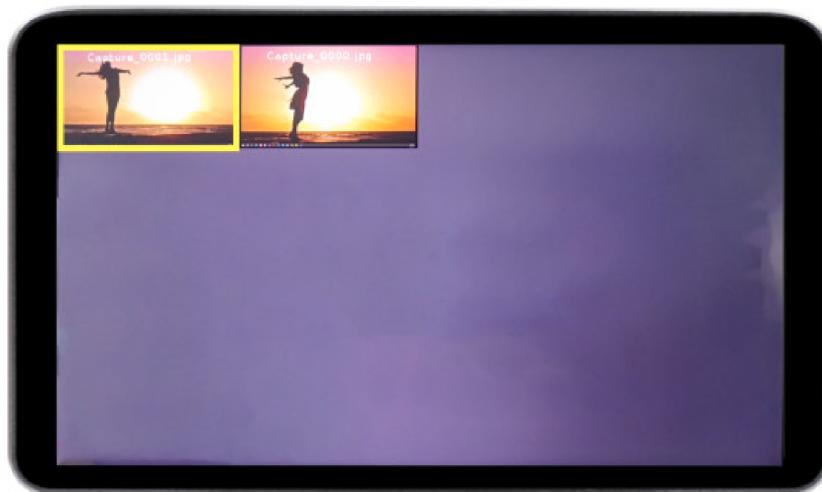
Step 2: Click on "Image Overlay".



### Introduction of Image Overlay

Using the captured image, you can do a semi-transparent overlay comparison with real-time video via the USB drive

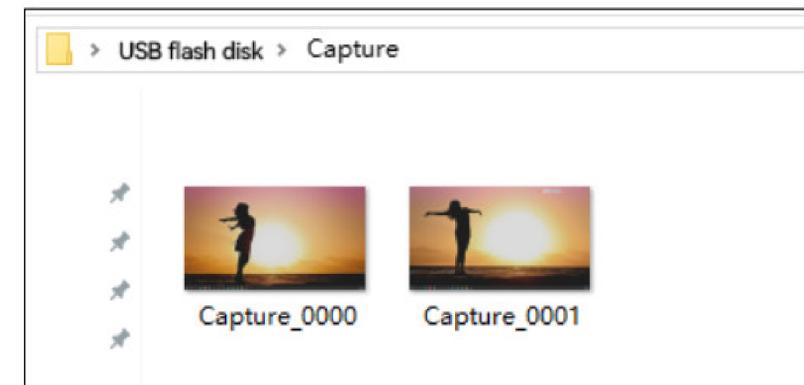
Step 3: Wait for Image Overlay



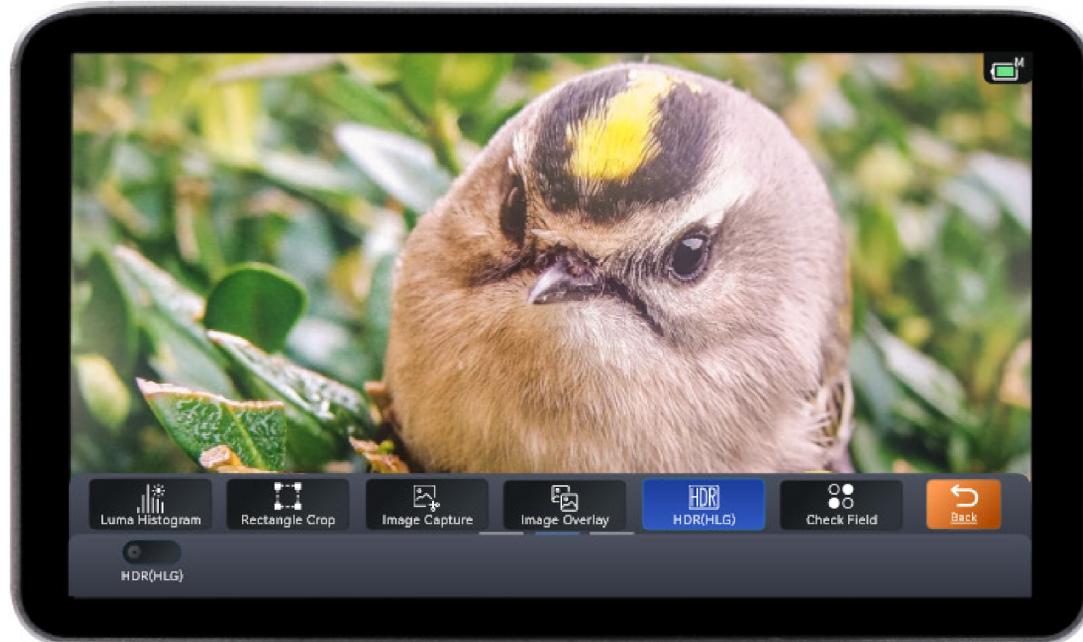
Step 4: Image Overlay is finished.



Users can add their own images and store them on a USB drive for overlay. Image Requirements: Only 16:9, 1920x1080 with the size not exceeding 1M; otherwise, the image cannot be overlaid.



## 3.11 HDR(HLG)



Before opening

### Introduction of HDR(HLG)

Click on the HDR (HLG) button to enhance the contrast and improve the picture quality.



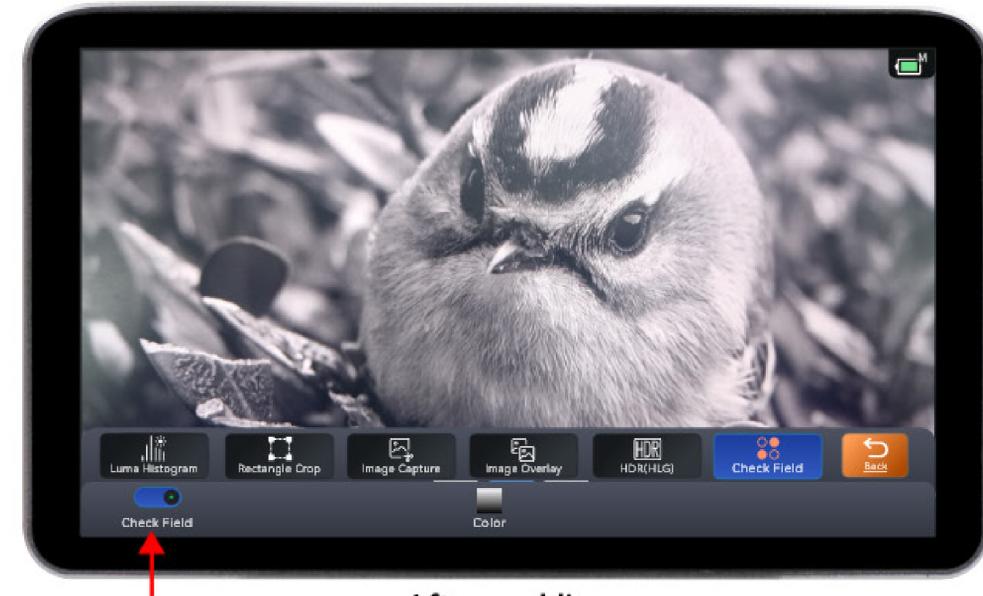
After opening

## 3.12 Check Field



### Introduction of Check Field

Different color overlays can be applied to highlight specific areas or issues in the image.



After enabling

### Check Field-Color

Check Field includes four colors (black and white gradient, red, green, blue). Select the corresponding color frame to adjust the image colors.



# 3.13 Guides

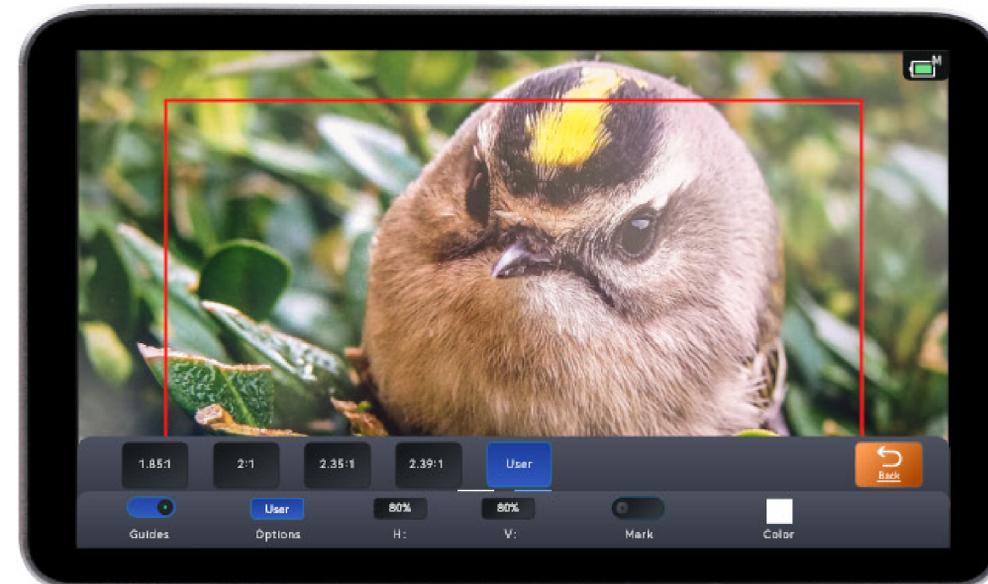
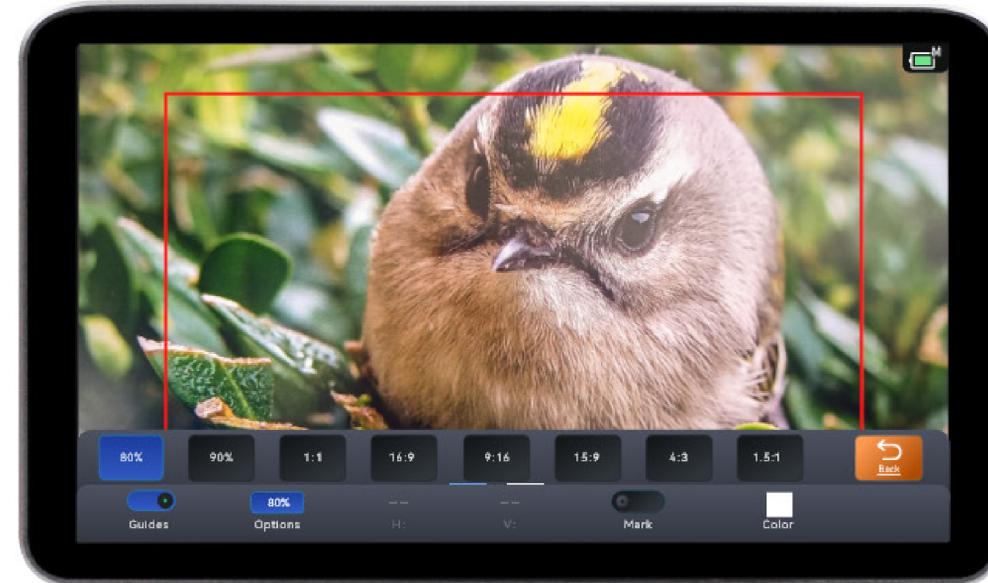


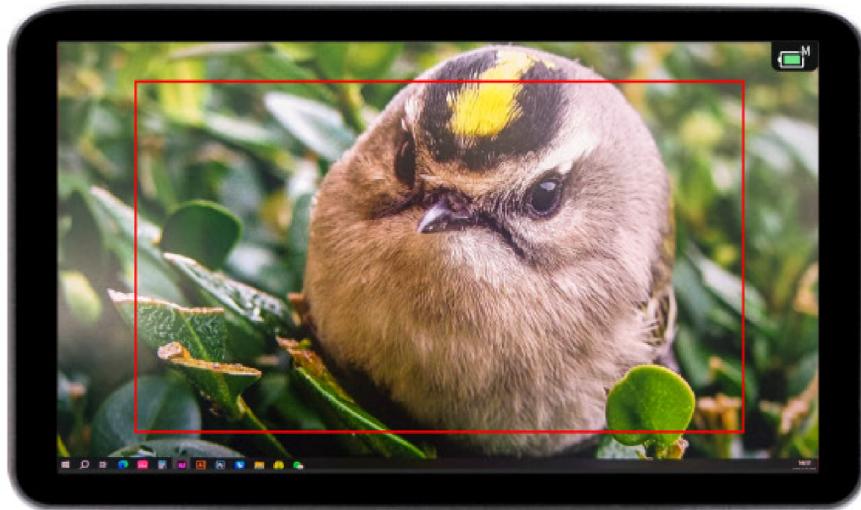
## Introduction of Guides

By displaying different aspect ratios, users can understand the final output format during shooting, ensuring better presentation of important elements in the frame.

## Guides-Option

1. Guide frame includes options for (1.85:1, 2:1, 2.35:1, 2.39:1, custom).
2. Select the corresponding parameters to adjust the frame sizes, or customize the parameters for precise adjustments.

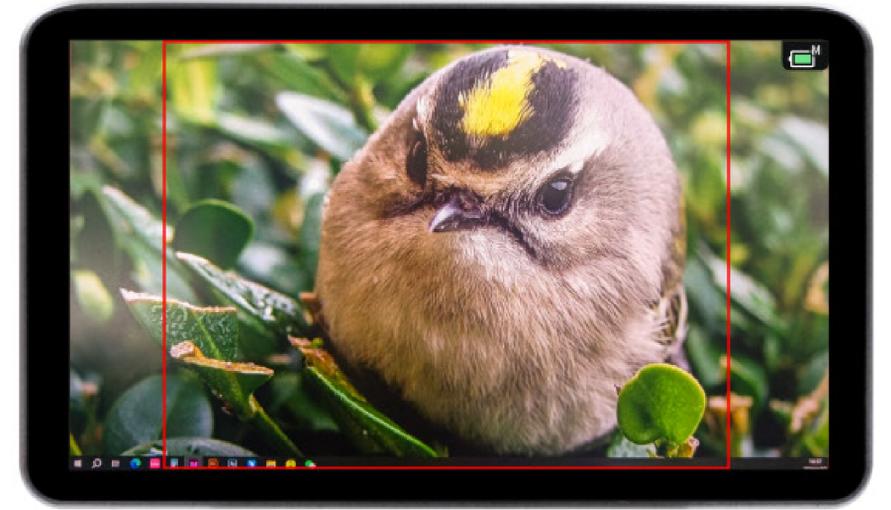




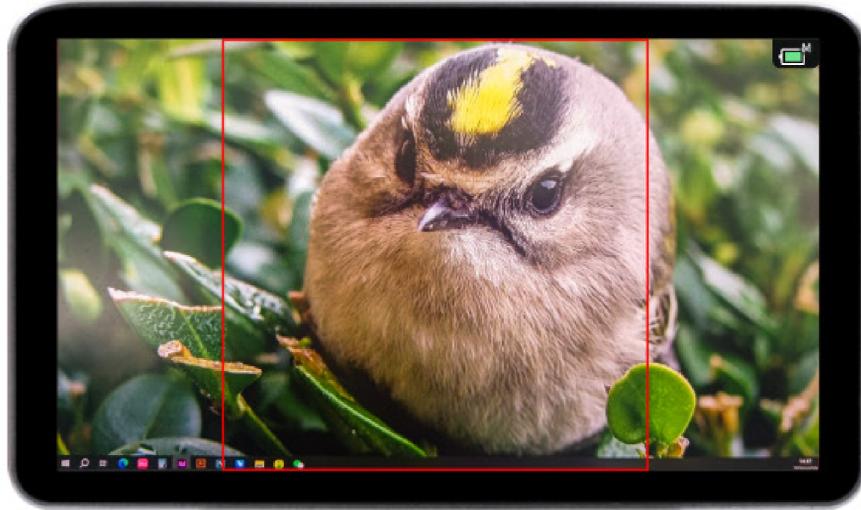
(80%)



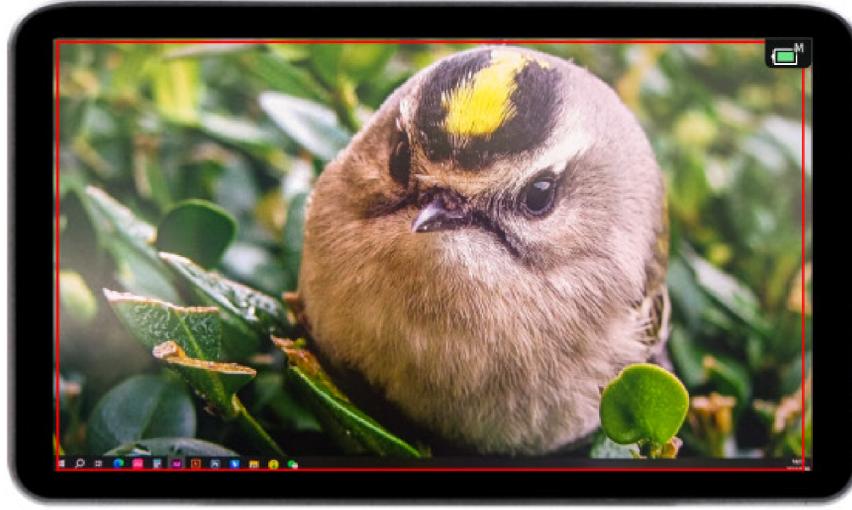
(90%)



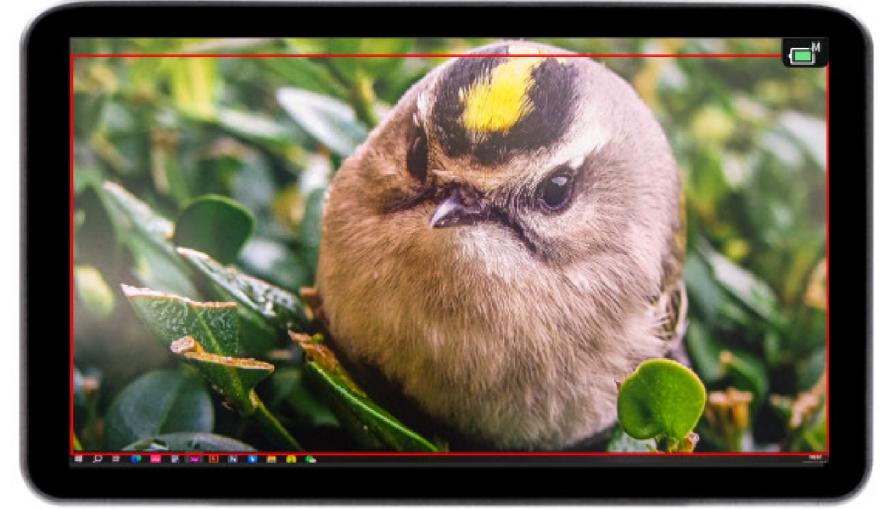
(4: 3)



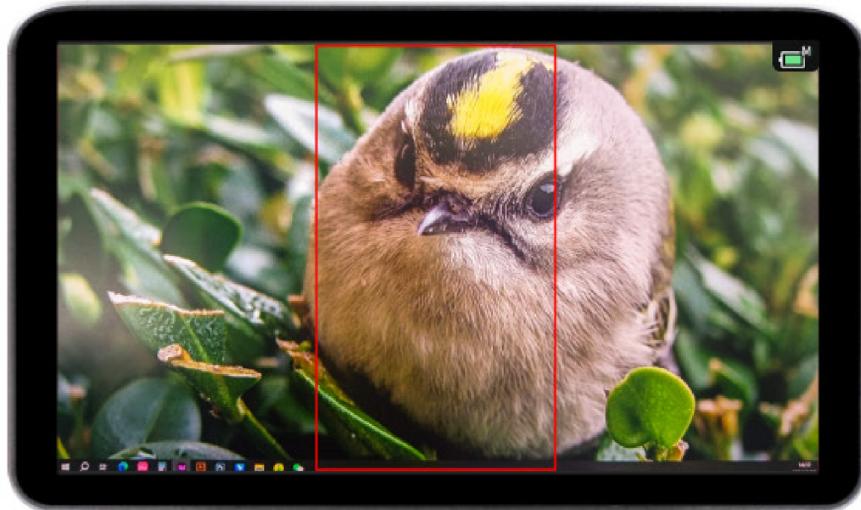
(1: 1)



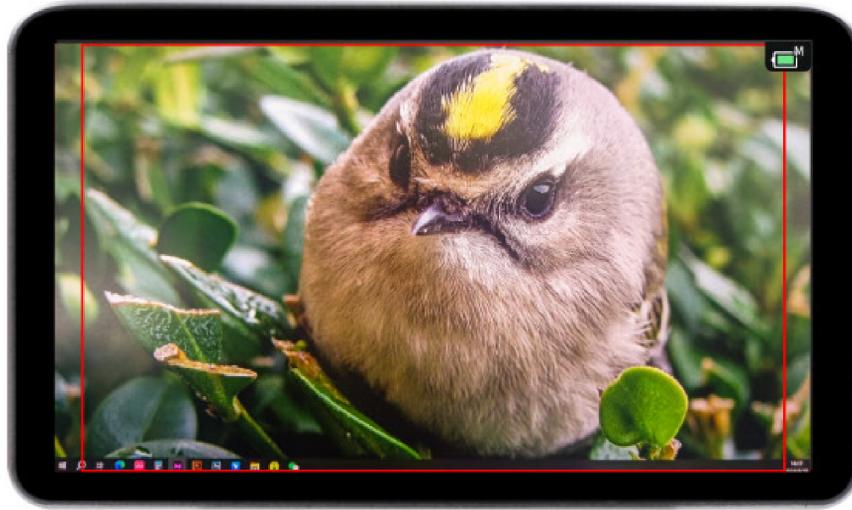
(16: 9)



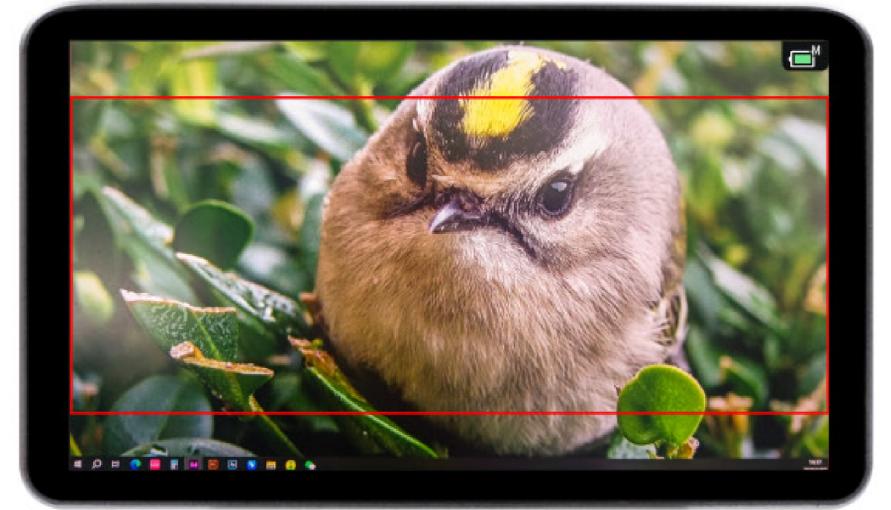
(1.85:1)



(9: 16)



(15: 9)



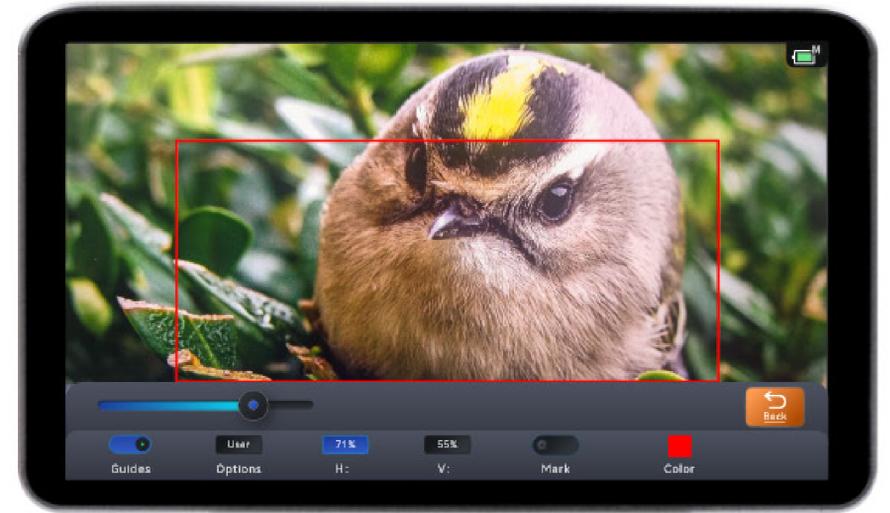
(2.35:1)



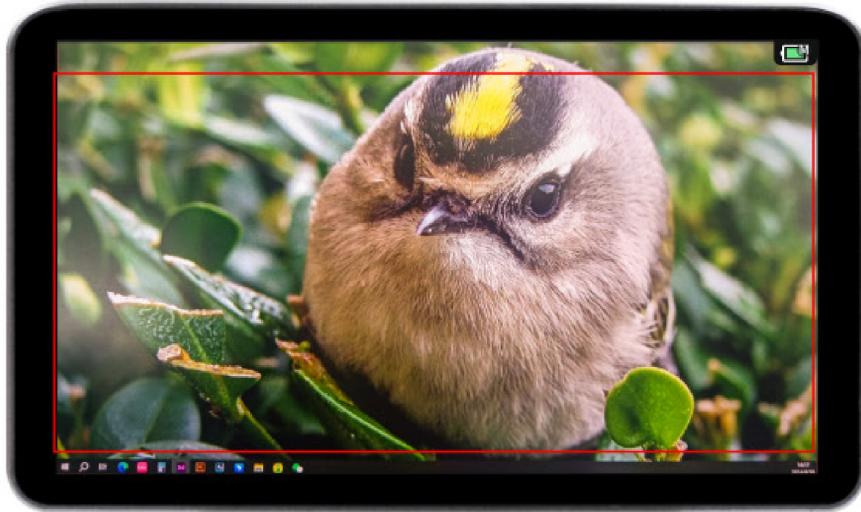
(1.5: 1)



Customised horizontal effects



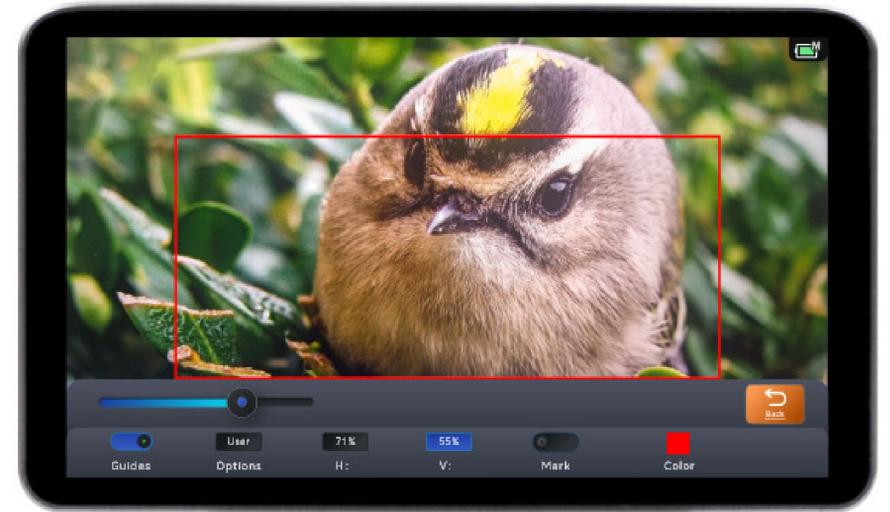
Customised horizontal effects



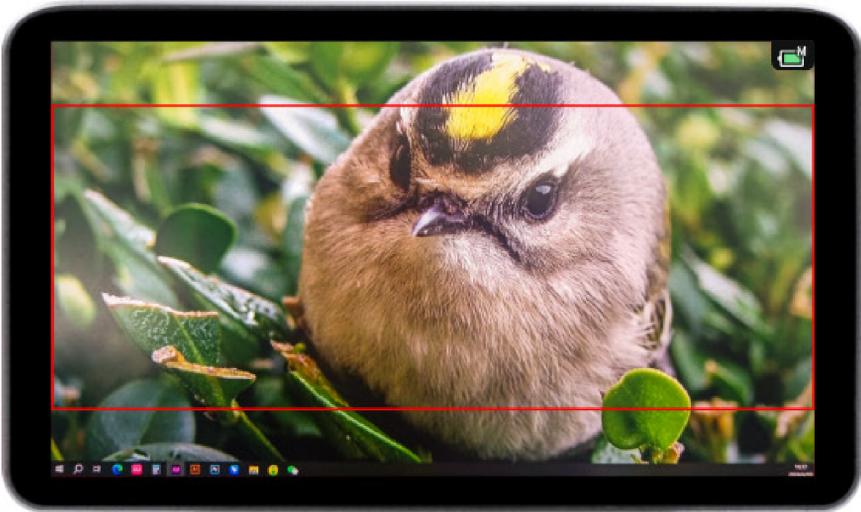
(2:1)



Customised vertical effects



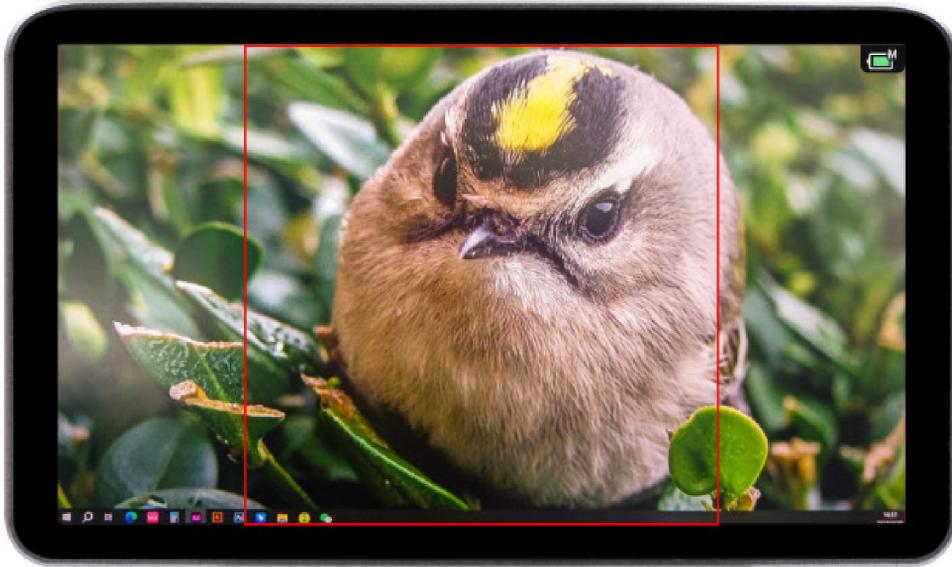
Customised vertical effects



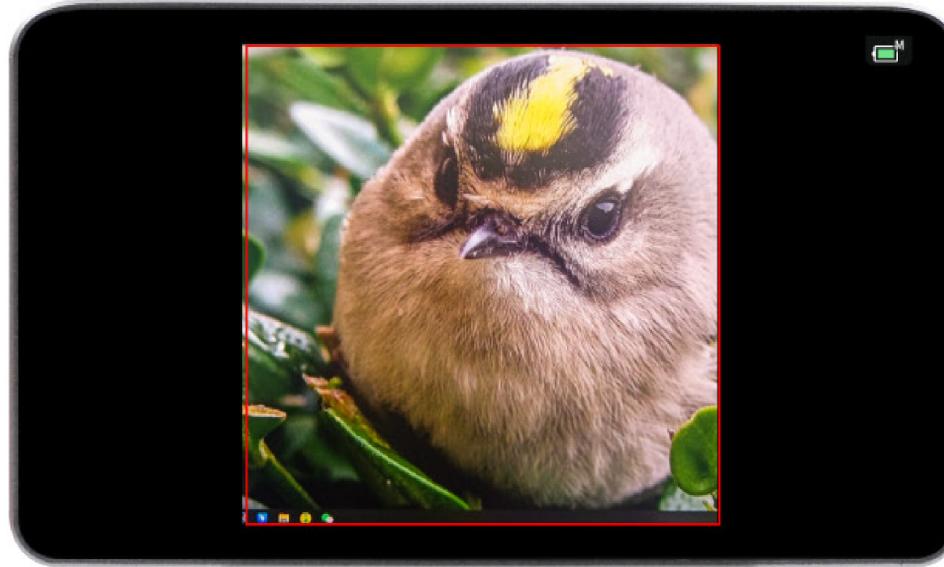
(2.39:1)

## Guide - Marking

After clicking the guide frame button, only the guide frame part will be displayed on the screen



Before marking



After marking

## Guide - Color

Guide frame colors include white, red, green, and blue; select the corresponding color frame to adjust the color.



white



red

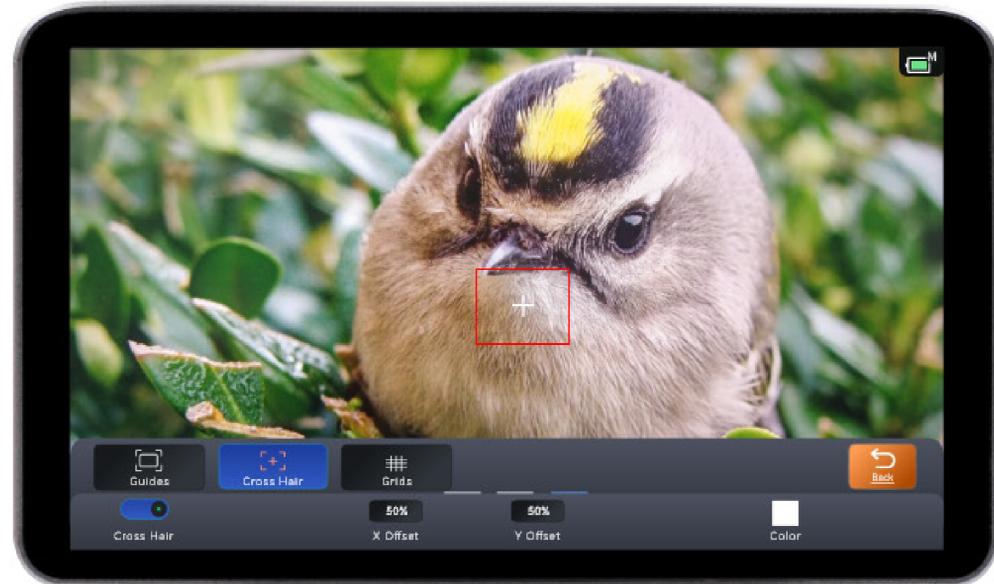


green



blue

## 3.14 Cross Hair

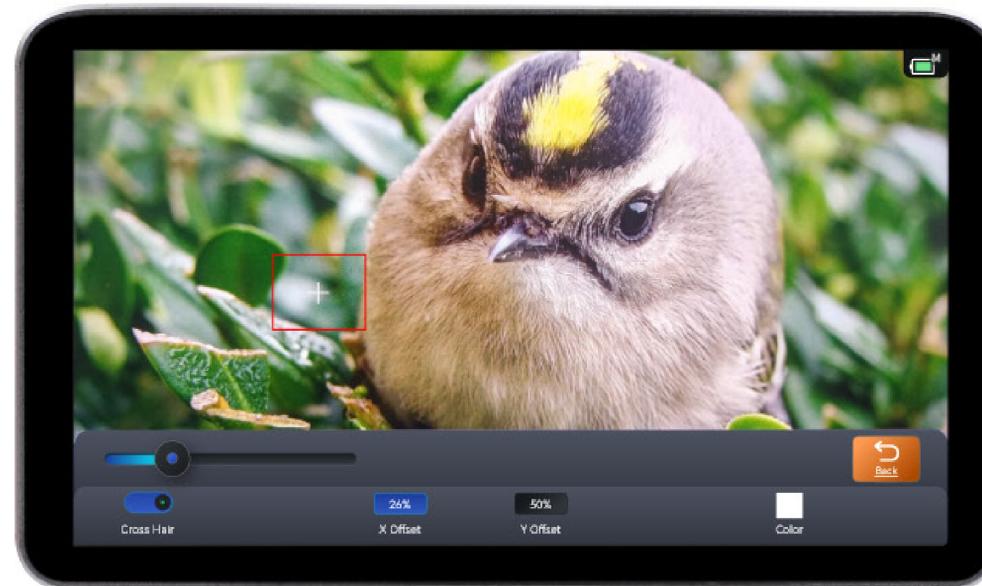


### Introduction of Cross Hair

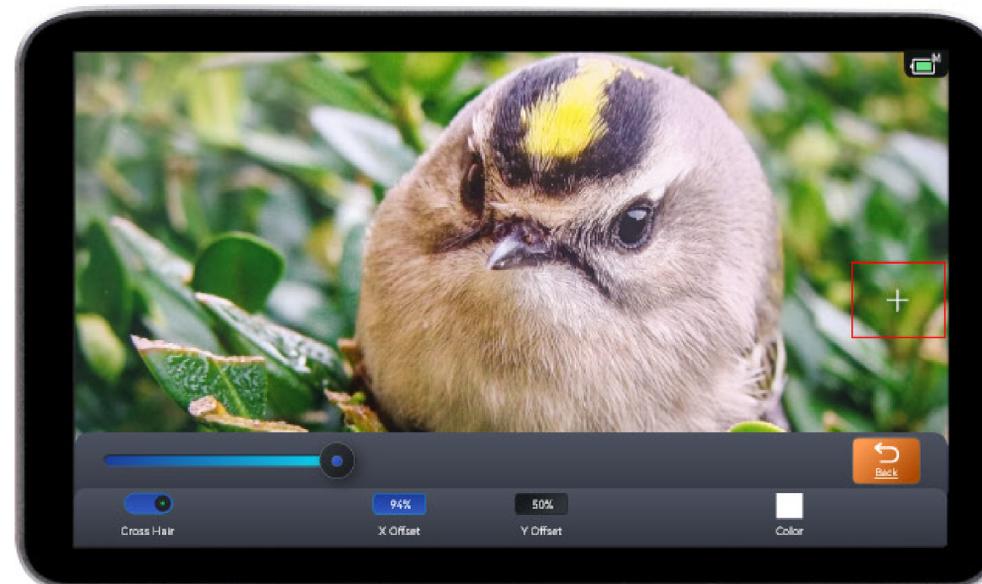
Display a crosshair reference line on the image to help precisely align the subject

### Cross Hair-Horizontal Shift

Move the slider to shift the crosshair left or right.



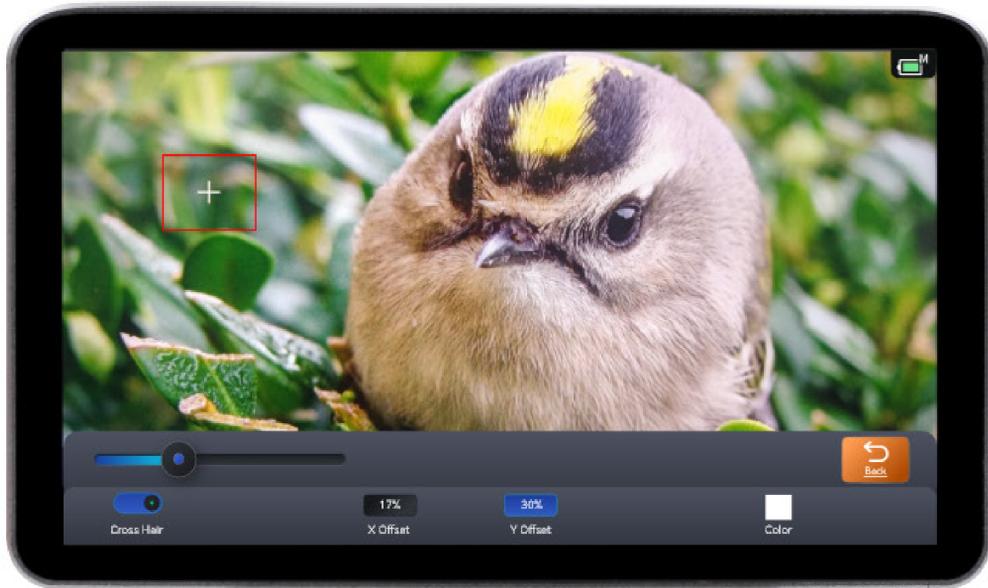
Swipe Left



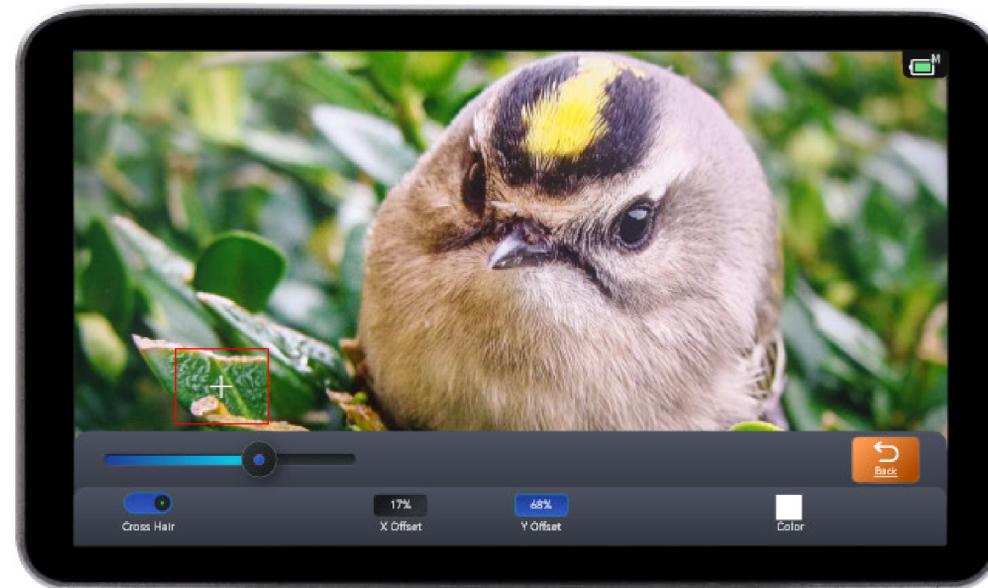
Swipe Right

## Cross Hair-Vertical Shift

Move the slider to shift the crosshair up or down.



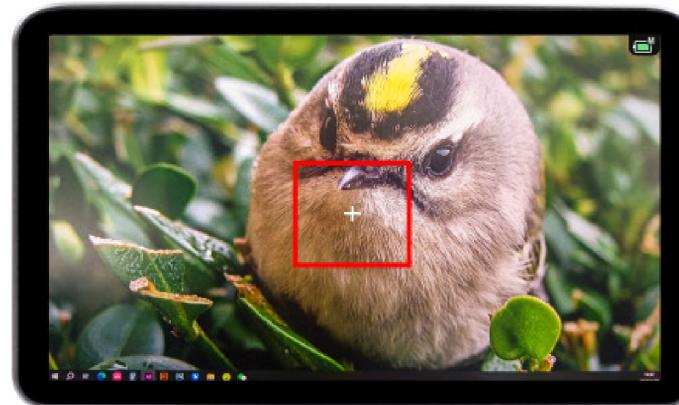
Swipe Left



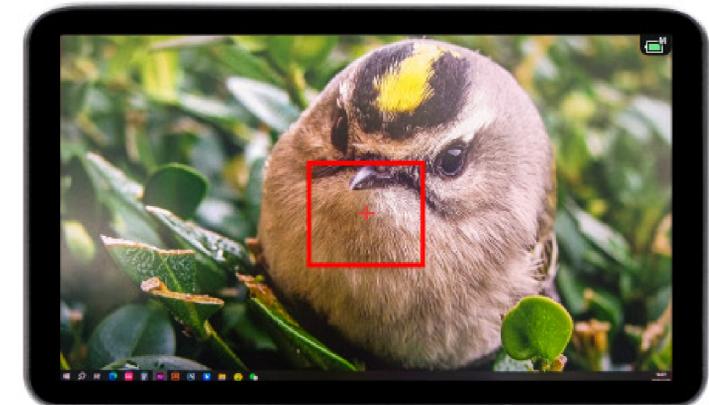
Swipe Right

## Cross Hair - Color

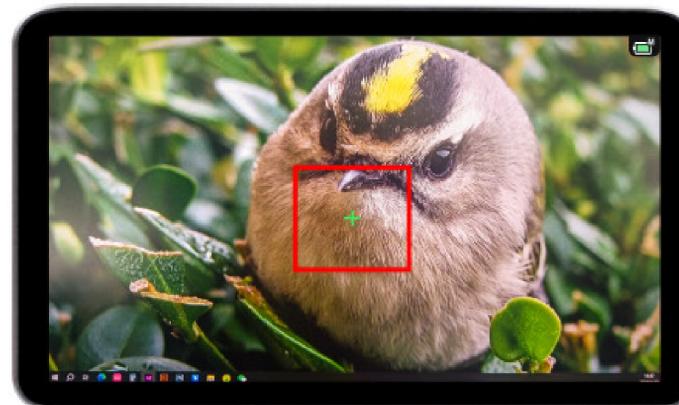
Cross Hair colors include white, red, green, and blue; select the corresponding color frame to adjust the color.



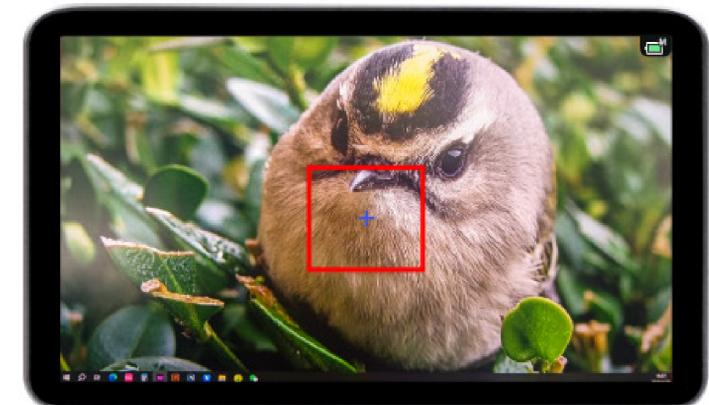
white



red

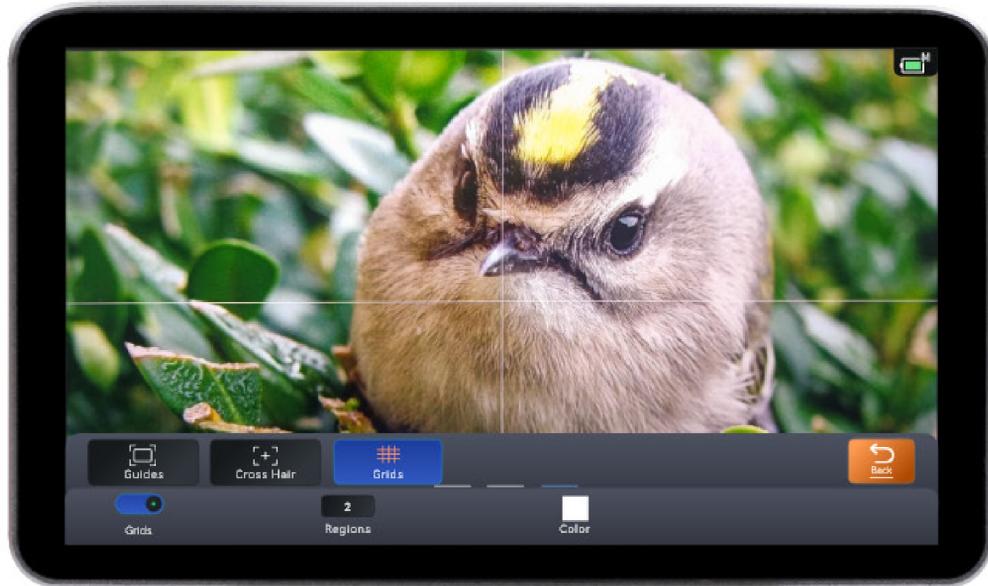


green



blue

## 3.15 Grids

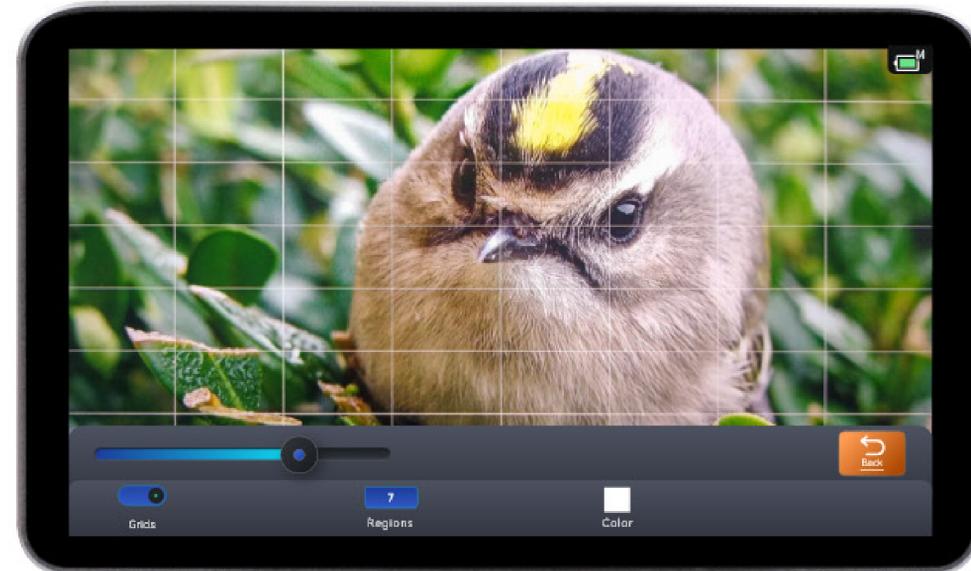
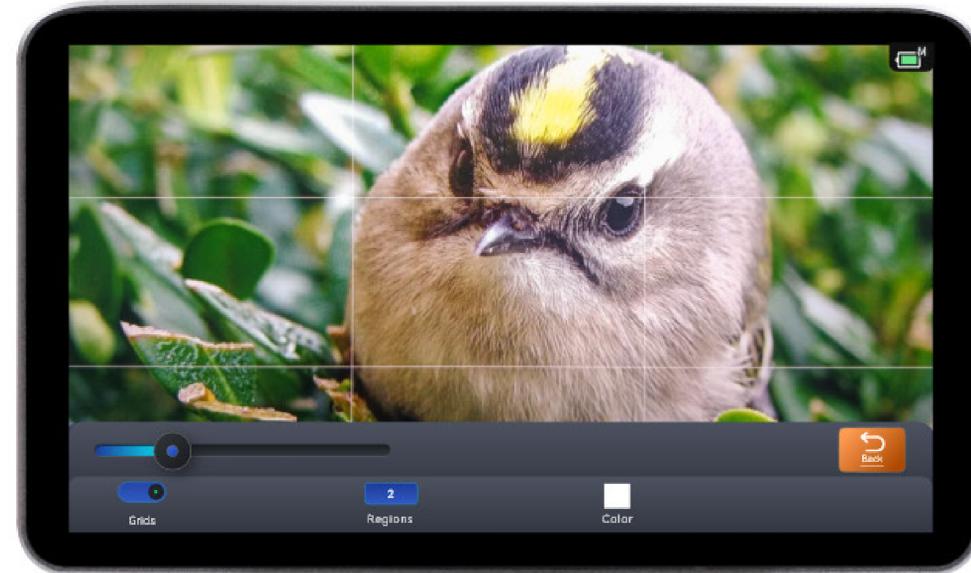


### Introduction of Grids

After enabling the grid, the images are divided evenly, helping users compose their shots more precisely and conveniently.

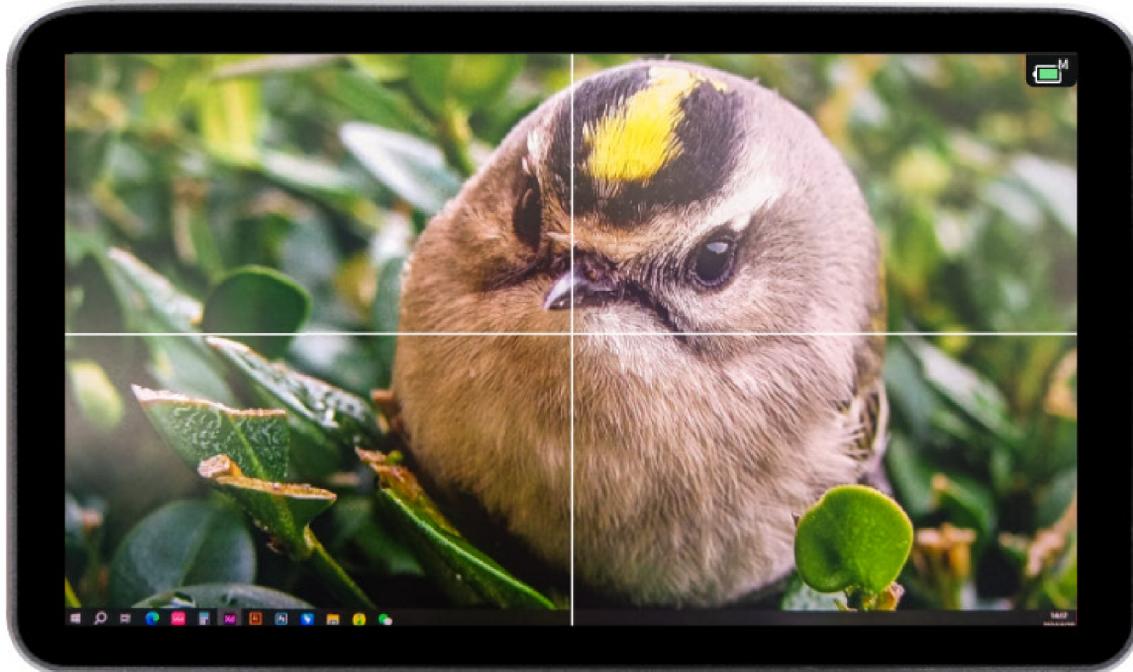
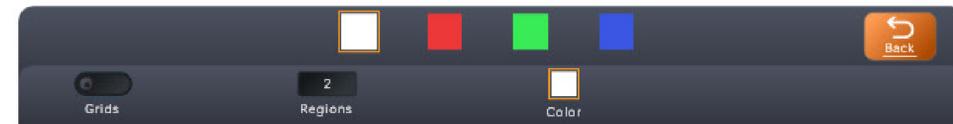
## Grids-Range

Click on the grids range and adjust the slider to increase the number of grids.

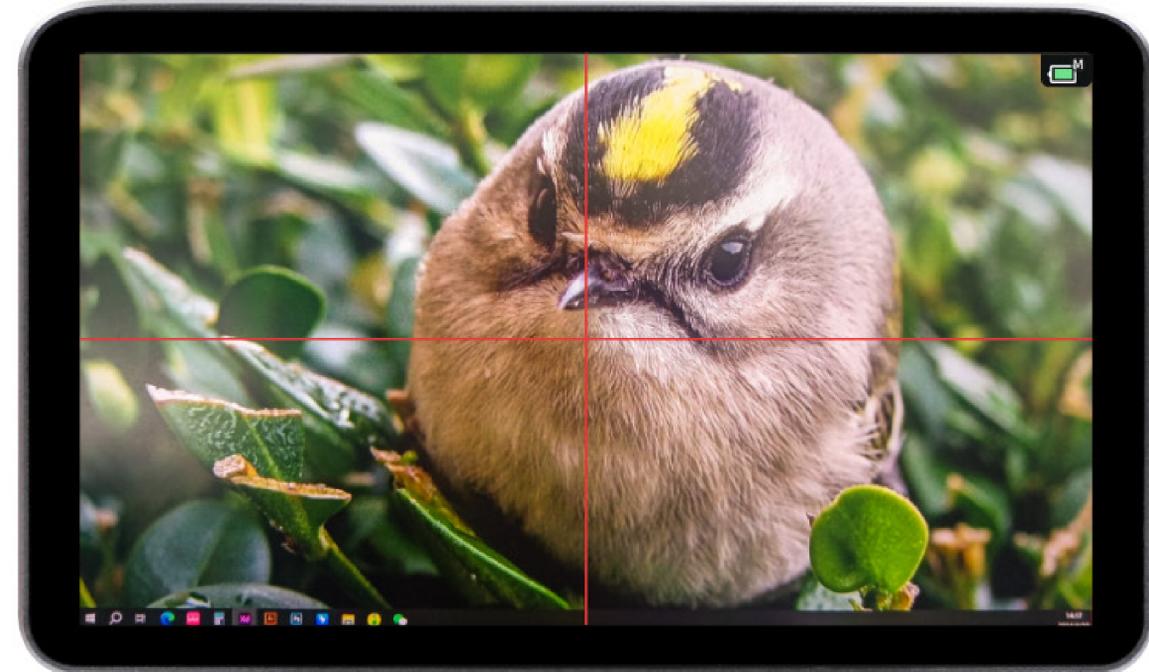


## Grids-colors

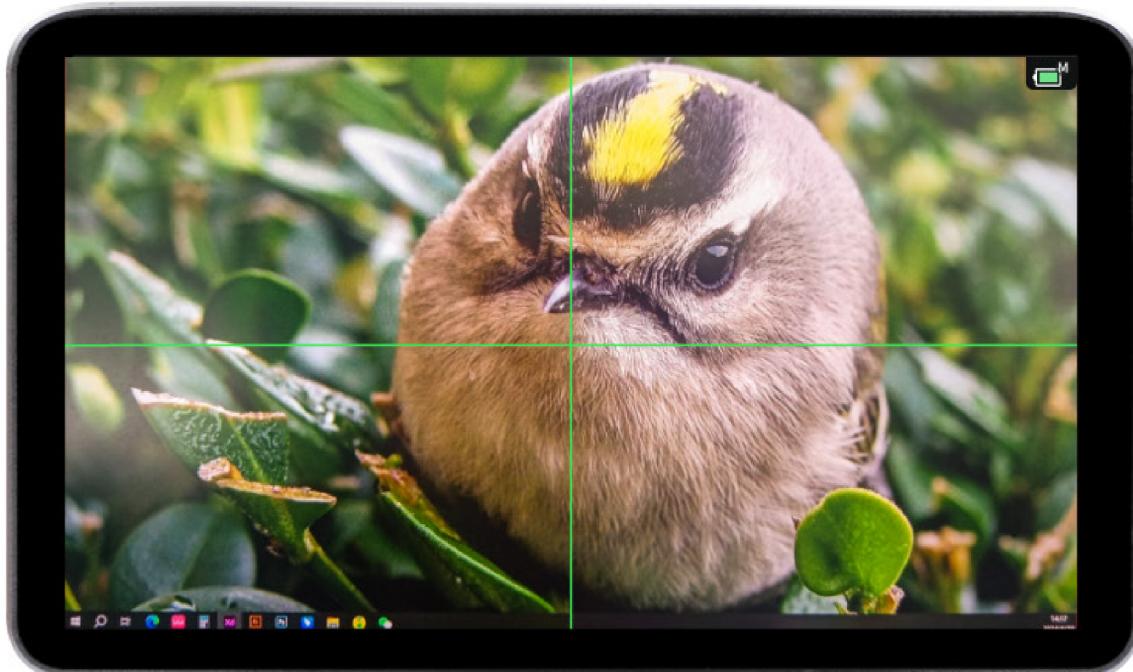
Grid colors include white, red, green, and blue; select the corresponding color frame to adjust the color.



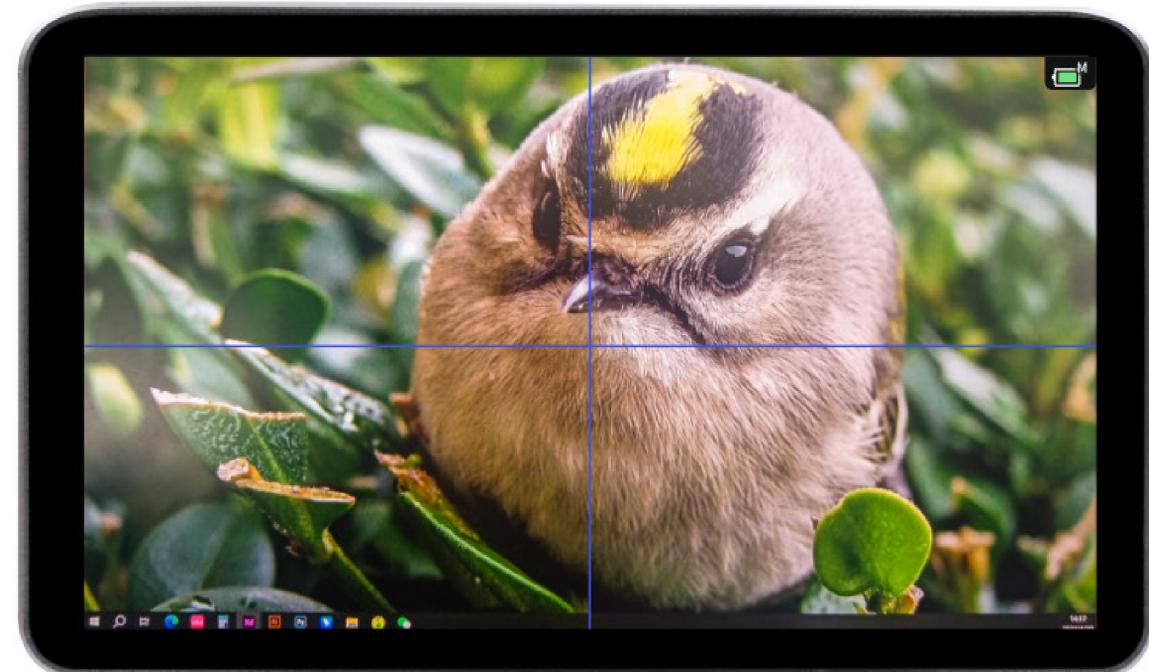
white



red



green



blue

# Settings Introduction

## 4.1 Image



### Introduction of Image

Adjustable image parameters include brightness, contrast, saturation, sharpness, hue, backlight brightness, distortion, and color temperature.

### Image - Brightness



Comparison of Image Brightness Effect



Comparison of Image Brightness Effect

Click the brightness icon to swipe left or right and adjust the brightness, with a range of 0-100.

### Image-Contrast



Comparison of Image Contrast Effect



Comparison of Image Contrast Effect



Comparison of Image Contrast Effect

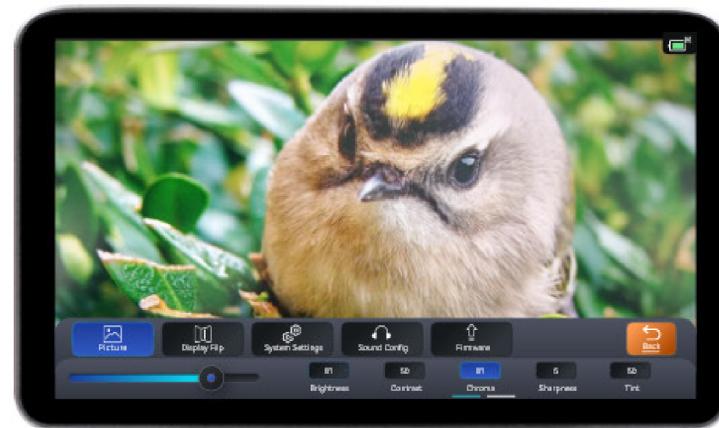
Click the saturation icon, you can move the slider bar left and right to adjust the parameters to control the brightness of the screen, adjustable range of 0-100

## Image-Chroma



Comparison of Image Saturation Effects

Click the saturation icon, you can move the slider bar left and right to adjust the parameters to control the brightness of the screen, adjustable range of 0-100

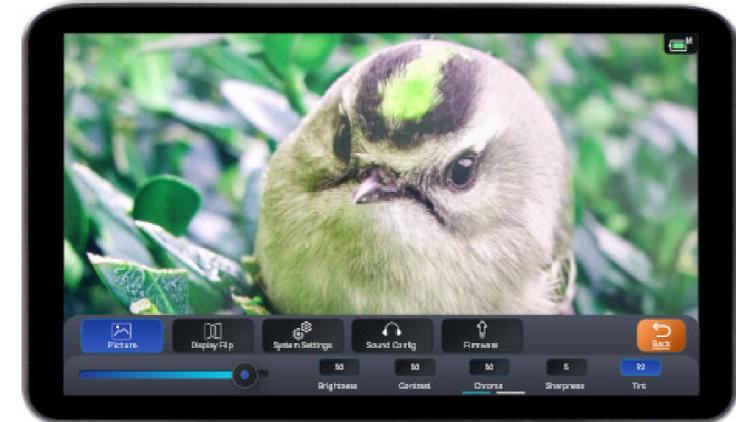


Comparison of Image Saturation Effects

## Image - Tint



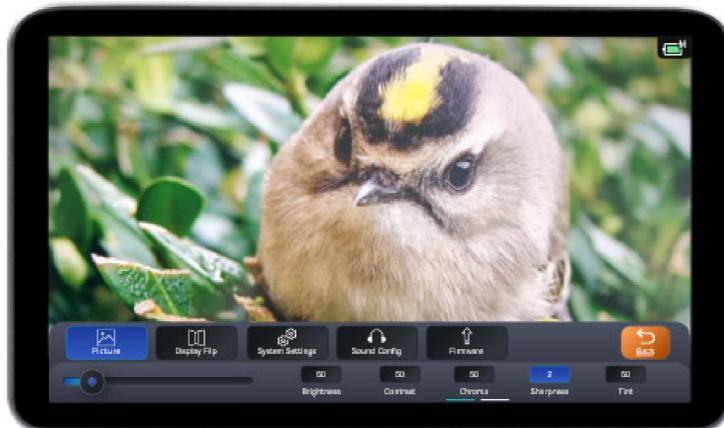
Comparison of image tone effects



Comparison of image tone effects

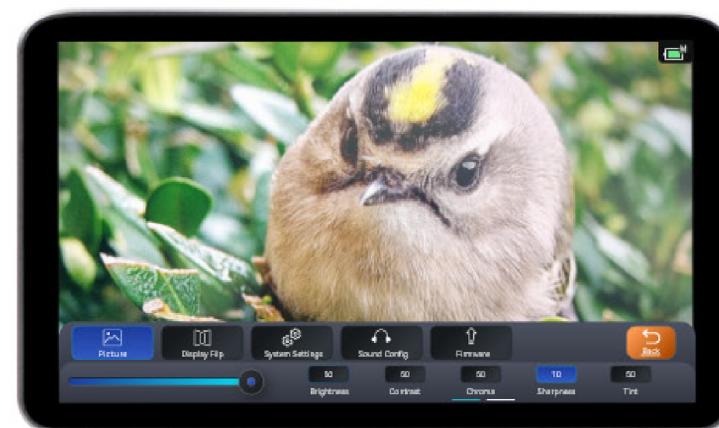
Click the tint icon, you can move the slider bar left and right to adjust the parameters to control the brightness of the screen, adjustable range of 0-100

## Image - Sharpness



Comparison of Image Sharpness Effects

Click the sharpness icon, you can move the slider bar left and right to adjust the parameters to control the brightness of the screen, adjustable range of 0-10



Comparison of Image Sharpness Effects

## Image-Backlight



Comparison of backlight brightness effects



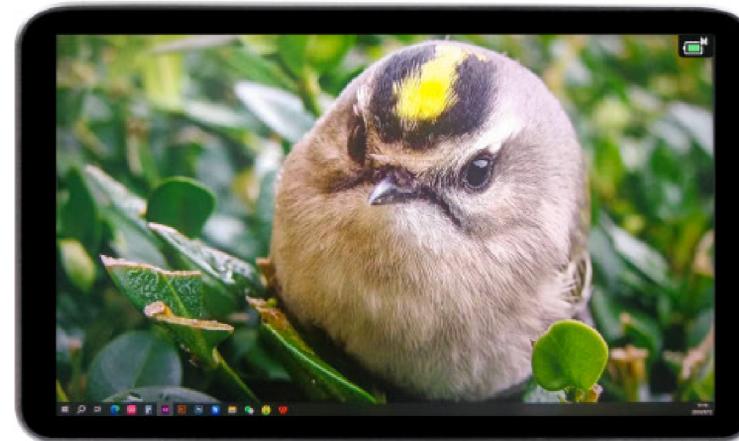
Comparison of backlight brightness effects

Click the backlight brightness icon, you can move the slider bar left and right to adjust the parameters to control the brightness of the screen, adjustable range of 0-100

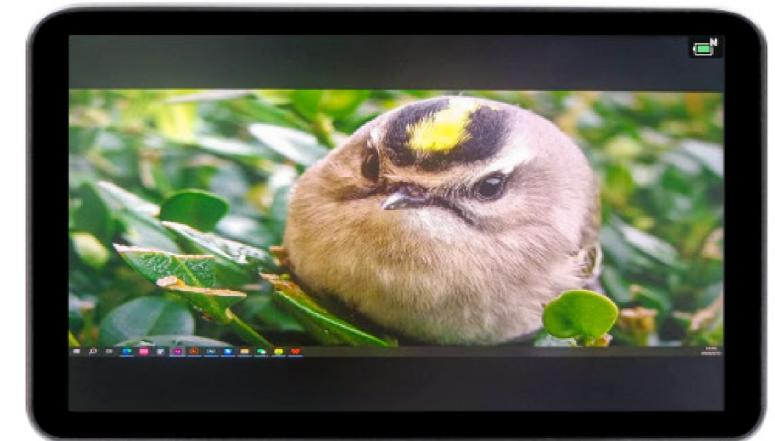
## Image Distortion



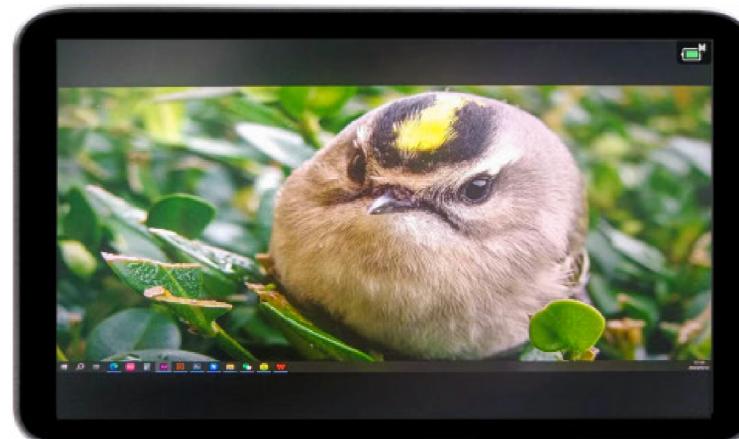
Click the distortion icon to adjust the distortion parameters, modifying the image size with default settings including (1.00X, 1.33X, 1.42X, 1.50X, 1.60X, 1.66X, 1.80X, 1.85X, 2.00X, 2.35X, and custom 4.00X).



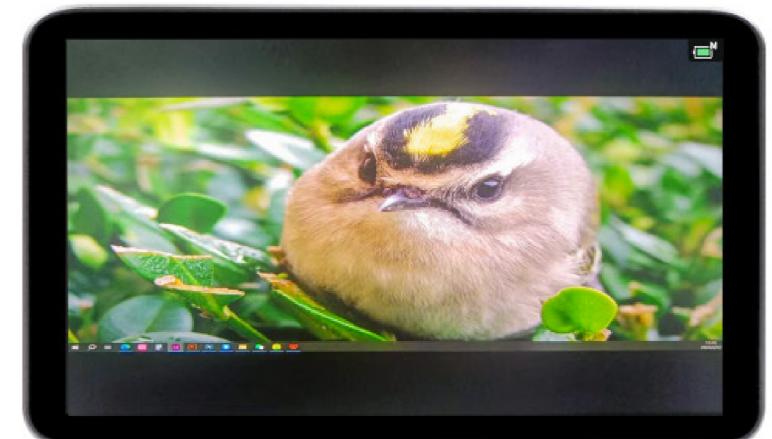
(1.00X)



(1.33X)



(1.42X)



(1.50X)



(1.60X)



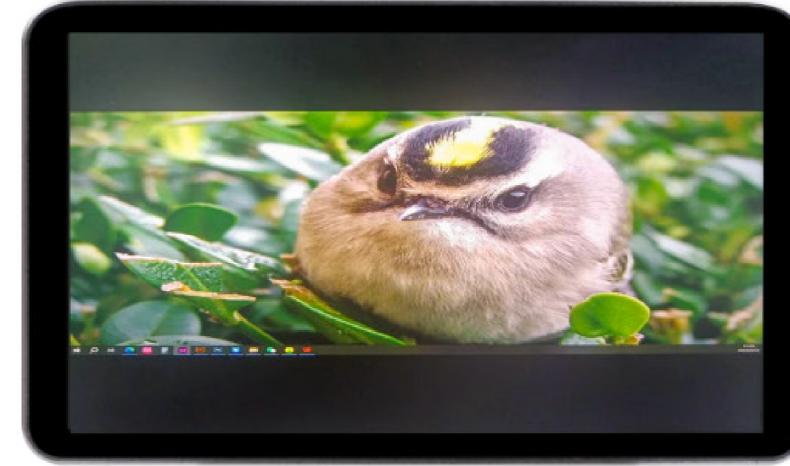
(1.66X)



(1.80X)



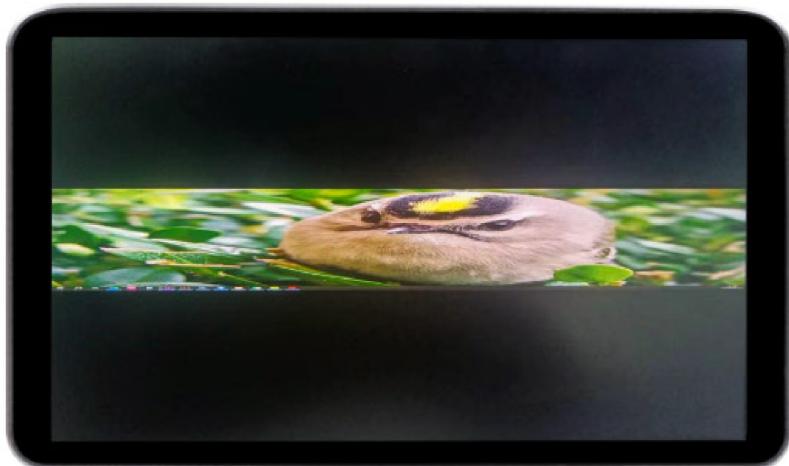
(1.85X)



(2.00X)



(2.35X)



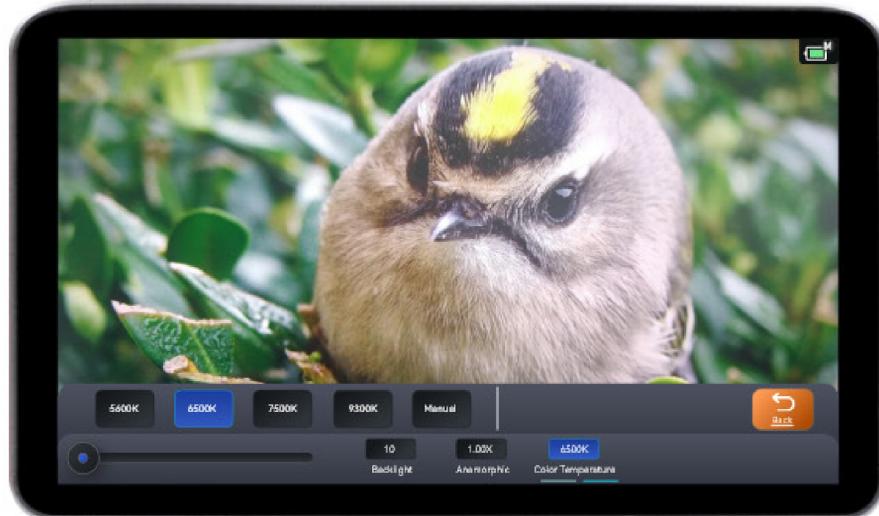
(用户4.00X)

## Image-Color Temperature

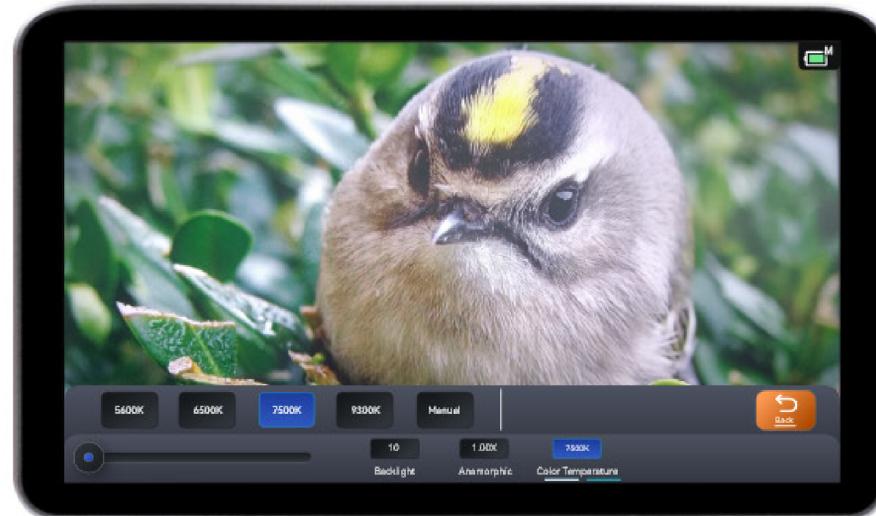


(5600K)

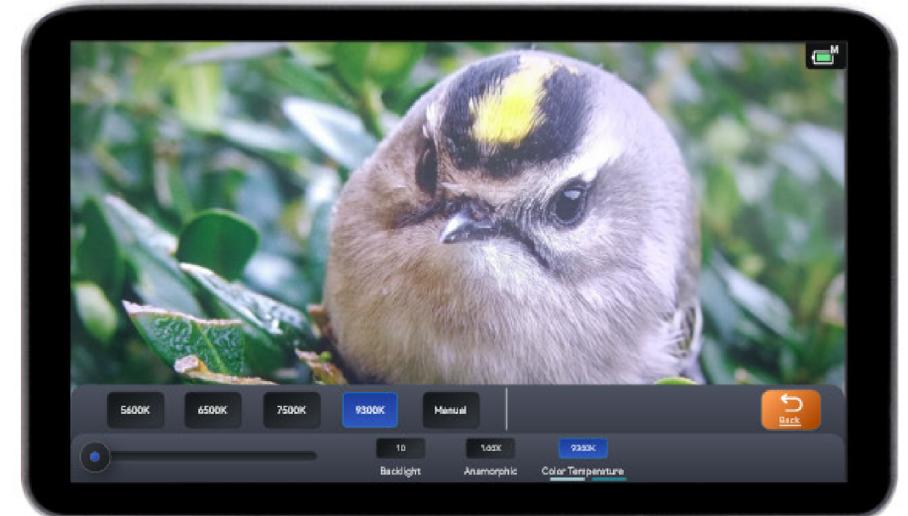
Manually set to customize the image color temperature parameters, the image default color temperature parameters include (5600K, 6500K, 7500K, 9300K, etc.)



(6500K)

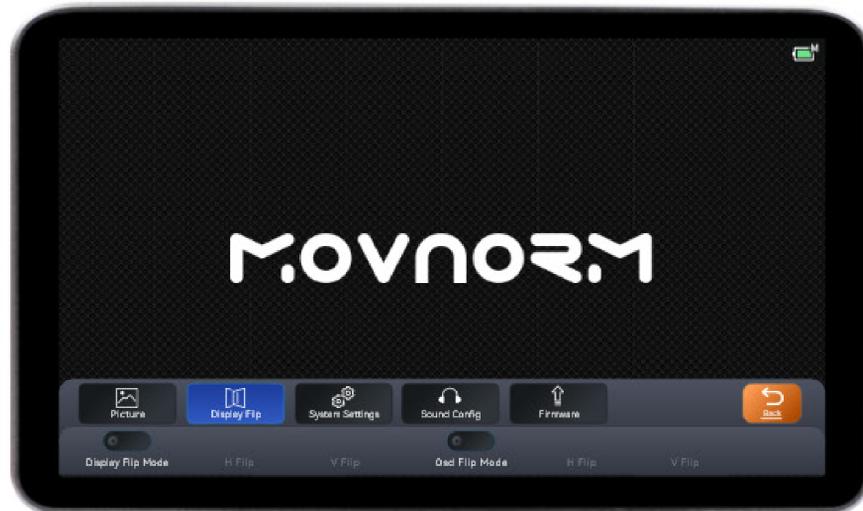


(7500K)



(9300K)

## 4.2 Display Flip



### Introduction of Display Flip

Flip the menu bar or image vertically and horizontally

### Display Flip-Display Flip Mode

Click on the display flip icon, the display flip mode includes Horizontal flip and Vertical flip. Users can choose the flip direction of the menu according to the actual situation



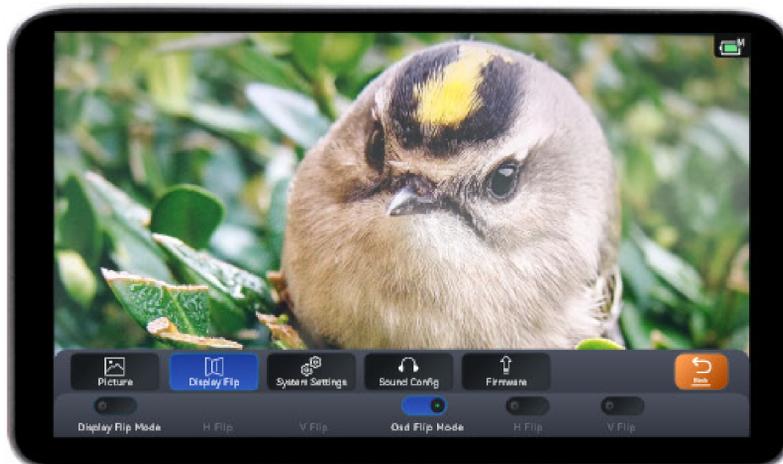
Display Flip Mode-H Flip



Display Flip Mode-V Flip

### Display Flip-Menu Flip Mode

Click on the display flip icon, the display flip mode includes Horizontal flip and Vertical flip. Users can choose the flip direction of the menu according to the actual situation

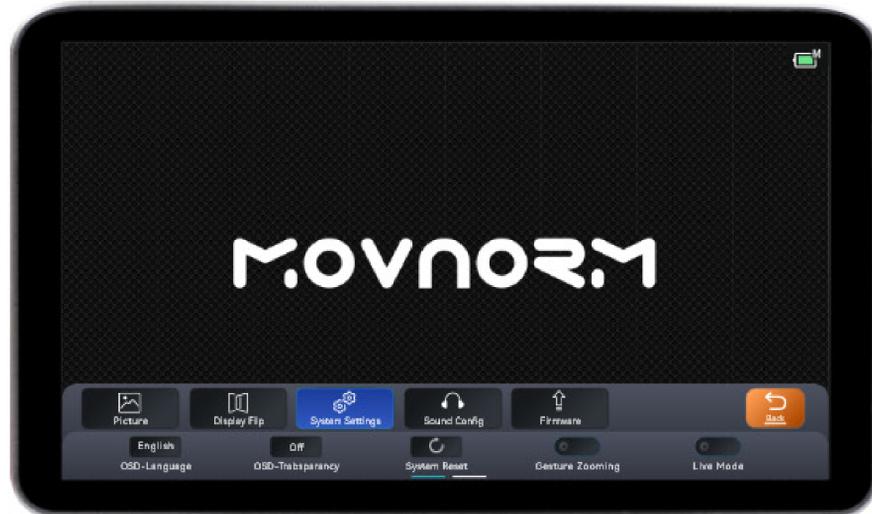


Osd Flip Mode-H Flip



Osd Flip Mode-V Flip

## 4.3 System settings



### Introduction of System settings

System settings include menu language, menu transparency, system reset, gesture zoom, live mode menu effects, and record button position.

### System settings - Menu Language

Click on the menu language to enter the menu language options, the user can choose the appropriate language according to the actual situation, the menu language includes (English, Traditional Chinese, Japanese, Simplified Chinese, Russian, French, Spanish, etc.)



English



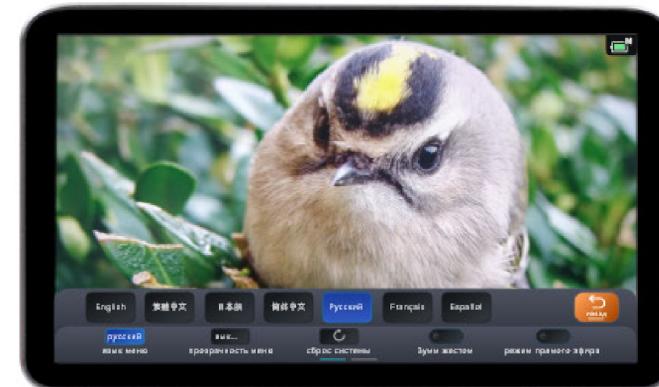
Traditional Chinese



Japanese



Simplified Chinese



Russian



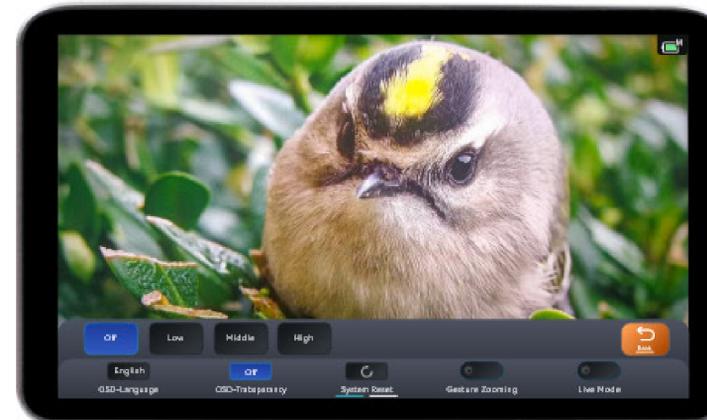
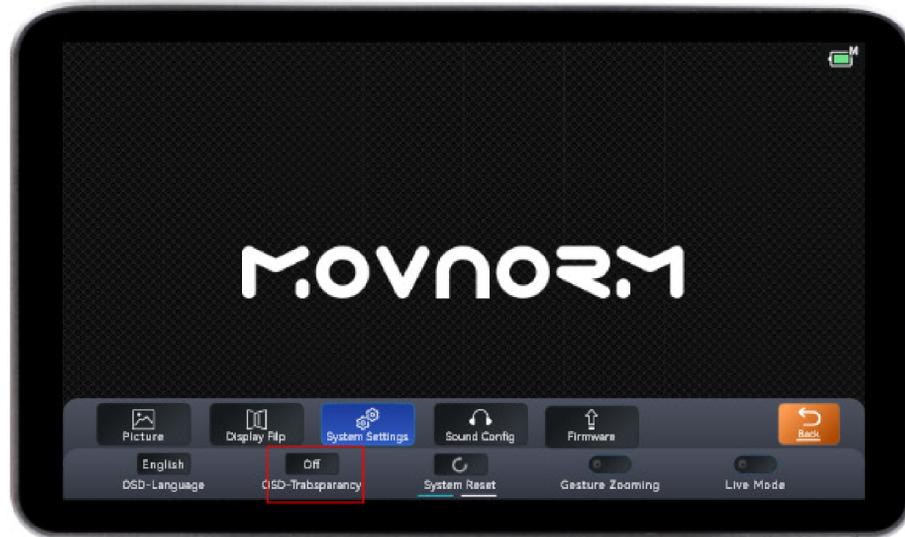
French



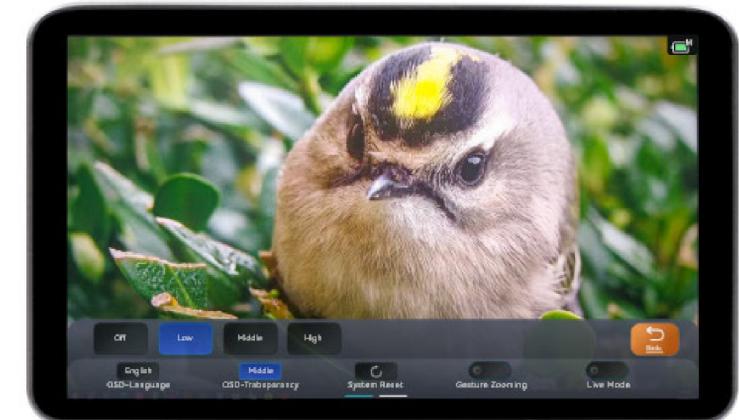
Spanish

## System settings - Menu Transparency

Click on the menu transparency icon, you can adjust the transparency of the menu in the screen changes, menu transparency, including off menu transparency, low menu transparency, menu transparency, high menu transparency, the user can choose according to the actual needs of the situation



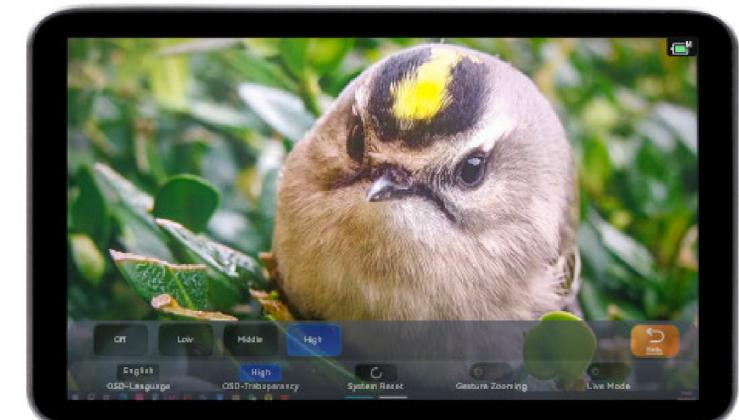
Off



Low



Middle

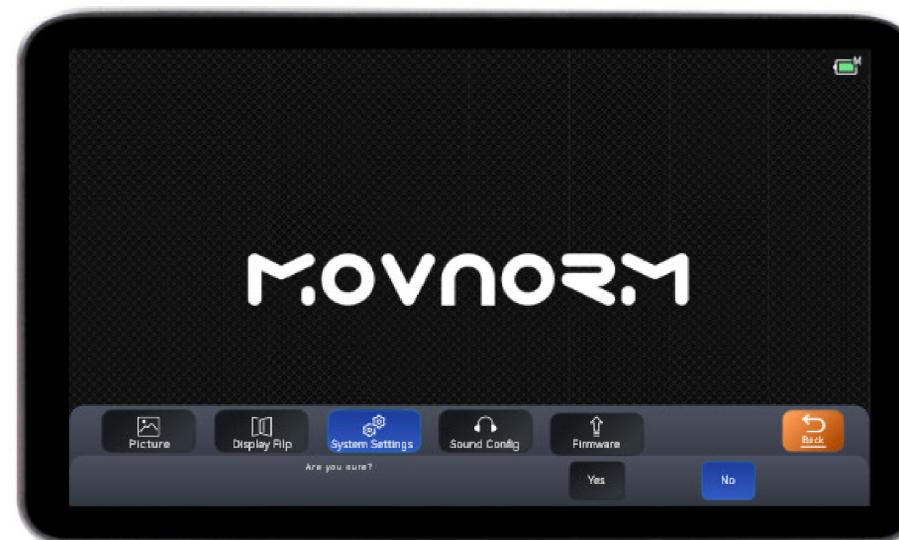
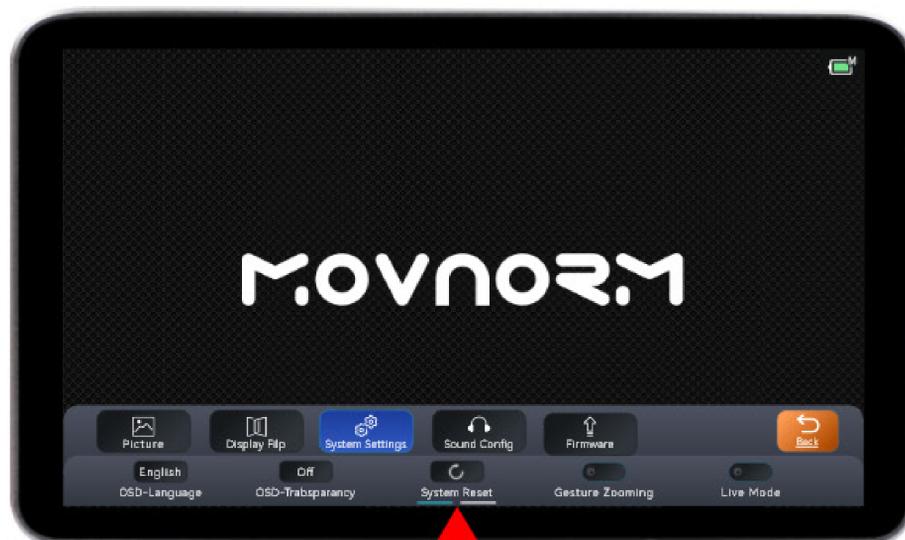


High

## System settings - System Reset

System Reset: Resets the system's initial parameters.

Click on the system reset icon to choose whether to reset the system or not



## System settings - Gesture Zoom

Open the gesture zoom icon, two fingers together and placed on the screen, to both sides of the expansion or contraction can be adjusted to the size of the screen



Before enabling



After enabling

## System settings - Live Mode

When open, you can adjust the image settings after opening the Luminance Waveform; when close, you can turn off the functions of False Color, Luma Waveform (various), Vector Waveform, and Time Code.



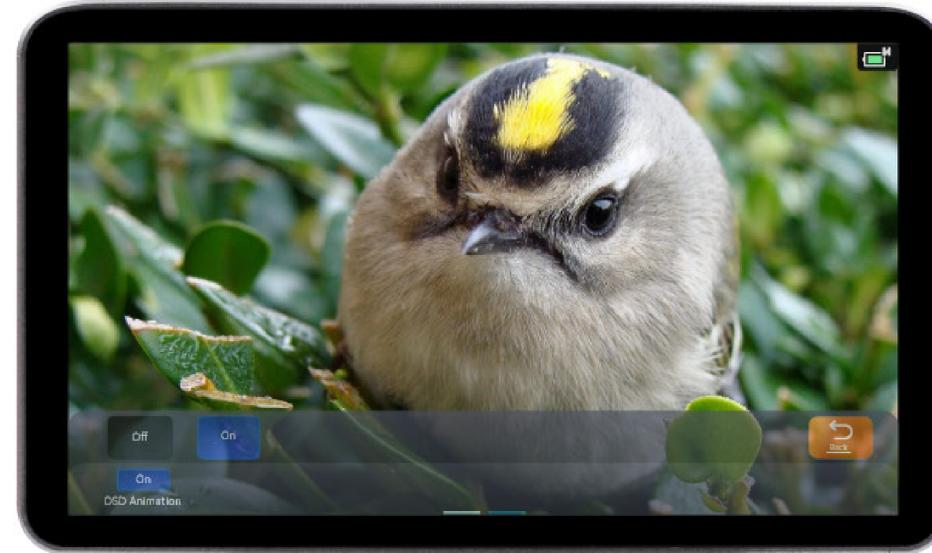
Brightness Waveform



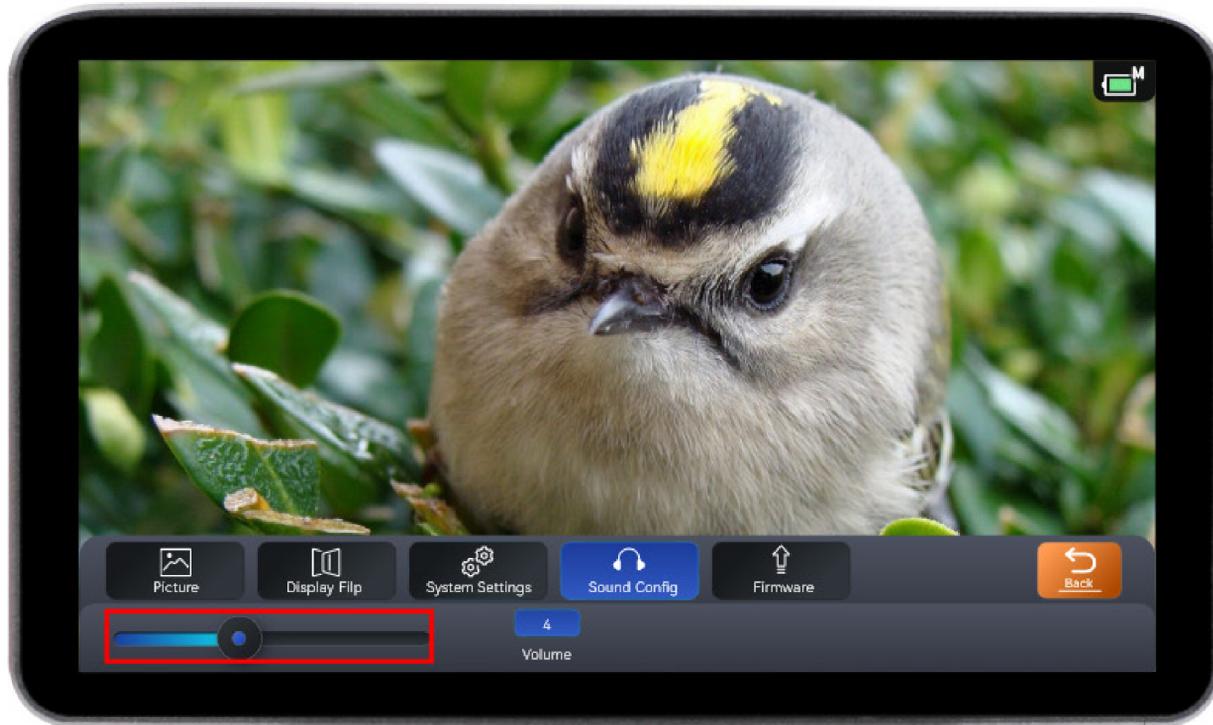
Slide the slider bar left and right to adjust the image parameters

## System Settings-OSD Animation

When the menu effect is turned on, the menu bar toggle screen becomes a fading toggle.



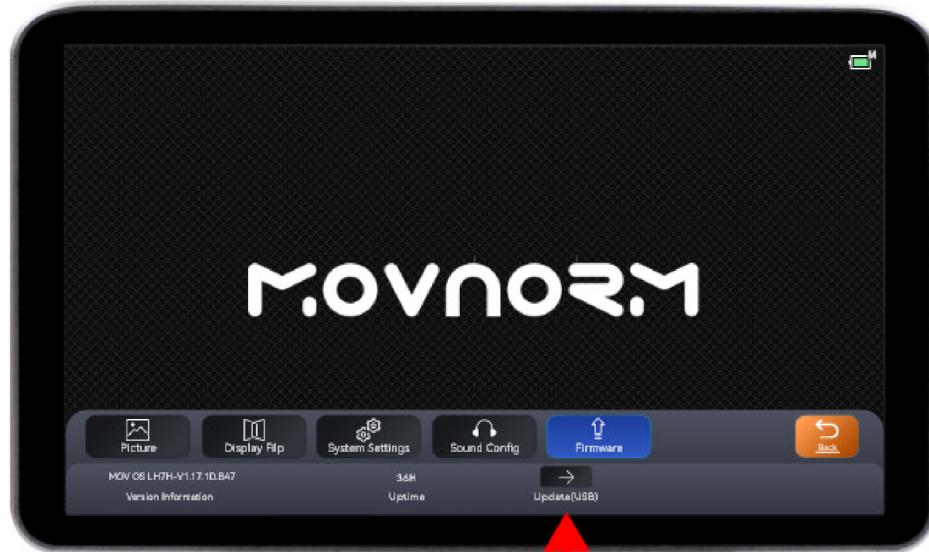
## 4.4 Sound device



### Introduction of Sound device

Adjust the volume by sliding the lever left or right, adjustable range 0-10

## 4.5 Firmware



### Introduction of Firmware

Upgrading the monitor firmware version

### Upgrading the monitor firmware version

Preparation Steps:

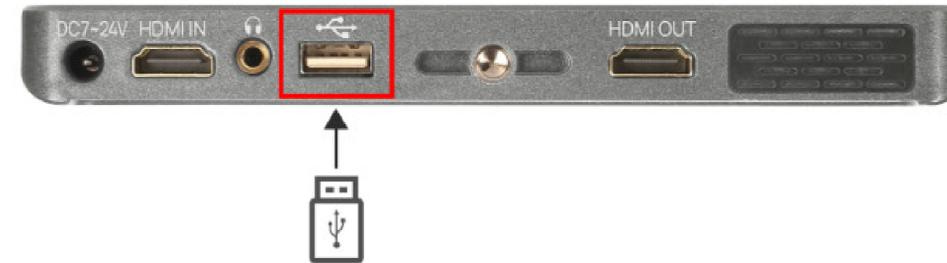
1. Put the firmware upgrade file into the root directory of the USB flash drive
2. Unable to power off during the upgrade process
3. Support FAT, FAT32, EXFAT and NTFS format U disk

Step 1: Unzip the firmware upgrade file and send the upgrade file (LH7H bin) to the root directory of the USB flash drive.

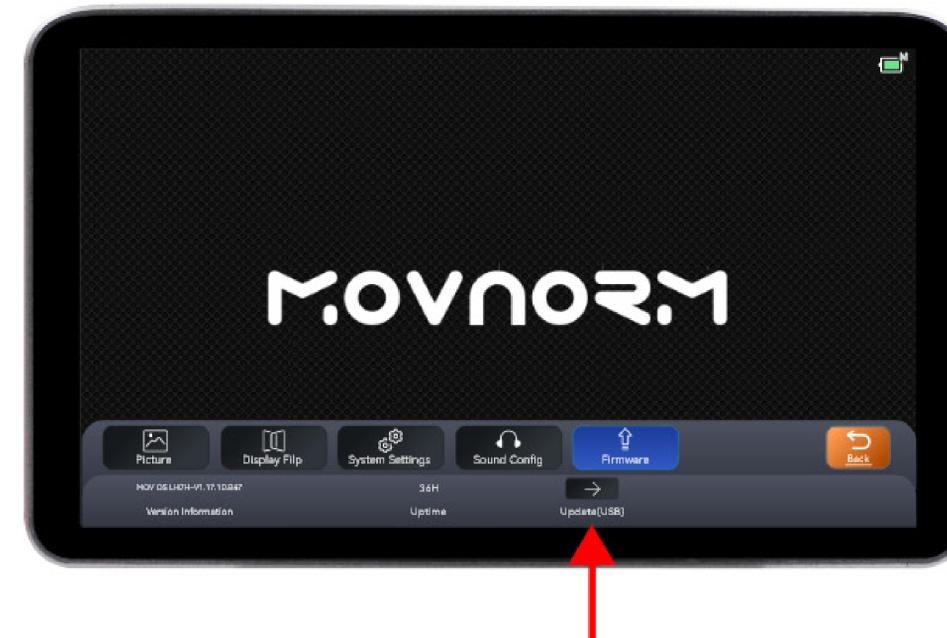
A screenshot of a Windows File Explorer window showing the contents of a USB flash disk (G:). The window title is 'USB flash disk (G:)'. It displays a table with columns for Name, REVISION DATE, Type, and Size. There are two files listed: 'LH7H.bin' and 'MOV\_OS\_PORTKEYS\_LH7HV1\_17\_1D...'.

Name	REVISION DATE	Type	Size
LH7H.bin	2024/1/22 16:00	BIN DOCUMENT	5,088 KB
MOV_OS_PORTKEYS_LH7HV1_17_1D...	2024/4/12 8:48	360 ZIP FILE	4,339 KB

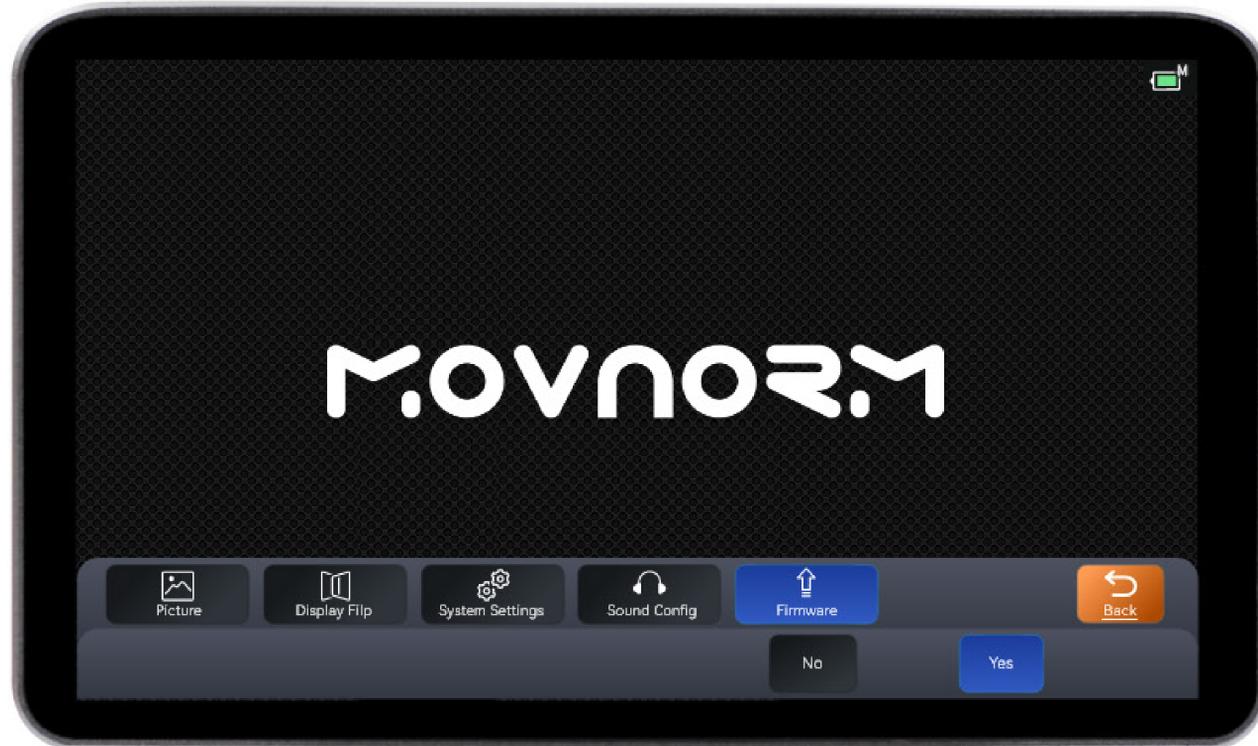
Step 2: Connect the monitor to the power supply and insert the USB flash drive with the upgrade file into the USB-A port on the monitor.



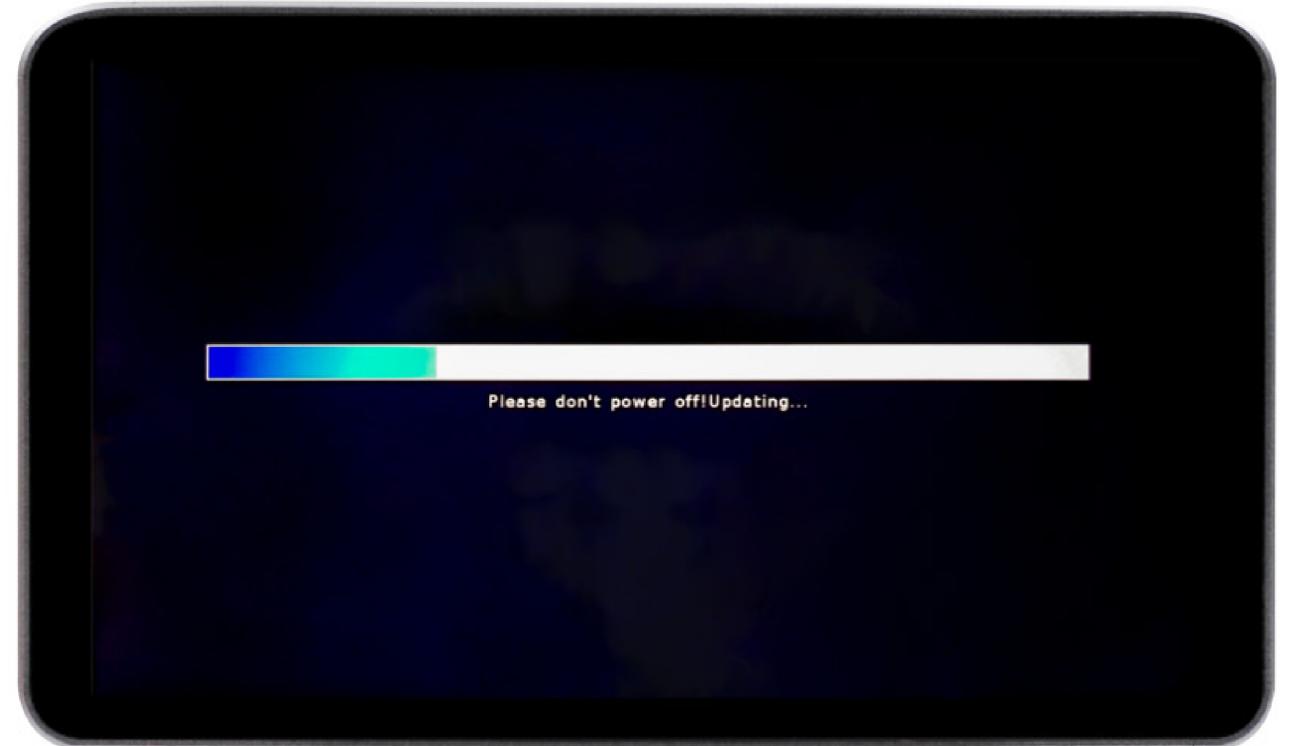
Step 3: Turn on the computer, click "Settings" → "Firmware" → "Software Upgrade (USB)".



Step 4: Select "Yes".



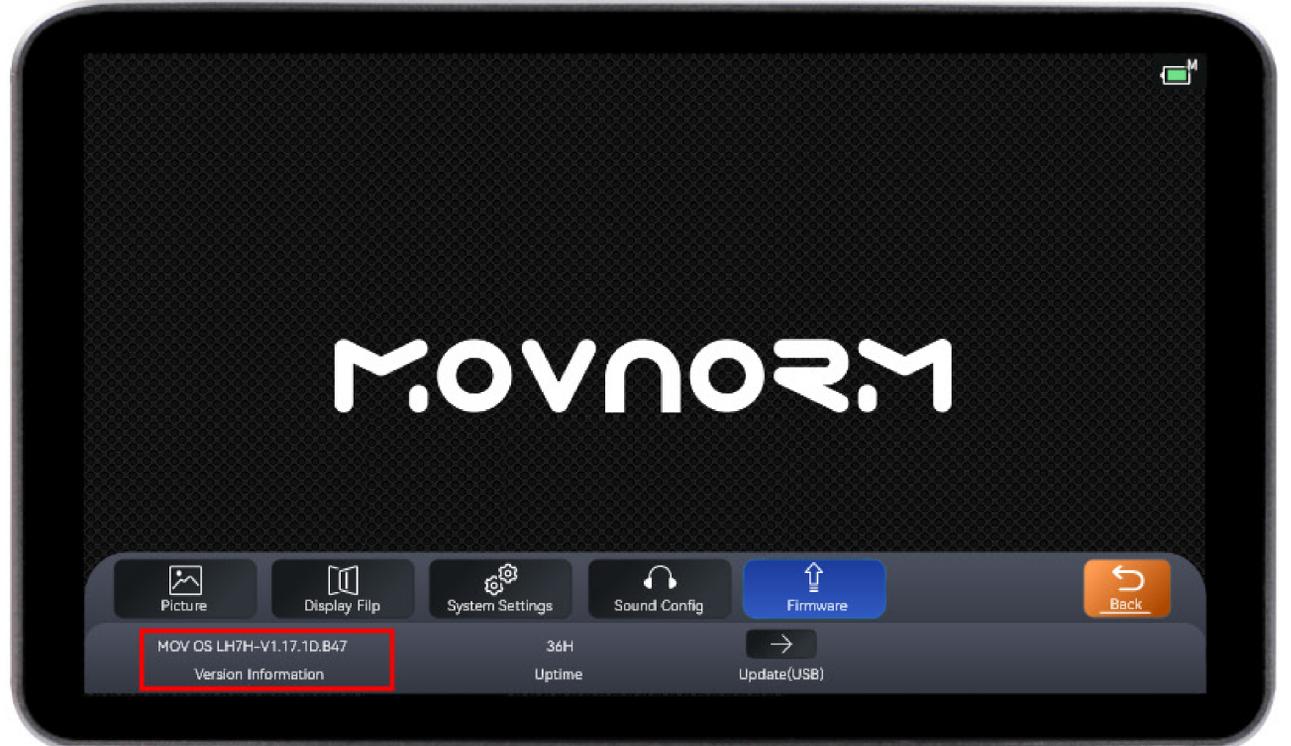
Step 5: Wait for the upgrade to complete



Step 6: Upgrade is complete, the screen into the black screen, the system configuration upgrade, black screen is a normal phenomenon, please do not switch on and off on the way.

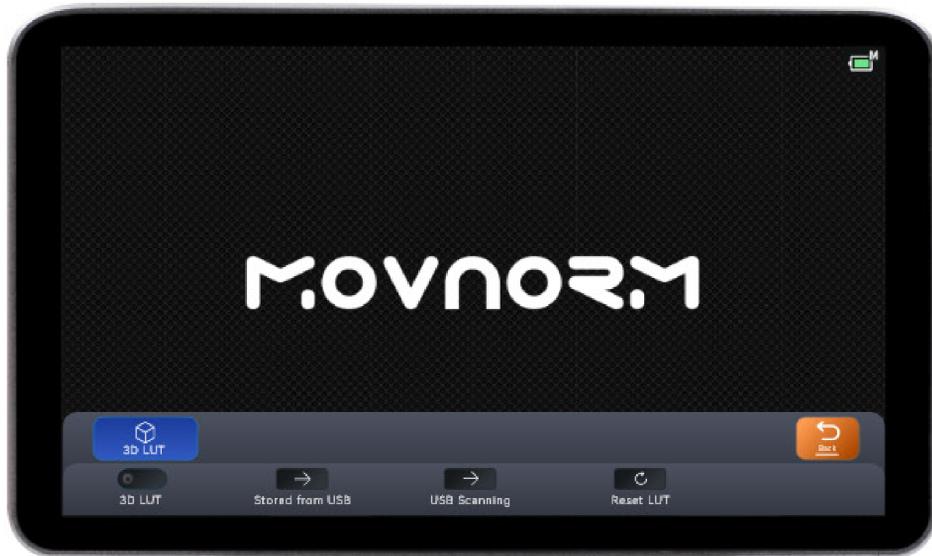


Step 7: After the upgrade is completed, enter the "Firmware" interface and check whether the firmware is upgraded successfully.



# 3D LUT Introduce

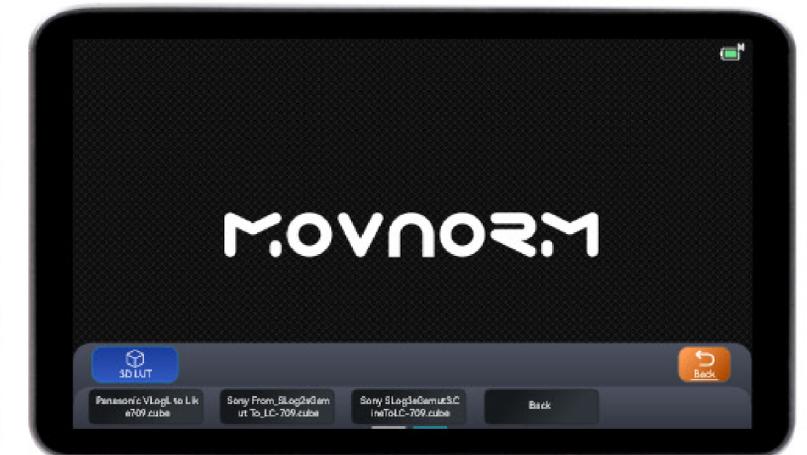
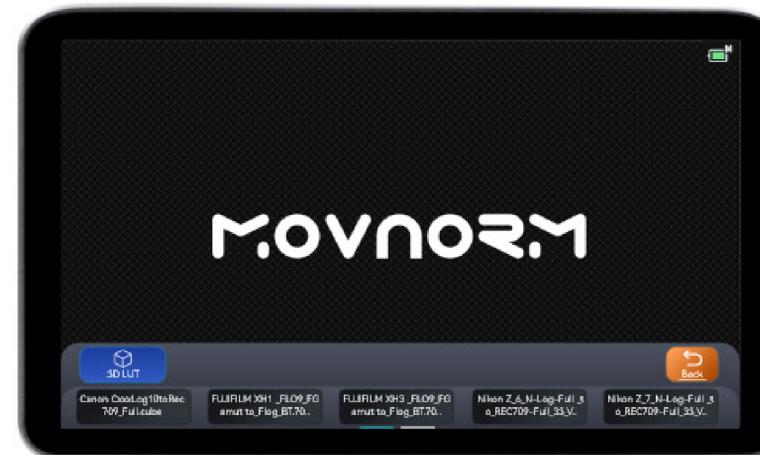
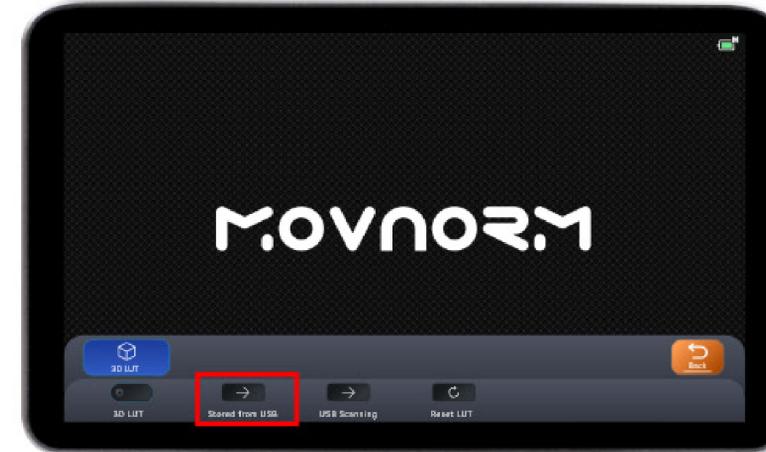
## 5.1 3D LUT



### Introduction of 3D LUT

After opening the 3D LUT, click on the user storage, and then click on the LUT file to apply it to the screen. In the USB search, you need to send the LUT file to the external USB flash drive, connect the USB flash drive to the USB port of the monitor, select the removable disk, and click on the LUT file you need to store. (The LUT file can be re-stored to the user's storage)

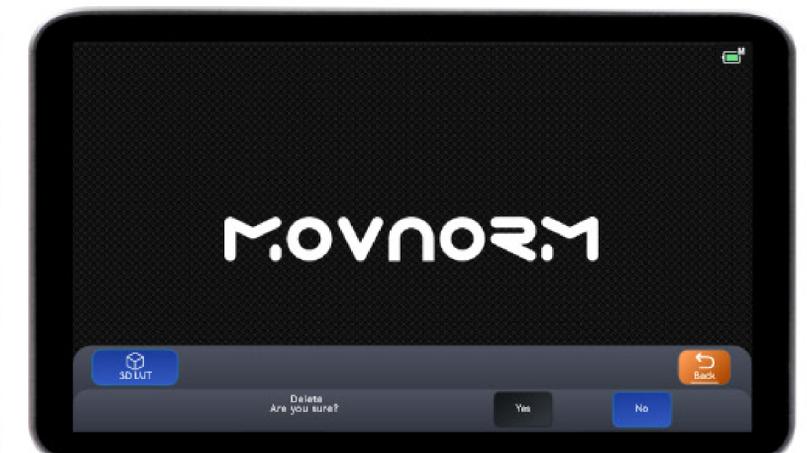
### 3D LUT-Stored from USB



1. Click on User Storage to enter the 3D LUT page, where users can select the LUT that matches their actual needs and apply it to the ima

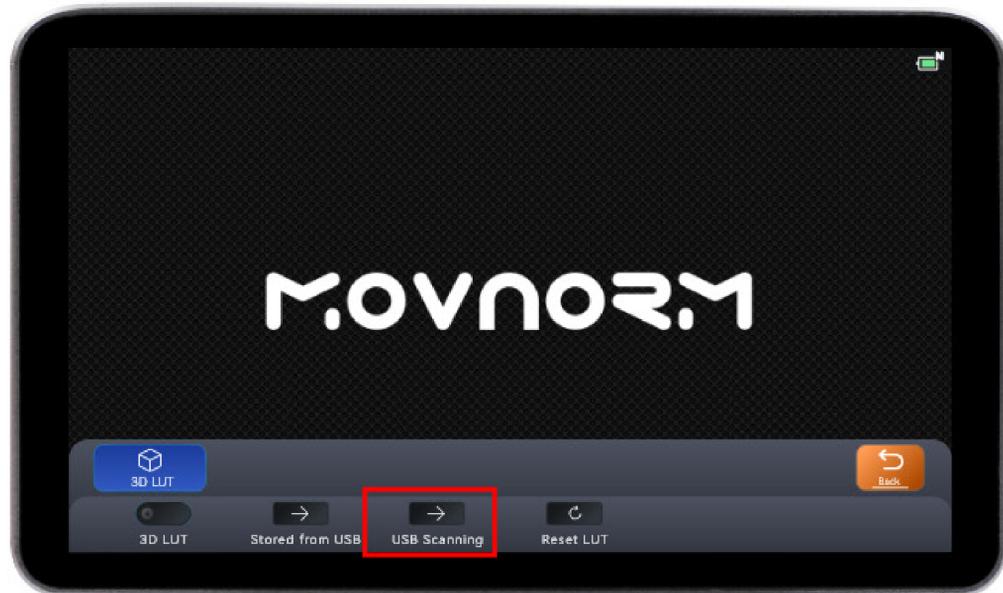


Tap and hold

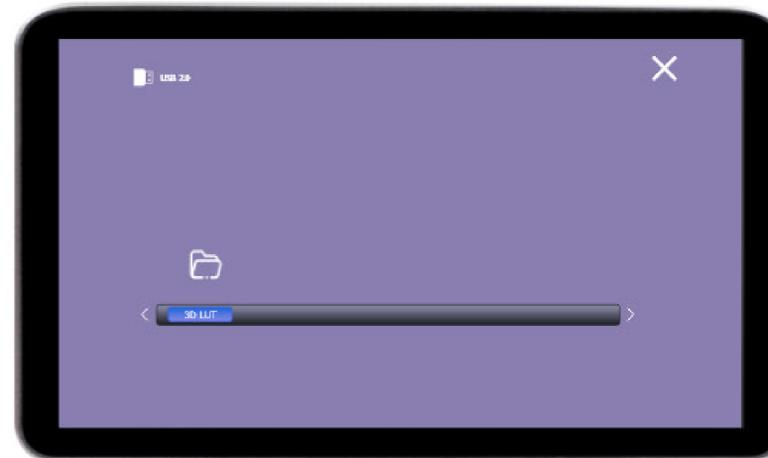


2. Long press LUT to select deletion

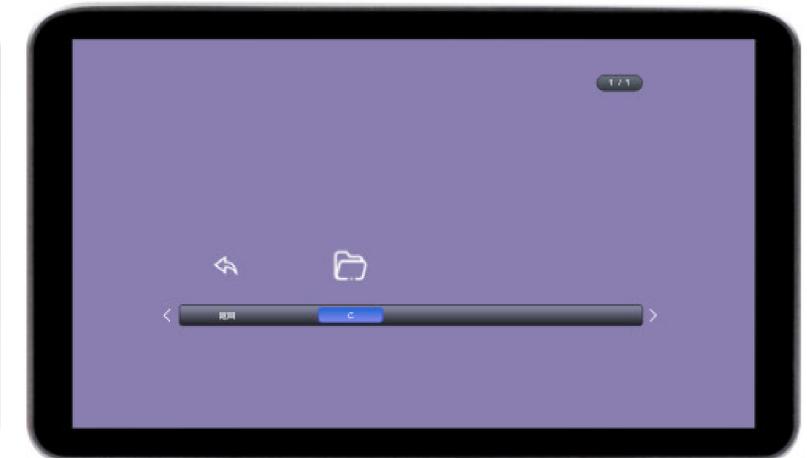
## 3D LUT-USB lookup



In USB lookup, you need to make a good LUT file sent to the external USB flash drive, connect the USB flash drive to the USB port of the monitor, select the removable disk, click on the LUT file that needs to be stored, and then you can complete the process. (The LUT file can be repeatedly stored in the user's memory)



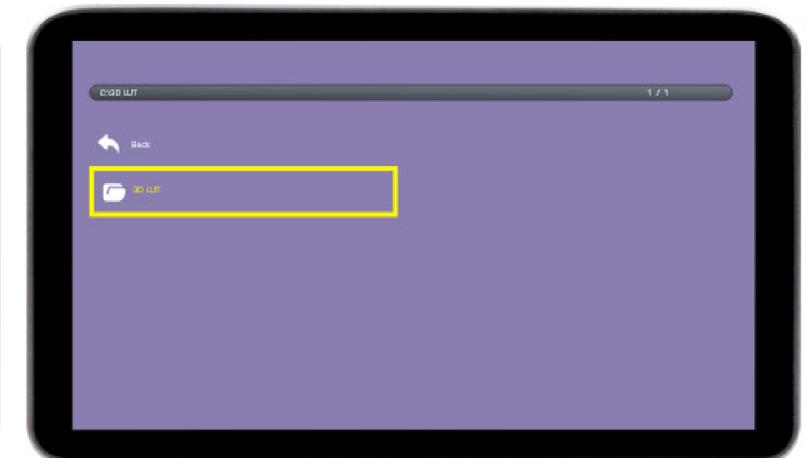
1



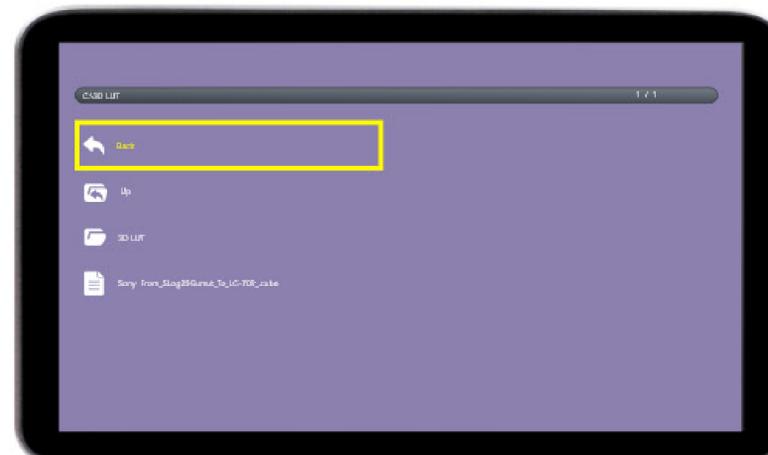
2



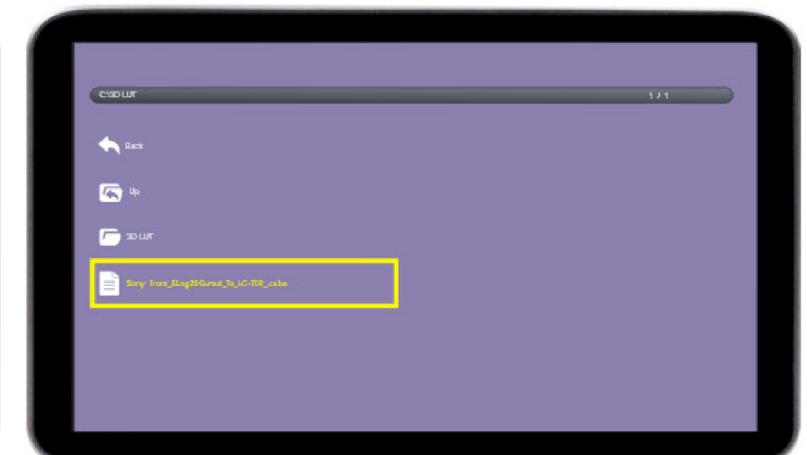
3



4



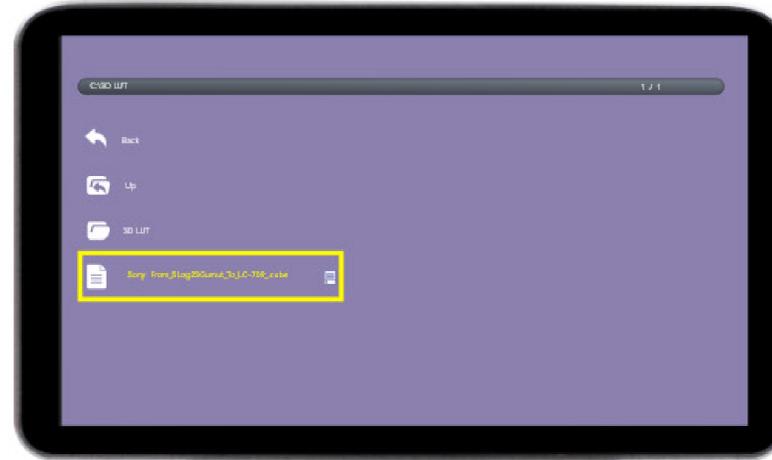
5



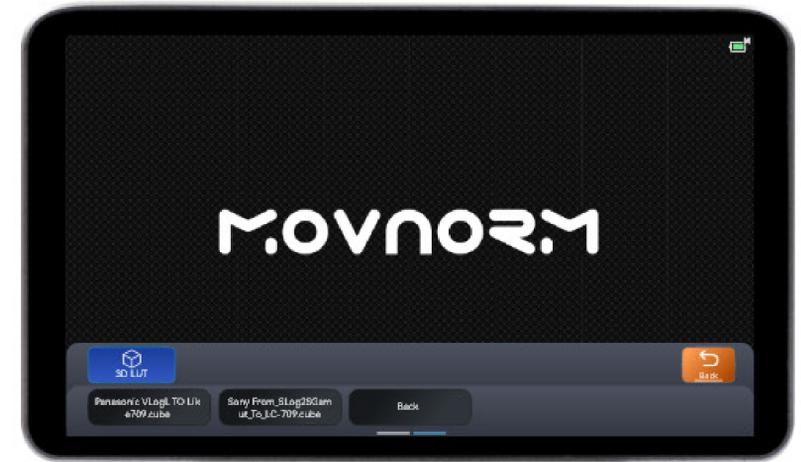
6



7

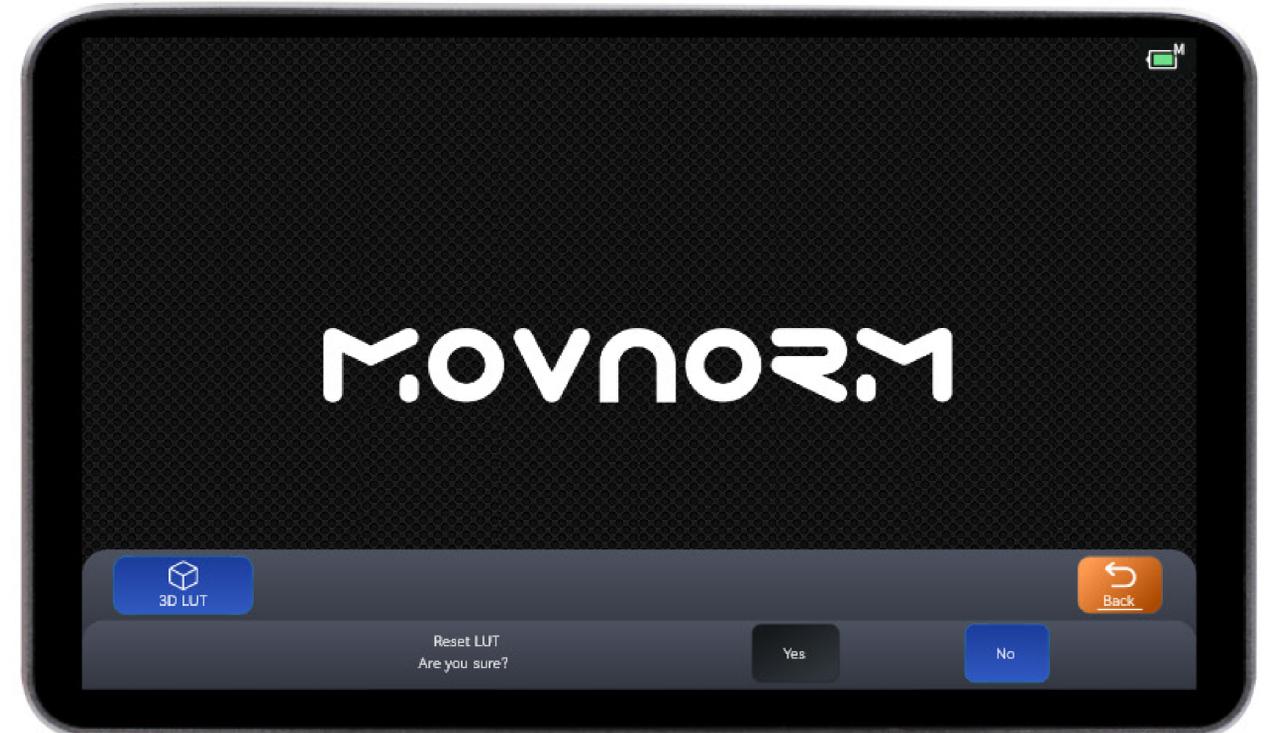
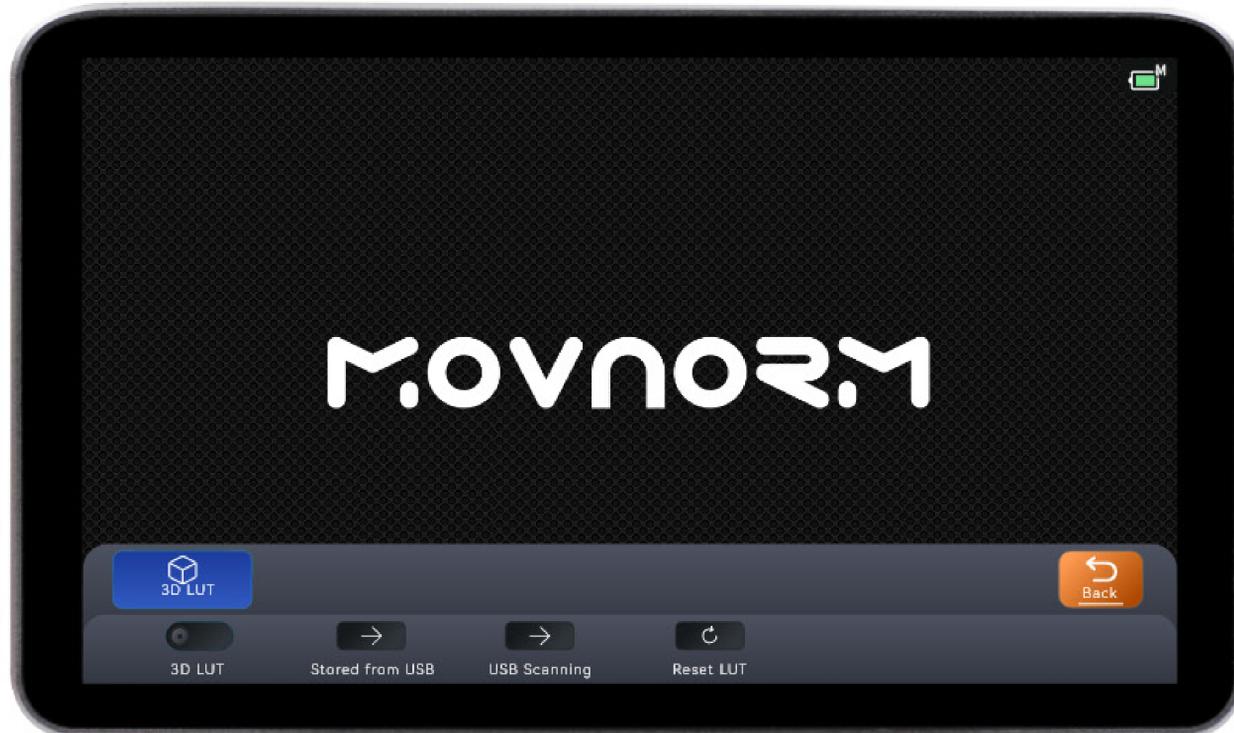


8



9

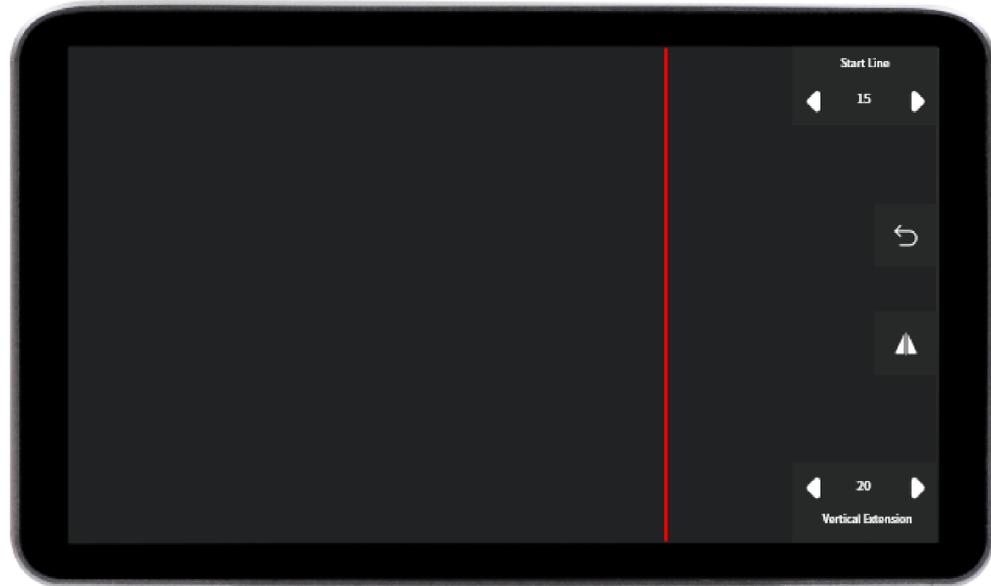
### 3D LUT-Reset LUT



Reset LUT to its original Settings

# Vertical Extension Introduce

## 6.1 Vertical Extension

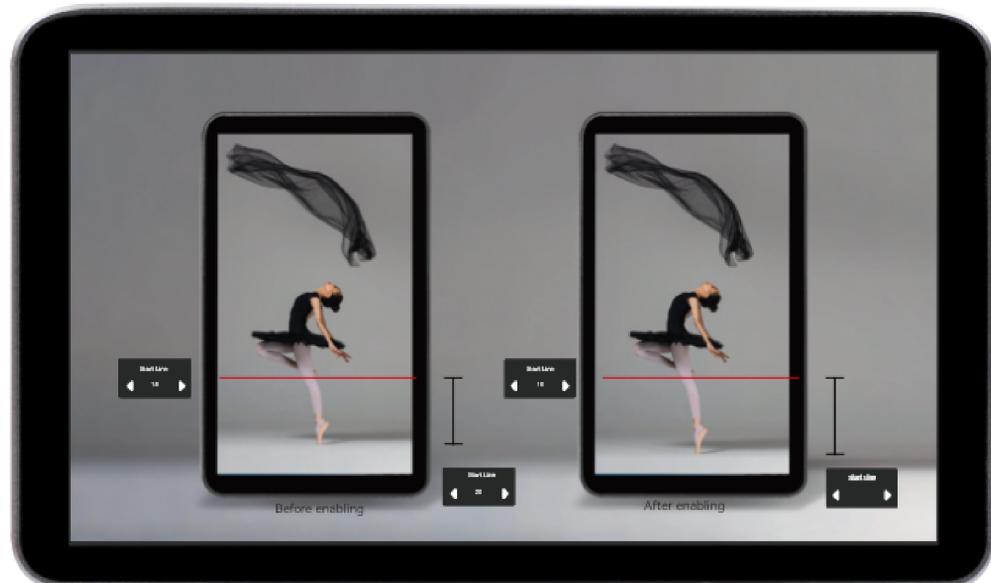


### Introduction of Vertical Extension

Turn on vertical stretching, adjust the start line parameter to the position on the screen where the stretching needs to be adjusted, and adjust the vertical stretching parameter to complete the adjustment.

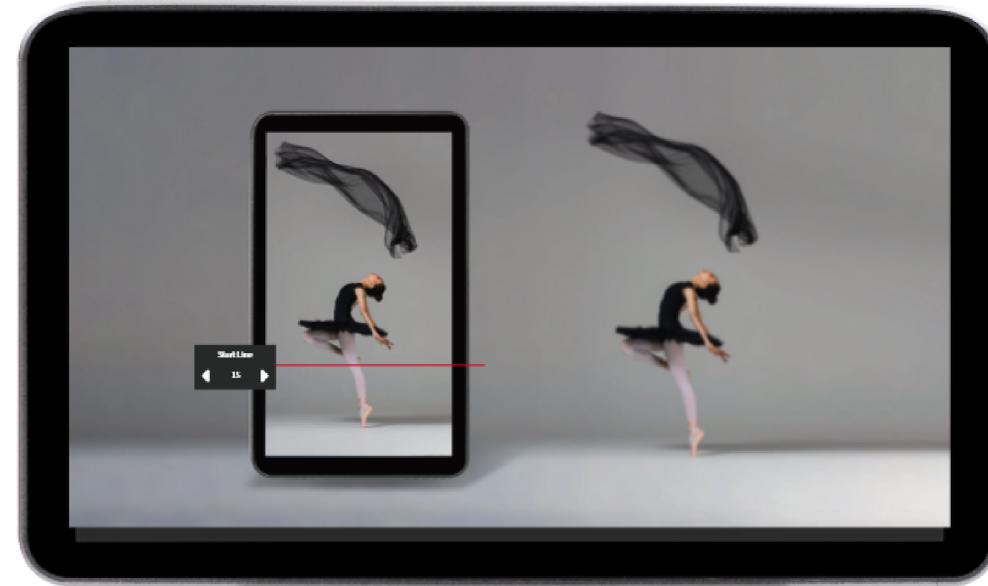
### Vertical Extension - Vertical Extension

Adjust the parameter settings for vertical stretching to stretch the screen image.



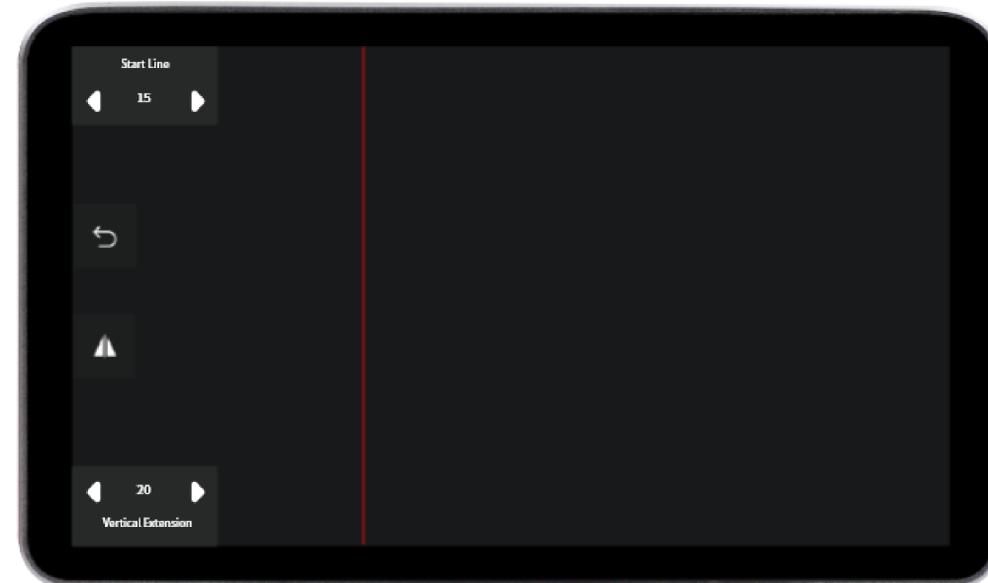
### Vertical Extension - Start Line

Changing the position of the image by changing the position of the start line



### Vertical Extension - Mirror Image

Monitor the page parameter settings are all transferred to the left, adjust the parameters of the screen image will be mirrored stretching



# Status Bar of Monitor

## 7.1 Status Bar of Monitor



You can click on the power icon to view the monitor and the camera.



After clicking

# Camera introduction

## 8.1 Wired control camera



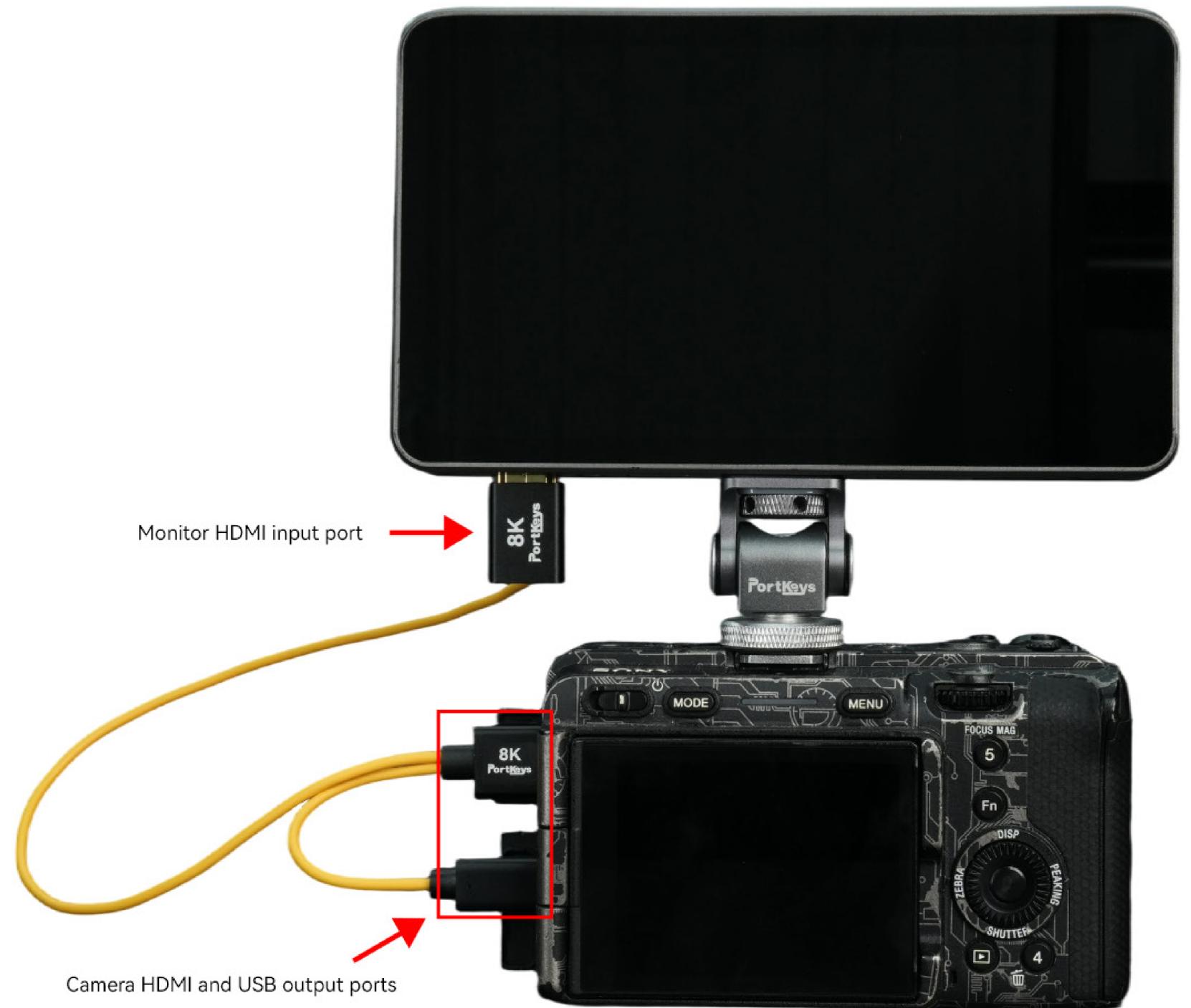
Click to "add a new device".



Click on the camera to be connected.



Successfully connected.



Monitor HDMI input port

Camera HDMI and USB output ports

Wired camera control connection can be completed with just a single input interface.

## 8.2 Camera Operation

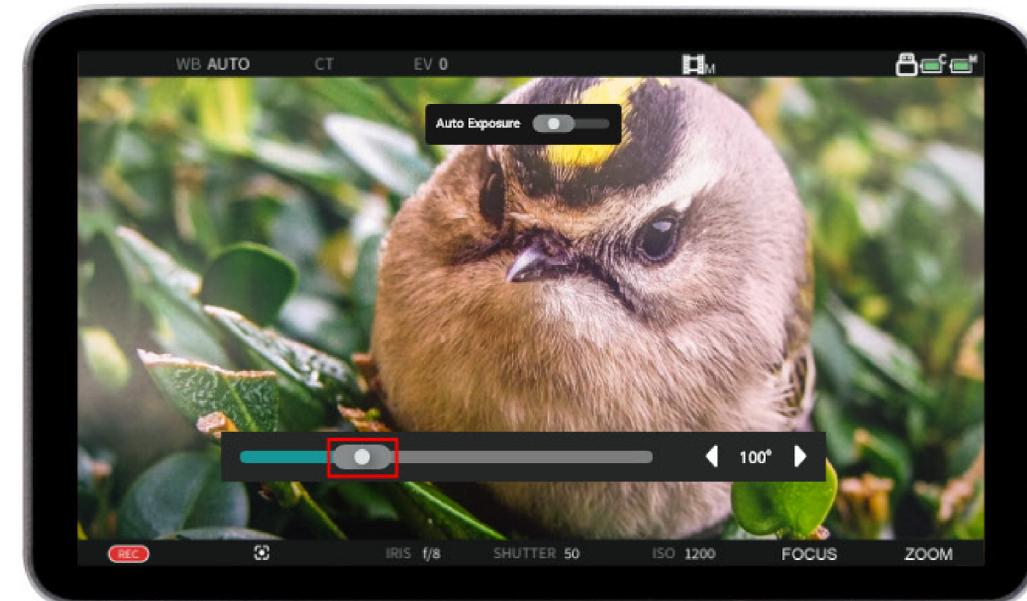


Fully compatible with major camera brands : Sony, Canon, Panasonic, BMD, and Z CAM. Control key parameters such as aperture, shutter, ISO, and WB directly on the monitor screen - improving camera operation efficiency.

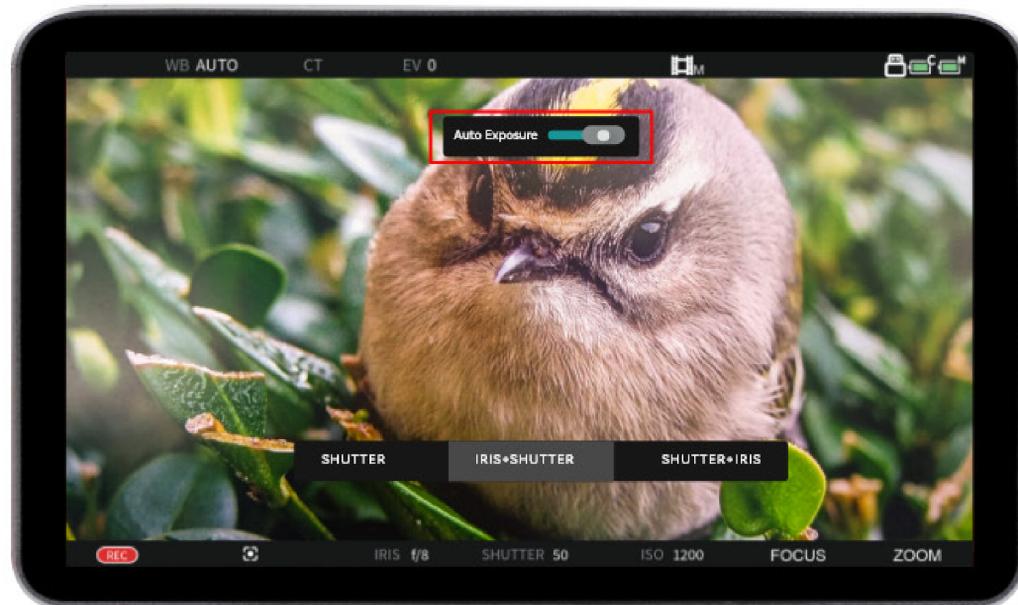


### Camera Controls-shutter

Camera shutter angle can be manipulated through the monitor.



Camera lens angle can be manipulated by dragging the slider.



You can turn on the automatic exposure mode, manipulate the camera lens angle, shutter.



Click to open Touch Focus

### Camera Control - Touch Focus

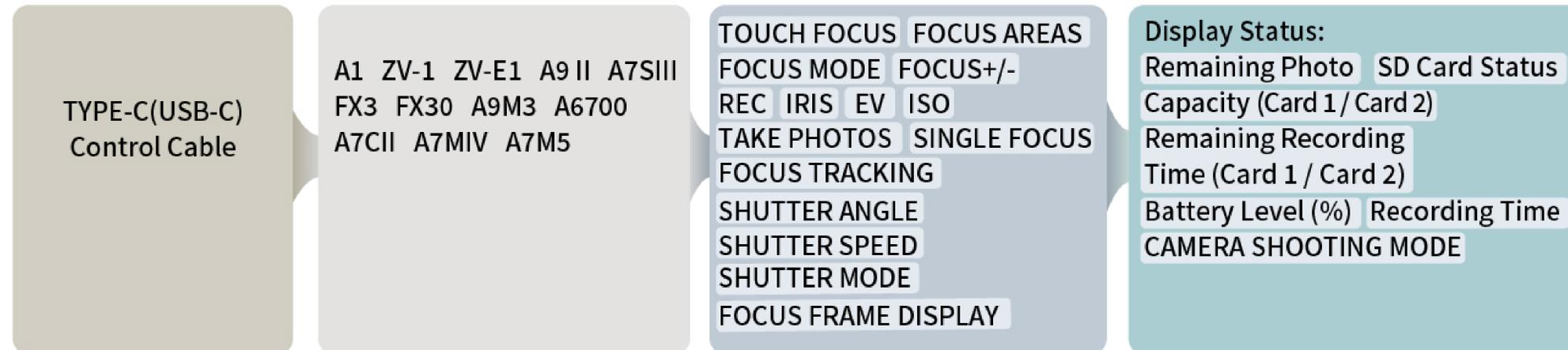
Camera control via monitor touch focus.



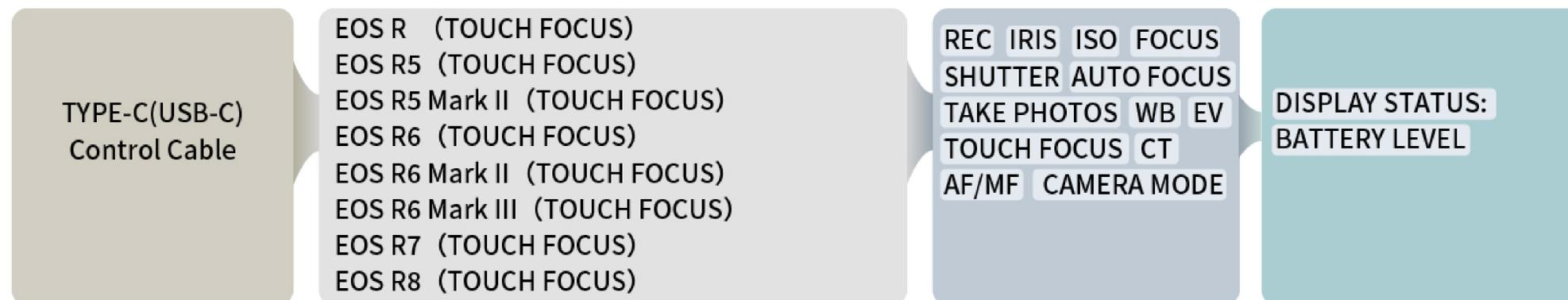
Turn on touch focus

# Camera Control- Controllable Camera

## Sony



## Canon



## Panasonic

