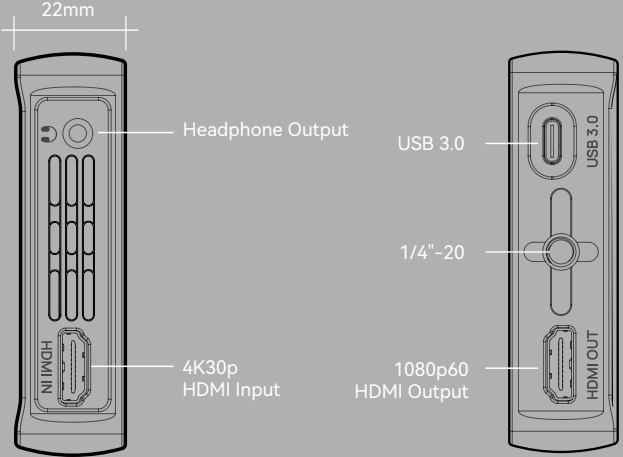
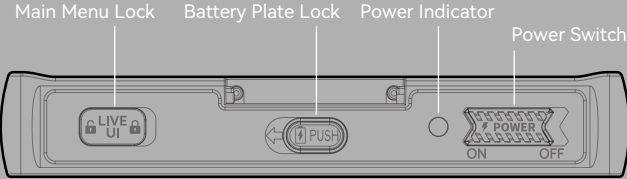
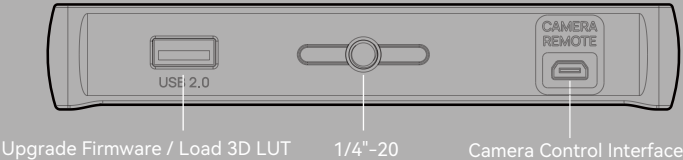
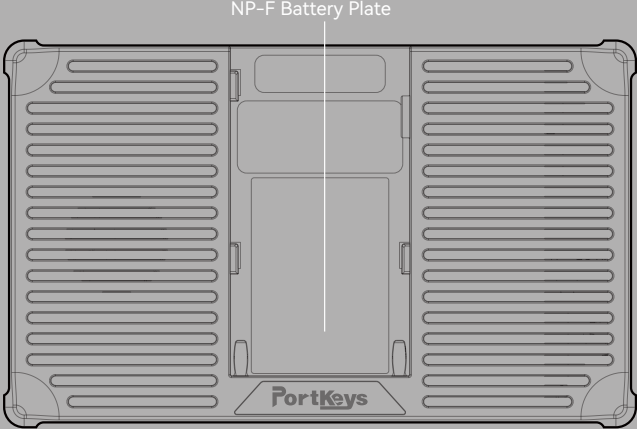


Product Manual



LH5C

Product Information



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Main Menu Lock



Main Menu Lock

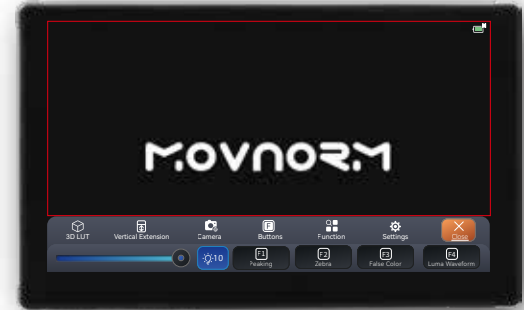
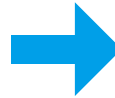


After turning on main menu lock , the screen directly clears and returns to the initial page, and gesture operations on the screen can no longer be performed.

Initial Page Operation



On the initial page, tap the screen to bring up the main menu operation page.



Tap the screen again to close the main menu.

Tap the battery icon to check the monitor status.



View battery voltage information, input signal information, and 3D LUT information.

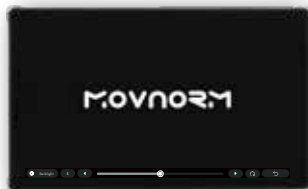
UI Operation Introduction

1.1



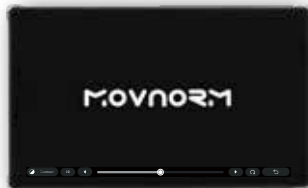
Initial Page

- 1、Backlight
- 2、Contrast
- 3、Sharpness
- 4、Chroma
- 5、Tint
- 6、Settings
- 7、Color Grader



1、Backlight 1~10

Adjust the overall brightness of the screen.



2、Contrast 0~100

Adjust the contrast between the brightest white and the darkest black in the bright and dark areas of the image.



3、Sharpness 0~10

Adjust the sharpness of detail texture and borders on the image.



4、Chroma 0~100

Adjust color vividness and color purity.



5、Tint 0~100

Adjust the basic tendency of the overall color of the image.

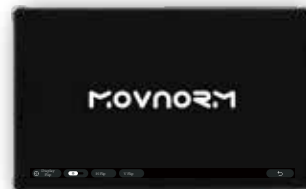


6、Settings



6.3、MIC Volume 0~10

Adjust the microphone input volume.



6.1、Display Flip

After the OSD flip mode is turned on, the display of the image changes along the horizontal or vertical direction, adjusting according to the vuse.



6.2、Headphone Volume 0~10

Adjust the audio output volume.

1.2

Color Grader Operation Instruction

*Color grader is usable after HDMI plugs in signal

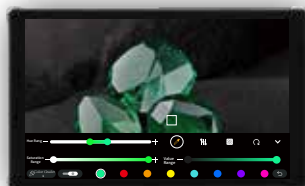


7. Color Grader

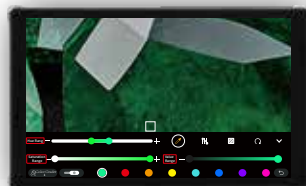
Click on any color picker; the button of that color picker will light up to indicate that the color picker has been enabled.



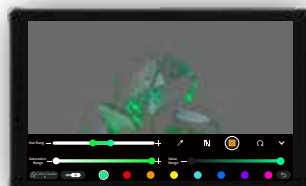
1. Click the edit button, the edit button lights up to enter edit mode, and clicking on any color picker will take you to the corresponding color adjustment interface.



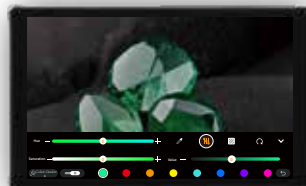
2. Click the eyedropper icon to select the color that needs to be adjusted on the screen. ●



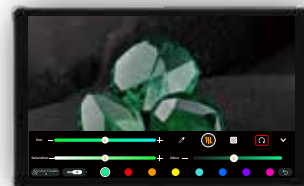
3. After selecting a color, avoid repeatedly selecting colors by using the hue range, saturation range, and brightness range. Click on the color blocks below to quickly choose the color you need to adjust.



4. Click on the mask to see the range of the selected color in the image. ●



5. After the color selection section ends, click on adjust, and adjust the hue, saturation, and brightness to achieve a more ideal display effect for the image. ●



6. Click reset to reset the color mixer settings.



7. Click the switch to turn the color mixer on and off. Click the color mixer in the bottom right corner to quickly switch to other color mixer interfaces.



8. When multiple color pickers are used, for example, after adjusting the color with color picker one, color picker two will select colors based on the adjustments made to the image by color picker one, rather than selecting colors from the original image.

1.3

Wired control camera

Connect and control the camera via cable.



Click to "add a new device".



Click on the camera to be connected.



Successfully connected.

1.4

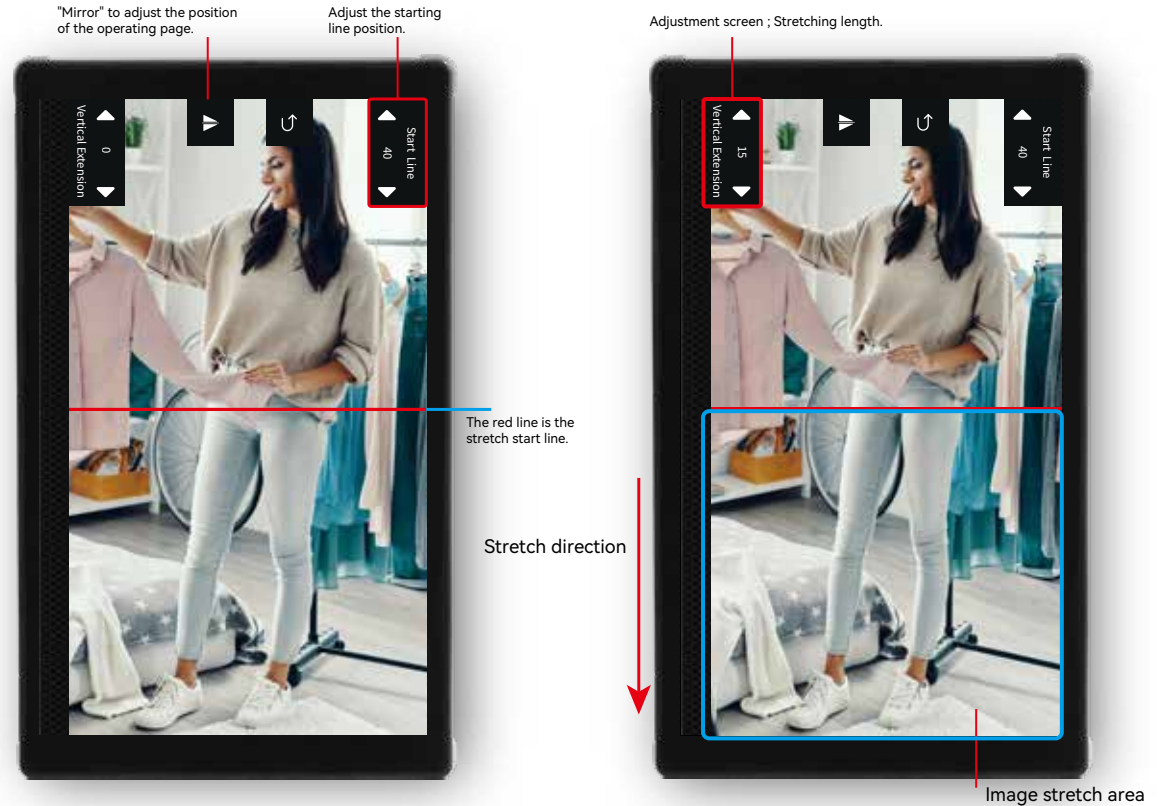
Operation of Vertical Extension



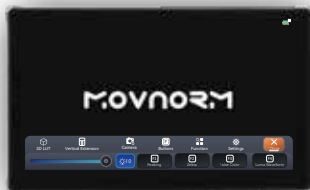
1. Click the screen to bring up the main menu.



2. Click on the Vertical Extension Function.

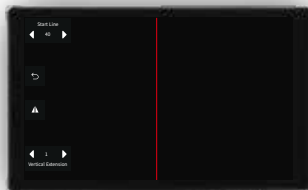


1.5



Initial Page

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



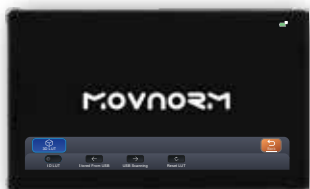
2、Vertical Extension

For details, please refer to "UI Operation Introduction 1.3" Vertical Stretch Operation Introduction.



4、Function

For details, please refer to page 08 "Function Introduction".



1、3D LUT

Stylized LUT.

User Storage: Used to store the created LUT file, which can be directly applied to the image.

USB Search: Send the created LUT file to the U-disk, connect the USB STICK to the monitor USB port, tap the "USB search", select the removable disk, tap the LUT file store (LUT file can be repeatedly stored in the user store), check whether the file is stored successfully in the "user store".

Reset LUT: Resets the LUT file applied to the image.



3、Buttons

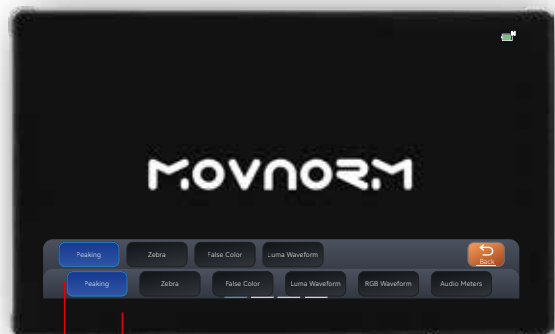
For details, please refer to page 07 "Shortcut key introduction".



5、Settings

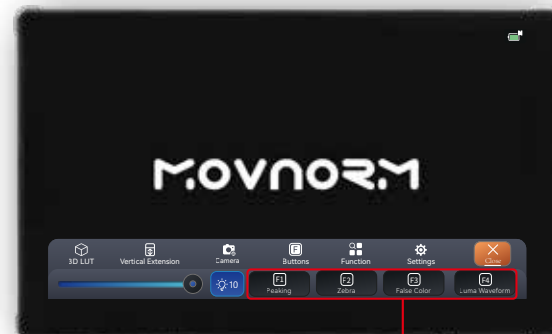
For details, please refer to page 10 "Settings Introduction".

Shortcut Key Introduction



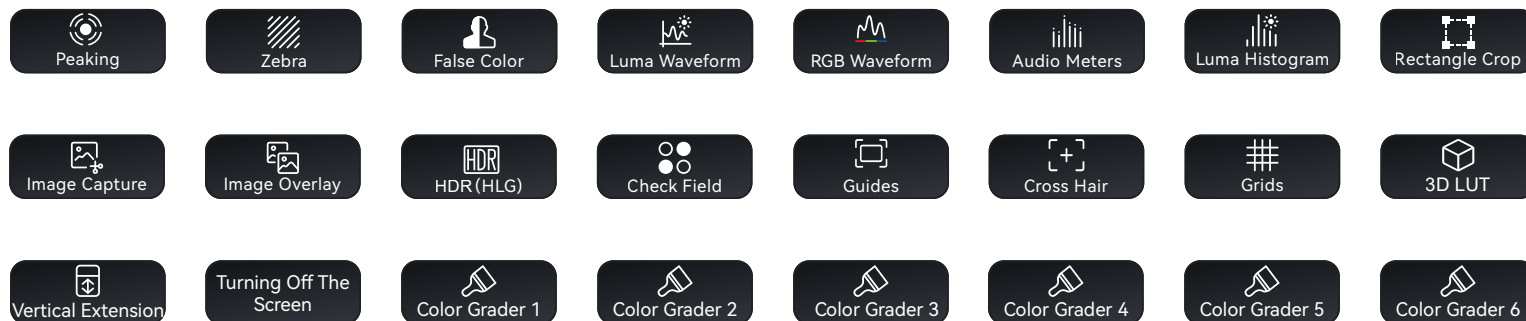
Click the shortcut function to be replaced.

Click the function to be replaced to complete.



Preset completed shortcut functions.

The functions listed below can be preset as shortcut functions.



Function Introduction

2.1



Peaking

Use the specific color to mark the focus position.

Style: Original/Black and White/Grayscale(Low)/Grayscale(Middle)/Grayscale(High)

Sensitivity: 1~15

Color: White/Red/Green/Blue Mark: ON/OFF

Frame: X Start 0%~99%

Y Start 0%~99%

Wide 1%~100%

Height 1%~100%

Reset



False Color

Use the specific color to display the image brightness level.(Style "User" is customizable)

Style: ARRI/User

Under Warn: ~7~15 (User)

Over Warn: 85~110 (User)

Tooltip: ON/OFF



RGB Waveform

Display the image of RGB three colors in scatter plot.

Opacity: OFF/25%/50%/75%

Brightness: 1~6

Warning Color: ON/OFF

Low Area: ~7~109(Warning Color ON)

High Area: ~7~109(Warning Color ON)

RGB Waveform zoom in and zoom out.

Position:Top Left / Top Right / Bottom Left / Bottom Right



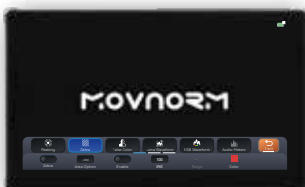
Luma Histogram

Display the brightness level in Block Diagram.

Transparent: ON/OFF

Luma Histogram zoom in and zoom out.

Position:Top Left / Top Right / Bottom Left / Bottom Right



Zebra

Use zebra to customize the parts of the image's overexposure and underexposure.

Area Option: Low/Middle/High

Enable: ON/OFF

IRE: ~7~50(Low)/~7~109(Middle)/50~109(High)

Range: ±0~±30 (Middle)

Color: White/Red/Green/Blue



Luma Waveform

Display the brightness level in scatter plot.

Opacity: OFF/25%/50%/75%

Brightness: 1~6

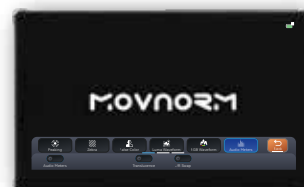
Warning Color: ON/OFF

Low Area: ~7~109(Warning Color ON)

High Area: ~7~109(Warning Color ON)

Luma Waveform zoom in and zoom out.

Position:Top Left / Top Right / Bottom Left / Bottom Right

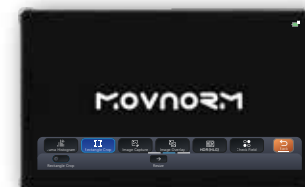


Audio Meters

Monitor the volume.

Translucence: ON/OFF

L/R Swap: ON/OFF



Rectangle Crop

Randomly crop rectangular images and display it full-screen.

Resize: X Start 0%~99%

Y Start 0%~99%

Wide 1%~100%

Height 1%~100%

Reset

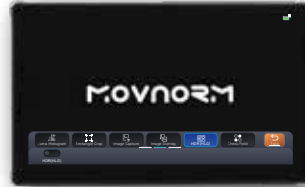
2.2



Image Capture

Capture a single frame image from a video and store it as a JPG on a USB stick.

Insert USB stick, click image capture, capture the image after processing and then store the image in the USB stick.



HDR(HLG)

The high dynamic range displays more shadow and highlight detail.



Guides

For composition and masking.

Options: 80%/90%/1:1/16:9/9:16/15:9/4:3/1.5:1/1.85:1/2:1/2.35:1/2.39:1

User-defined:

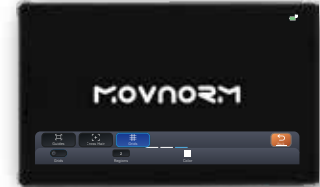
H: 1%~100%

V: 1%~100%

Mark: ON/OFF

Opacity: 0%/25%/50%/100%

Color: White/Red/Green/Blue



Grids

9 types of grid composition lines.

Area: 1~9

Color: White/Red/Green/Blue



Image Overlay

Overlay semi-transparent JPG images in video.

Insert the USB stick, click Image Capture to auto-capture JPG images from the USB stick, and click the image to overlay it on the video.



Check Field

Red, Green, Blue, and Black & White Solid Color Images.

Color: Black and White/Red/Green/Blue



Cross Hair

The cross mark is placed in the center of the image.

X Offset: 0%~100%

Y Offset: 0%~100%

Color: White/Red/Green/Blue

Settings Introduction



Image

Contrast: 0~100 Chroma: 0~100
 Sharpness: 0~10 Backlight: 1~10
 Tint: 0 ~100
 Anamorphic: 1.00X/1.33X/1.42X/1.50X/1.60X/1.66X/
 1.80X/1.85X/2.00X/2.35X
 User-defined: 0.25X~4.00X



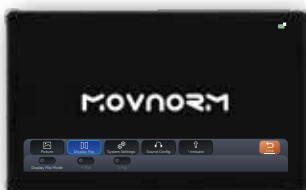
System Setting

OSD-Language: English / Simplified Chinese /
 Japanese / Russian / French / Spanish / Italian
 OSD-Transparency: OFF/Low/Middle/High
 System Reset: Yes/No
 Black Level: ON/OFF
 Gesture Zooming: ON/OFF
 Live Mode: ON/OFF
 OSD Animation: ON/OFF



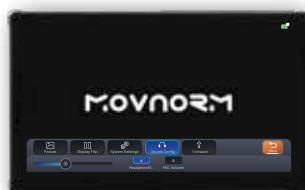
Firmware

View current software information, working time,
 and upgrade software.
 or specific detailed tutorials, please refer to page
 11 "Software Upgrade Tutorial".



Display Flip

After the OSD flip mode is turned on, the display of
 the image changes along the horizontal or vertical
 direction, adjusting according to the vuse.



Sound Config

Headphone Volume: 0~10
 MIC Volume: 0~10

Software Upgrade Tutorial



- 1、Download the corresponding upgrade software zip file from the official website (www.portkeys.com), unzip the upgrade file, and then place the .bin file into the USB stick root directory.

USB Upgrade Interface



- 2、Power the LH5C and connect the USB stick including upgrade file to the monitor USB port.



- 3、After booting, click "Settings" > "Firmware" > "Upgrade (USB)".



- 4、Select "Yes" to upgrade.



- 5、The firmware update process takes several minutes. After completing, the monitor will black out and enter the configuration upgrade state. (Do not power off during the upgrading)



- 6、After the upgrade is completed, click "Settings" > "Firmware" to view version information and check if the upgrade was successful.