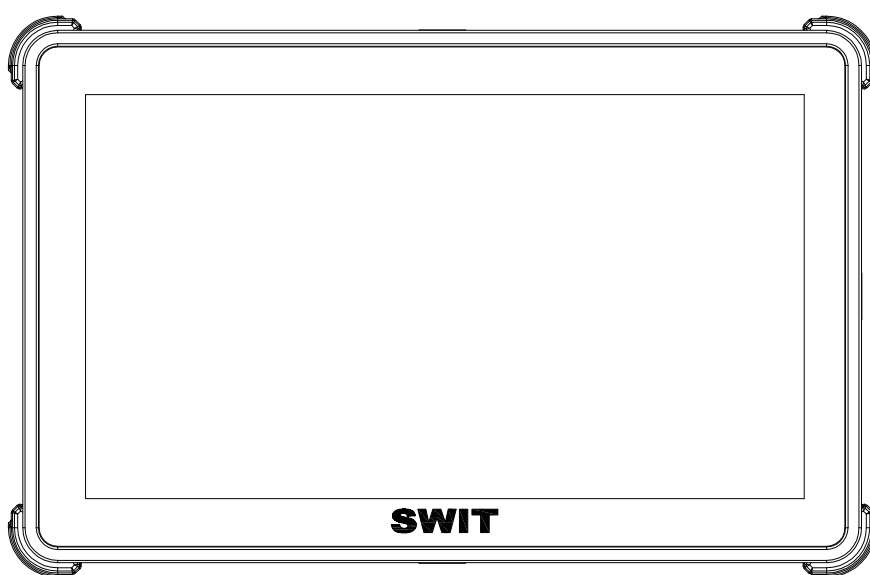




User Manual

Thank you for choosing a SWIT product.
Please read this manual carefully before use.

Version A

Statement

All internal technologies of this product, including hardware, software design, and trademarks, are protected by law. Any infringement of the intellectual property rights of this product will be subject to legal liability.

All company brands and trademarks used in this product are protected by law. All other brands and trademarks mentioned belong to their respective owners and are protected by law.

To better serve users, the company will continue to improve and develop its products. The company reserves the right to modify and improve the products described in this manual without prior notice.

This product carries a two-year limited warranty on the main unit and a one-year limited warranty on the LCD panel. The following conditions are not covered:

- (1) Cosmetic wear, LCD panel damage, or other damage caused by misuse;
- (2) Three or fewer bright or dark pixels on the LCD panel;
- (3) Damage caused by using a power adapter not supplied or specified for the product;
- (4) Failure or damage caused by use, maintenance, or storage not in accordance with this manual;
- (5) The product has been opened or disassembled by the user;
- (6) Other failures or damage not caused by product design, technology, manufacturing, or quality issues.

* No salesperson is authorized to provide any warranty terms beyond those stated here.

If you encounter any problems or have suggestions or requests regarding our products, please contact us by phone, fax, or email.

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade Dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

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Maintenance Precautions

Warning

1. To reduce the risk of fire or electric shock, do not expose this unit to rain or place it in a damp location.
2. Using the unit near equipment that generates strong magnetic fields may cause noise in video or audio signals. Keep it away from such equipment.

Power Supply Precautions

1. Use the dedicated power adapter specified by the manufacturer to avoid product damage.
2. If using another DC power source, make sure the voltage range, power capacity, and polarity meet the requirements.
3. Disconnect the power cable and external battery in the following cases:
 - (A) If the product will not be used for an extended period.
 - (B) If the power cord, plug, or socket is damaged.
 - (C) If the product has been impacted or dropped and the enclosure is damaged.

Product Use Precautions

1. Operate the touchscreen with clean, dry fingers. Do not use sharp objects or apply excessive pressure.
2. Do not apply pressure to the screen. The screen is delicate and fragile.
3. Do not place the product on an unstable surface. It may be seriously damaged if it falls.

Product Cleaning Precautions

1. When cleaning the screen, use a dry, soft, lint-free cloth and a dedicated cleaner to remove dust and stains.
2. Do not apply pressure when wiping the screen surface.
3. When cleaning with a cleaning solution, spray it onto a cloth first. Do not spray directly onto the display.

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Packing list

1	Monitor Unit	× 1
2	4GB SD Card	× 1
3	AC to 2-pin LEMO adaptor	Optional
4	MA-K7CAGE	Optional

Product Overview and Appearance

The K7 monitor uses a 7-inch, 2800-nit LCD panel with 1920 x 1080 FHD resolution for excellent viewing performance. It features a metal housing, touch operation, and optional cage accessories for monitoring from different angles. The monitor supports SDI/HDMI[®] cross conversion. It supports multiple power inputs, including 2-pin LEMO 7-34V and USB-C PD 9-20V DC, and dual NP-F battery plates with battery status display and hot-swap uninterrupted power.

Appearance Diagram

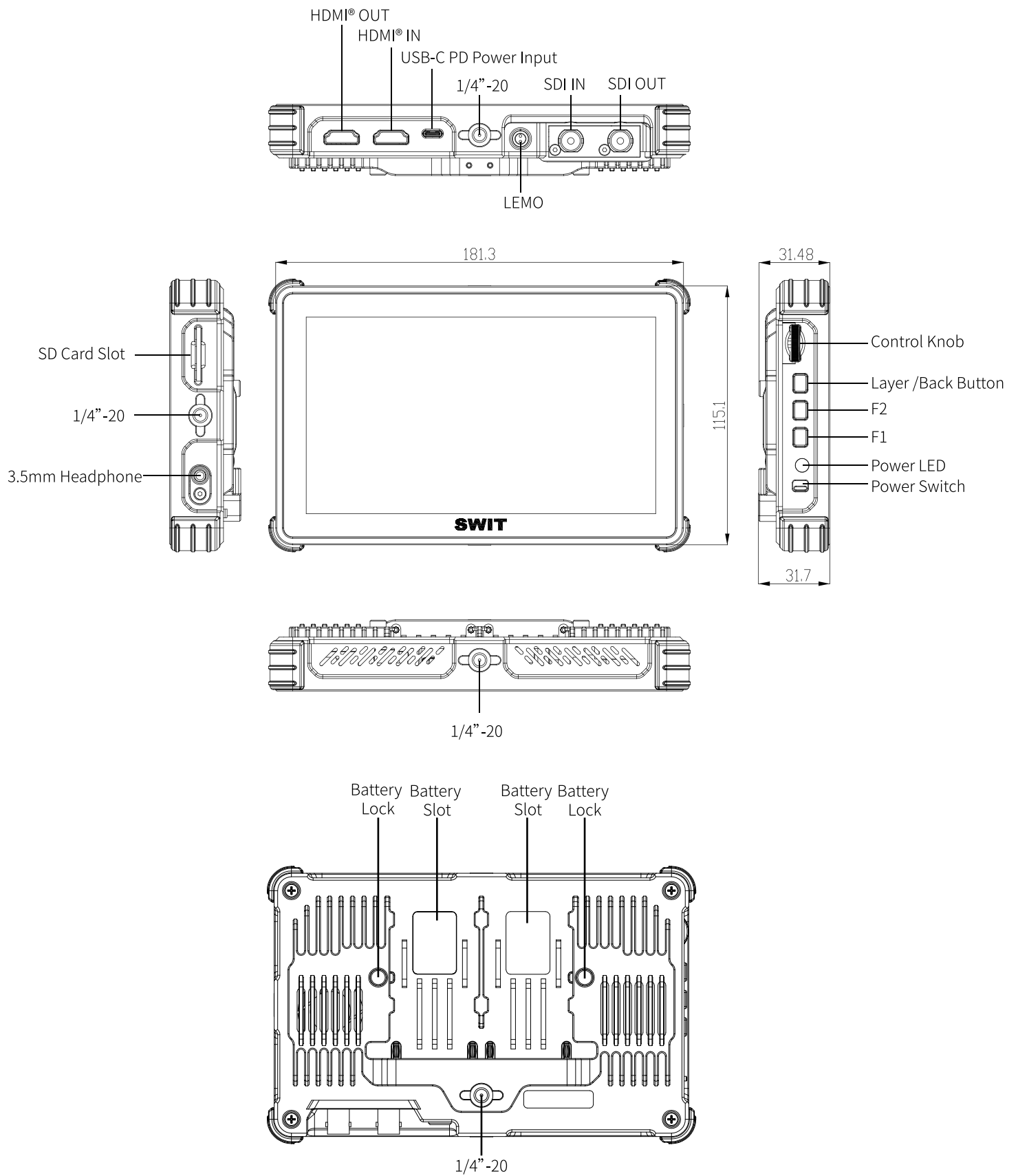


Figure 1: Appearance and Dimensions

Buttons and Interfaces

■ Right Panel (Operation Side)

Adjustment knob: Overlay screenshots or menu return options on the live view; long press to lock the screen.

F1 shortcut: Custom function key.

F2 shortcut: Custom function key.

Power indicator: Shows device power status, solid green LED on power-up.

Power switch: Slide to power on.

■ Left Panel

SD card slot: Used to import LUT files, save screenshots, read reference images, and upgrade firmware.

Headphone jack: 3.5 mm headphone output for audio monitoring. Swipe up or down anywhere on the right side of the screen to adjust volume quickly.

■ Bottom Panel

USB-C PD power input: DC power input supporting PD protocol (9-20V DC).

Only C-to-C power cables are supported.

SDI IN/OUT: SDI video, output support cross conversion (BNC).

HDMI IN/OUT: HDMI video input, output support cross conversion.

2-pin LEMO power input: DC power input (7-34V DC).

■ Rear Panel

Battery plates: Built-in dual NP-F series DV battery slots with hot-swap support: Seamless operation upon single battery removal if backup voltage is adequate.

Power Supply Priority:

USB PD/LEMO (Co-priority): The system automatically selects the power source with the higher voltage between the USB PD and LEMO inputs.

NP-F Battery (Backup): The system switches to the NP-F battery only when both USB PD and LEMO are disconnected or unavailable.

■ Mounting Holes

The left side, top, bottom, and rear each provide 1/4"-20 threaded holes for tripods and accessory mounting.

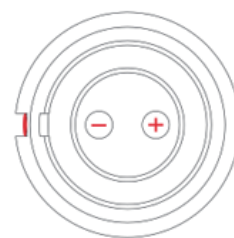


Figure 2: Schematic Diagram of LEMO Connector Positive and Negative Poles

Installation of Optional Accessory MA-K7CAGE

① Open the sun hood on the front of the cage.

② Insert the monitor into the designated mounting position from the front of the cage.

③ Using the supplied 1/4"-20 mounting screws, secure the monitor to the threaded holes on the top, bottom, and right side of the cage to complete the installation.

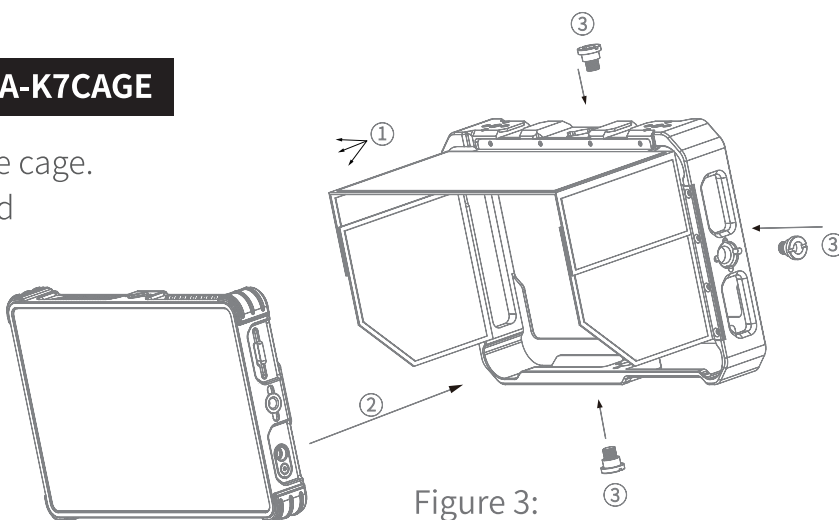


Figure 3: MA-K7CAGE Installation Diagram

Main Menu Functions

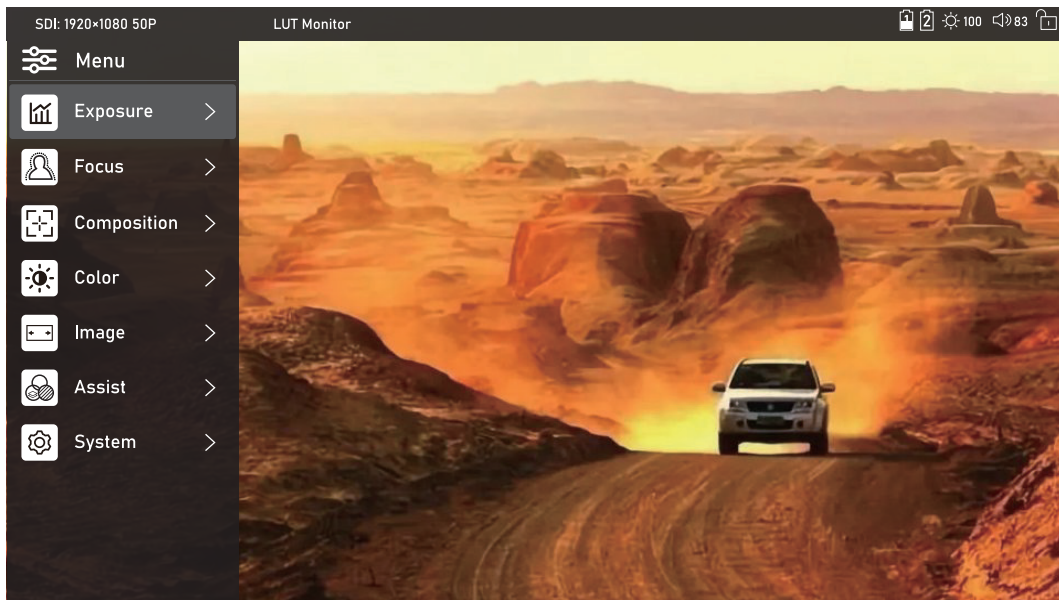


Figure 4: Main Menu

Exposure

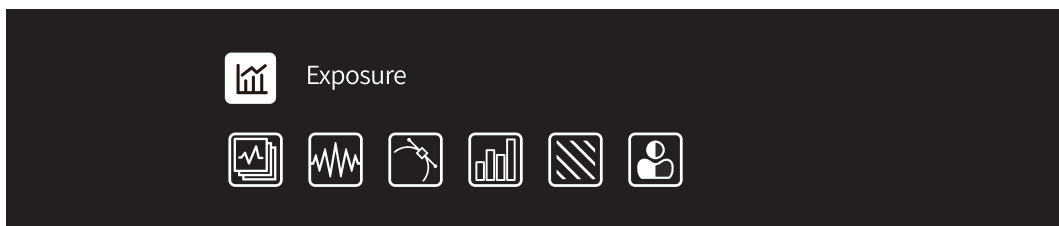


Figure 5: Exposure and Submenus

All scopes: Simultaneously display waveforms, histograms, RGB and audio meters to realize one-stop comprehensive monitoring of brightness, exposure, color and audio levels, enabling quick grasp of overall technical indicators of images.

Waveform: Quantitatively displays image luma distribution for precise exposure control.

Supports RGB, PARADE, and LUMA display modes, with adjustable transparency.

Vectorscope: Displays color phase and saturation for color reproduction analysis.

Histogram: Shows the distribution of bright and dark pixels to evaluate overall exposure balance.

Supports LUMA and RGB statistics modes.

Zebra: Highlights near-overexposed or overexposed areas to warn of highlight clipping.

Fine adjustment supported across a wide -7 IRE to 109 IRE range.

False color: Uses color mapping to show image luma distribution and assist exposure evaluation.

Provides ARRI and Spectrum mapping modes.

Focus

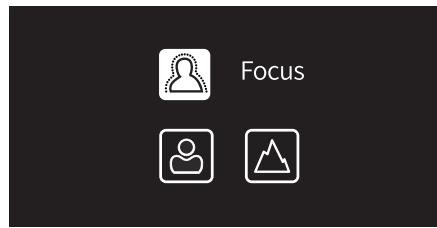


Figure 6: Focus and Submenus

Focus assist: Enhances edge contrast to help with manual focusing.

Intensity supports fine adjustment from level 1 to 8. Colors include yellow, magenta, cyan, red, green, blue, and white.

Peaking: Highlights the outlines of in-focus areas to help achieve focus quickly.

Sensitivity supports wide adjustment from 0 to 20.

Composition

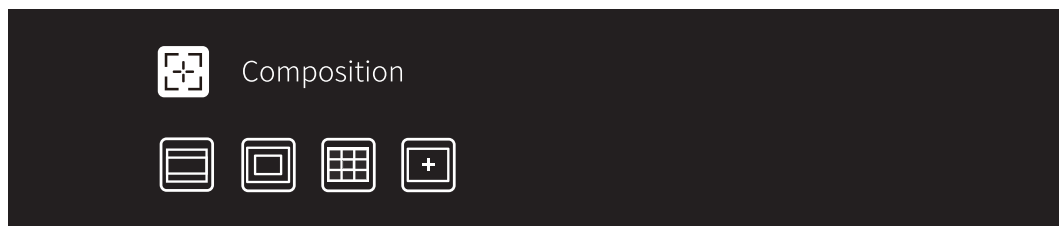


Figure 7: Composition and Submenus

Aspect marker: Overlays black bars to simulate different aspect ratios for composition.

Ratio: 16:9 / 16:10 / 4:3 / 5:4 / 1.85:1 / 2.35:1 / 2.39:1 / 2.41:1 / 2.75:1 / 1:1 / 9:16 / User (Users can customize the width and height dimensions of the aspect marker, with an adjustment range of 1 to 20 for both.)

Transparency (mask area) : 0% / 25% / 50% / 75%

Color: Yellow / Magenta / Cyan / Red / Green / Blue / White

Safe area: Helps keep critical content within the intended visible area.

Ratio: 16:9 / 16:10 / 4:3 / 5:4 / 1:1 / 1.91:1 / 4:5 / 9:16 / 1.85:1 / 2.35:1 / User (Users can customize the width and height of the safe area, with an adjustment range of 50%~100%.)

Color: Yellow / Magenta / Cyan / Red / Green / Blue / White

Grid: Overlays guide lines for leveling and rule-of-thirds composition.

Grid: 2x2 / 3x3 / 4x4 / 5x3 / 5x5 / 6x4 / 6x6 / 7x7 / 8x8 / 9x9

Color: Yellow / Magenta / Cyan / Red / Green / Blue / White

Center marker: Displays a crosshair at the center of the image to help align the subject.

Size: Adjustable from level 1 to 11

Color: Yellow / Magenta / Cyan / Red / Green / Blue / White

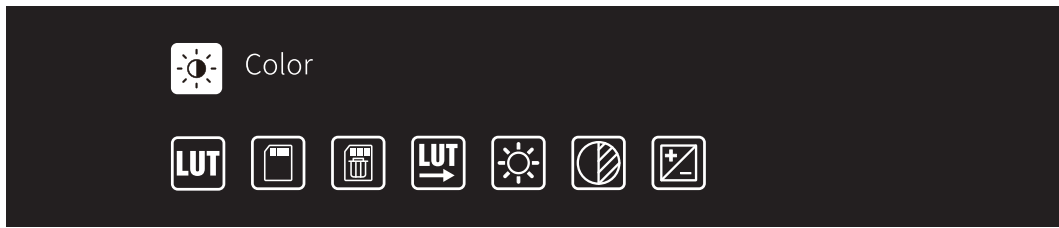


Figure 8: Color and Submenus

LUT configuration: Loads built-in color lookup tables to convert supported Log-encoded footage to a display-ready viewing look.

Built-in LUTs	
SLog3toLC709tA	LogC3toRec709
SLog2toLC709tA	Log3G10toRec709
CLog3toCanon709	VLogtoRec709
CLog2toCanon709	VLog_to_V709_forV35_ver100
LogC4toRec709	FLog2_FGamut_to_ETERNA_BT.709

LUT import: Import custom .cube LUT files from an SD card.

!!! Operating Steps and Precautions

- ▶ Import path: Tap Import and select a .cube LUT file from the inserted SD card.
- ▶ Format support: Supports 17-, 32-, 33-, 64-, and 65-point 3D LUT cube files.
- ▶ File location: LUT files must be placed in the root directory of the SD card, not in subfolders.
- ▶ SD card format: Only FAT32 SD cards are supported. Make sure the card is formatted correctly.
- ▶ Related operation: To clear imported custom LUTs, select LUT Remove from the main menu.

LUT output: Controls whether the LUT effect is also output through external ports.

SDI LUT output: On / Off

HDMI LUT output: On / Off

Brightness: Adjusts overall image brightness.

Adjustable from 0 to 100. Swipe up or down anywhere on the left side of the screen for quick adjustment.

Contrast: Adjusts light/dark contrast, adjustable from 0 to 100.

Saturation: Adjusts color vividness, adjustable from 0 to 100.

Hue: Adjusts image color phase offset, adjustable from 0 to 100.

Color temperature: Adjusts white-balance color temperature. Options: 5600K / 6500K / 9300K / User (Users can customize RGB values).

Image

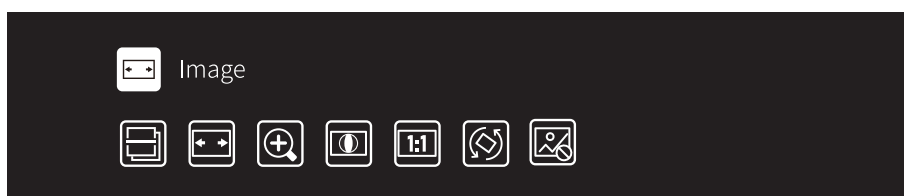


Figure 9: Image and Submenus

Scan mode: Switches video scan mode for different signal sources: underscan / overscan.

Aspect ratio: Adjusts the image output ratio for different monitoring needs.

Auto / 16:9 / 16:10 / 4:3 / 5:4 / 2:1 / 1.85:1 / 2.35:1 / User(Users can customize the width and height dimensions of the aspect ratio, with an adjustment range of 100%~300%)

Zoom: Magnifies the center area of the image to inspect details.

Magnification adjustable from 1.0x to 3.5x.

Anamorphic: Corrects anamorphic widescreen lens images to restore the proper ratio.

1.25x / 1.33x / 1.5x / 1.6x / 1.8x / 2.0x / 2.0xmag / User(Users can customize the anamorphic ratio with an adjustment range from 0.50X to 2.00X and an adjustment precision of 0.01)

Pixel-to-pixel: Enables 1:1 pixel mapping to avoid image-quality loss from scaling.

Image flip: Adjusts the image orientation according to the mounting direction. Automatic image flipping can be enabled or disabled.

Submenu	Setting	Available Third-Level Menu	Option Values
Image Flip	ON	Image flip	Horizontal Mirror / Vertical Mirror / Rotate 180° / Default
	OFF	Image flip	Horizontal Mirror / Vertical Mirror / Rotate 180° / Default
		Menu Orientation	Default / -90° / 180° / +90°

Image freeze: Freezes the current image as a static reference.

Assist

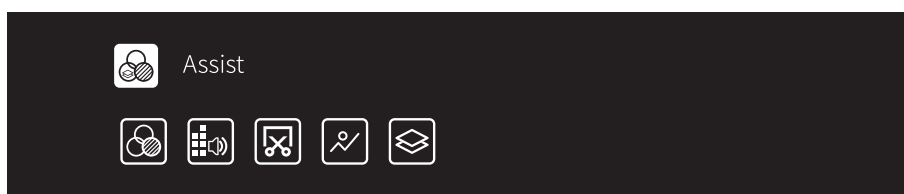


Figure 10: Other Assist Functions and Submenus

Monochrome: Displays the image in grayscale to evaluate exposure without color interference.

Red / Green / Blue / White

Audio meter: Displays audio input levels in real time for monitoring recording status.

Screenshot: Saves the current monitoring image as a still image to the SD card.

Image browse: Views reference images stored on the SD card.

Image overlay: Semi-transparently overlays a reference image on the live image for composition alignment. The latest screenshot or a selected image can be used.
Transparency: Adjustable from 0 to 80%.

System

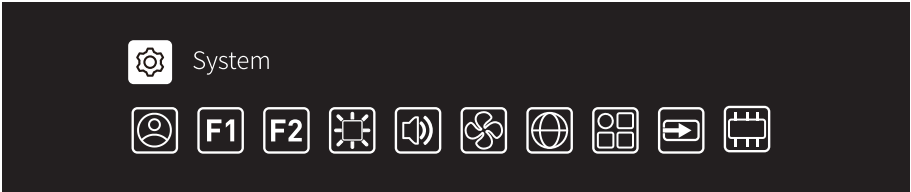


Figure 11: System Settings and Submenus

User group: Save your preferred monitoring tools and image adjustments as a User Preset. Recall your personalized monitoring setup instantly without manual reconfiguration.
Current user: 1 / 2 / 3 / 4. Supports restoring default settings for the selected user group.

F1 shortcut: Customize the physical F1 button function.
Screenshot / Focus Assist / Peaking / False Color / Zebra / LUT / Aspect Marker / Safe Area / Grid / Monochrome / Waveform / Vectorscope / Luma Histogram / RGB Histogram / All Scopes / Audio Meter

F2 shortcut: Customize the physical F2 button function.
Image Browse / Focus Assist / Peaking / False Color / Zebra / LUT / Aspect Marker / Safe Area / Grid / Monochrome / Waveform / Vectorscope / Luma Histogram / RGB Histogram / All Scopes / Audio Meter
When F2 is set to the default value "Image", you can enter the page for images stored on the device with one click:

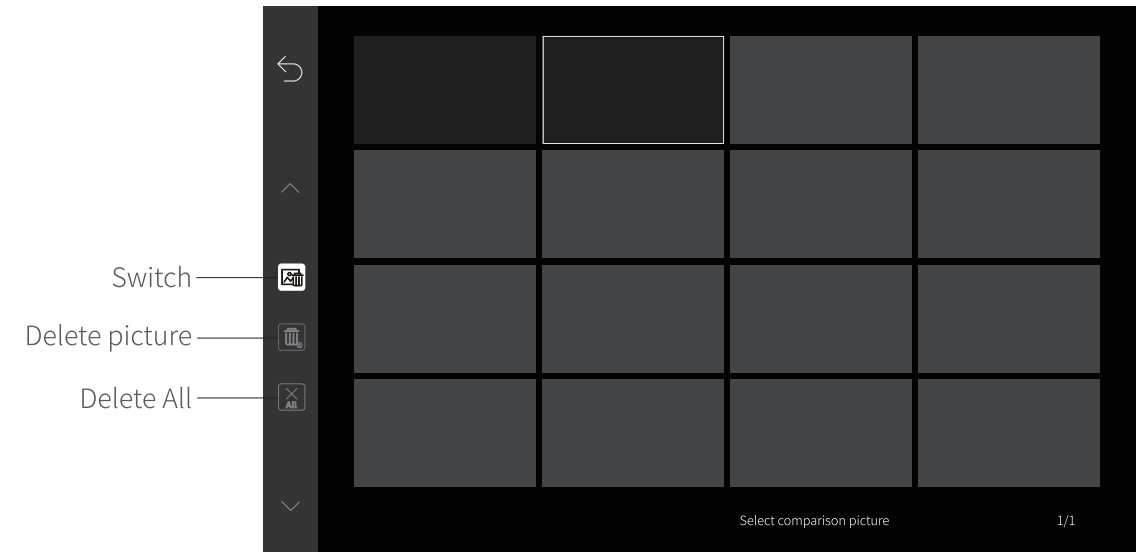


Figure 12: Schematic Diagram of Image Browsing Page

When the prompt "**Select comparison picture**" appears in the lower right corner of the interface, users can select any picture from the album to overlay on the current signal source screen.

Tap the "**Switch**" icon, and the "**Delete picture**" and "**Delete All**" icons will be highlighted in white.

Meanwhile, the prompt in the lower right corner changes to "**Delete picture**".

The interface will then enter the picture deletion management page, where users can perform the following operations:

1. Tap the "**Delete**" icon: Delete the currently selected picture. Tap the "✓" in the lower right prompt to confirm deletion or tap the "↶" to exit the deletion operation;
2. Tap the "**Delete All**" icon: Delete all pictures. Tap the "✓" in the lower right prompt to confirm deletion or tap the "↷" to exit the deletion operation;

Backlight: Adjusts screen backlight brightness, adjustable from 1 to 100.

Sound: Controls audio output volume, adjustable from 0 to 100.

Fan: Adjusts internal cooling fan behavior: Auto / Off.

Language: Switches the system interface language.

English / Chinese / French / German / Italian / Spanish / Japanese / Korean / Russian

Menu settings: Adjusts main menu display properties.

Transparency: Black / 75% / 50% / 25%

Display time: 5s / 10s / 15s / 20s / 25s / 30s / Always

Battery information: On / Off

Signal input: Switches the video input channel.

Auto / SDI / HDMI

Firmware: View version information, perform upgrades, or restore factory settings with one touch.

Upgrade method: Upgrade via SD card.

Firmware Update Procedure

1. Copy the latest .bin firmware file to the root directory of the SD card.
2. Ensure the SD card is formatted to FAT32.
3. Verify or rename the firmware file to K7_V0.x.xx.bin (Do not alter the filename).
4. Insert the SD card firmly into the card slot.
5. Rotate the adjustment Knob to navigate to [System] → [Firmware] → [Upgrade] and press the knob to confirm.
6. Connection Error: If "Connection Failed" appears, check the SD card seating or try a different SD card.
7. Read Error: If "Read Failed" appears, verify the integrity of the firmware file and ensure the filename is correct.
8. Upon initiation, a progress bar will be displayed on the screen.
9. Success: Upon completion, the message "Upgrade Successful. Reboot Required" will appear, and the device will reboot automatically.
10. Failure: If the update fails, review the steps above and retry the process.
11. After rebooting, verify the version number via [System] → [Firmware] → [Version Info].

!!! Prevent power loss during upgrade. It is recommended to power the unit through both TYPE-C and LEMO ports.



Figure 13: Shortcut Menu

The shortcut menu is a floating operation panel at the bottom of the monitoring image for quick access to frequently used functions. The icon of the enabled shortcut menu is highlighted in yellow.

Open: Swipe up from the bottom of the screen.

Page turning: Swipe the menu bar to the right, tap the arrow on the right side of the menu, or scroll with the adjustment knob.

Page 1	Image Flip, Focus Assist, Sharpness, Waveform, Vectorscope, Histogram, False Color, LUT Switch, LUT Output, Fan, Signal Input, Color Temperature, Aspect Marker
Page 2	Safe Area, Center Marker, Grid, Audio Meter, Zebra, Monochrome, Aspect Ratio, Image Freeze, Pixel-to-Pixel, Zoom, Scan Mode, Anamorphic, User Group

Specifications

LCD Panel		
Display Size		6.97-inch LTPS-TFT-LCD (optically bonded, with protective glass)
Active Display Area		154.4×86.8 mm
Resolution		1920×1080
Color Depth		16.7 million colors
Aspect Ratio		16:9
Maximum Brightness		2800cd/m ²
Contrast Ratio		1000:1
Viewing Angle		Horizontal / Vertical: 160 degrees / 160 degrees
Input / Output Interfaces		
Input	HDMI 2.0×1	4K60P
	BNC×1	3G/HD/SD-SDI Input
Output	BNC×1	3G/HD/SD-SDI Loop Output
	HDMI×1	HDMI Loop Output
	3.5mm×1	SDI/HDMI Audio De-embedded Output
Video Format		
HDMI		4096×2160p (50／59.94／60)
		4096×2160p (23.98／24／25／29.97／30)
		3840×2160p (50／59.94／60)
		3840×2160p (23.98／24／25／29.97／30)
		1080i (60／59.94／50)
		720p (60／59.94／50)
		1080p (60／59.94／50／30／29.97／25／24／23.98)
		1080psf (30／29.97／25／24／23.98)
SDI	SMPTE-425M-A/B	1080p (60／59.94／50)
	SMPTE-274M	1080i (60／59.94／50)
		1080p (30／29.97／25／24／23.98)
	SMPTE-RP211	1080psf (30／29.97／25／24／23.98)
	SMPTE-296M	720p (60／59.94／50)
SMPTE ST2048-1:2011		2048×1080p (23.98／24／25／29.97／30／50／59.94／60)
Other Specifications		
Operating Voltage		2-Pin LEMO:7-34V / USB-C PD:9-20V DC
Power Consumption		18W
Operating Temperature		0℃～40℃
Operating Humidity		10%～90%
Storage Temperature		- 15℃～ + 60℃
Storage Humidity		10%～90%
Unit Dimensions		187.5 x 121.3 x 31.7 mm (main unit only, including corner protectors)
Net Weight (main unit only)		575 g

Troubleshooting

Symptom	Possible Cause	Solution
No image displayed	Not powered on / insufficient power / NP-F battery depleted	Check the power switch, confirm the power supply, or replace with a fully charged battery.
	Signal cable loose	Reconnect the HDMI/SDI cable.
No signal	Wrong input source selected / unsupported format	Switch the input source and confirm the video format.
Corrupted image / flicker	Poor cable contact / electro-magnetic interference	Use a high-quality cable and keep away from interference sources.
Color cast or no color	Monochrome mode enabled / LUT abnormal	Turn off monochrome mode. Turn off LUT, select the correct LUT, restore color defaults, or delete and re-import the custom LUT.
	Assist function enabled (false color, peaking, etc.)	Turn off the corresponding monitoring assist function.
No audio / silent	Volume set to 0	Adjust the volume.
	No embedded audio in the input source	Confirm that the selected channel has embedded audio, or connect analog audio.
	When no headphones are connected or worn	Connect 3.5mm Headphones
SD card upgrade failed	SD card not FAT32 / file damaged	Format the SD card as FAT32 and check the upgrade file.
LUT not applied	LUT not in root directory / SD card not FAT32	Confirm the .cube file is in the SD card root directory and the card is FAT32.



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