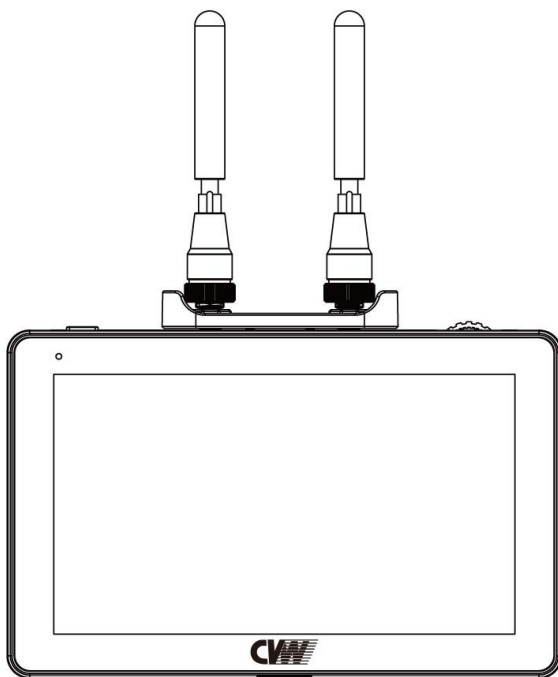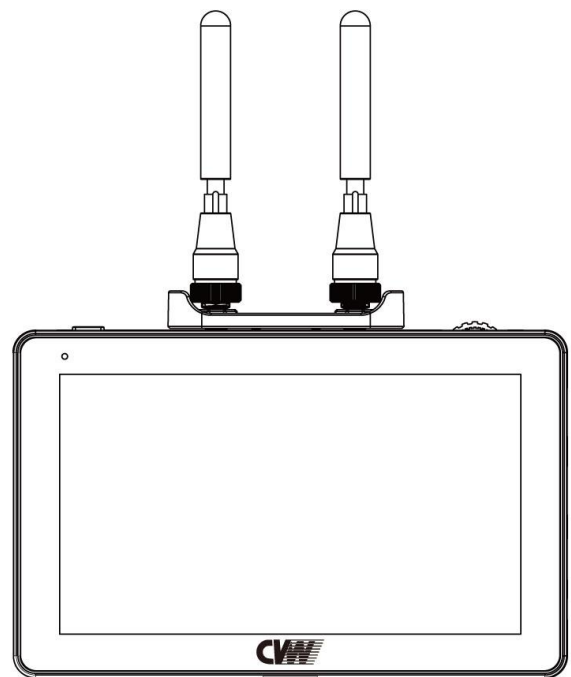# CVW SWIFT Z

5.5″ Wireless Monitor Kit

HDMI/3D LUT/HDR

TX: 7109

RX: 3109

User Manual

Overview

Thank you for purchasing our wireless monitor kit. The kit is a set of touch-screen monitors with built-in wireless modules. It supports the resolution format of up to 1080P/60Hz in wireless mode. It comes with H.264 codec to enable clearer video and lower latency.

Full HD color LCD monitor, which adopts advanced integrated DSP circuits and energy-efficient IPS LED panel, delivers low power consumption and stable performance. The kit comes with HDMI input and output, reverse power(to cameras), touch screen, supporting 3D LUT and HDR. It is portable, user-friendly. A wide variety of advanced features is included, such as Histogram, Audio Meter, Focus Assist, False Color, Zebra Exposure, Anamorphic.

The kit comes with dual battery slot, you can use the power adapter or the external battery as power source.

 To insure the best use of the unit, please read the user's manual carefully

CAUTION

- This product should not be exposed dripping or splashing.
- Please place the wireless monitor on a flat with hard and stable surface.
- In order to reduce the risk of electric shock of fire, please do not expose the receiver/ transmitter to rain or moisture.

● Please avoid the heavy impact and drop onto the ground when move the product.

● The screen of this product is made of glass. Please do not drop the screen towards the ground. Keep away from injury if the screen is broken.

● Keep the product away from the heat source, and avoid the prolonged exposures to the sun as the LCD screen will be damaged.

● To avoid damaging the product, please do not take apart or repair the unit by yourself without the adjustable components in the unit.

● In order to better maintain the LCD screen and protect the cover, please follow the following ways to avoid damages.

1. Please refrain from using the hard objects to hit the screen.
2. Please do not force to wipe the screen.
3. Please do not use the chemical solutions to clean the screen.
4. Please do not spray any detergent on the screen.
5. Please do not write on the screen directly.
6. Please do not stick on the screen.
7. Please simply wipe with a clean soft cloth and make sure no water on the screen.

Special Notice

● The impact of radio waves (such as the following environment may cause the abnormal audio and video (blocked image, noise...etc.).

1) Transmit near the wall which is hard for the radio waves to get through.

2) Quite close to the refrigerator, metal fitment and appliances, or net to the crowded situation.

● This product has been tested and manufactured to comply with national electrical safety rules, however, there will be noise caused by the interference with other machines in rare cased. If the interference is happened, please keep a certain distance away from other machines.

● The product is susceptible to interference from 5GHz wireless local area network or other wireless devices.

● Optimal range between transmitter and receiver is between 1 meter and 30 meters with in line of sight indoor.

● It will take 30-40 seconds to boot the system before wireless communication start, the media receiver can not be operated during this time.

Features

● Transmission range up to 250m/800ft (LoS);
● Ultra-low latency: 70ms;
● Up to 1080P60Hz;
● Selectable channels to minimize interference;
● Both the TX monitor and RX monitor support HDMI IN and HDMI OUT, a second monitor can be working via HDMI LOOP OUT;
● Can work as a monitor alone if the wireless module is deactivated;
● 5.5 inches 1920x1080 full HD IPS screen with touch function;
● Support 3D LUT;
● Support HDR monitoring;

- A panoply of auxiliary functions, including histogram, focus assist and many others, enabling optimized exposure and focus;
- DC8V power out to power your cameras;
- Attachable sun hood ensure better viewing in bright sunlight.
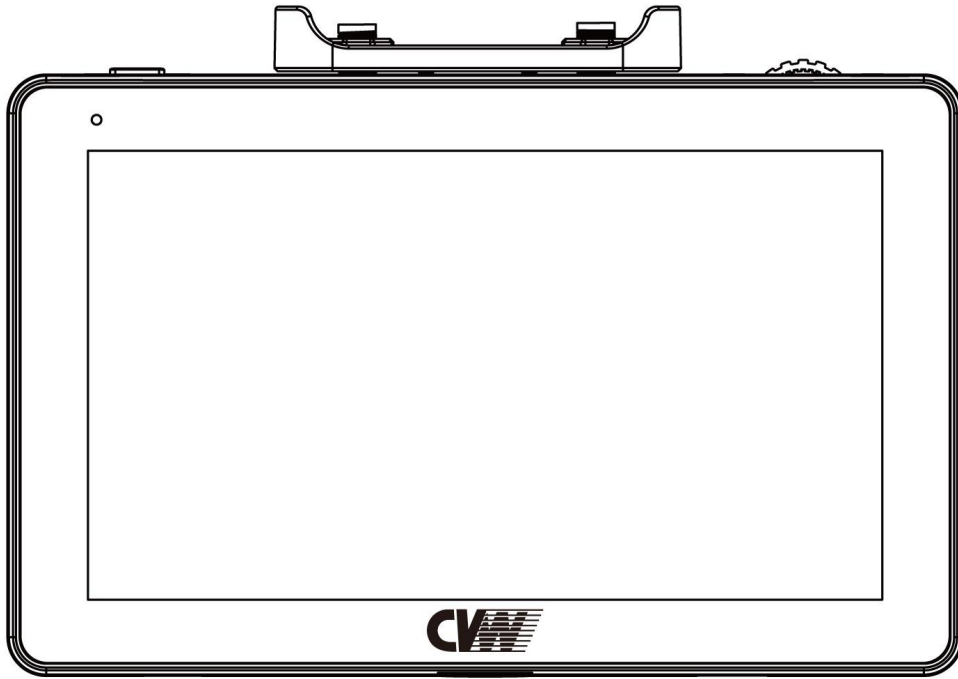
CONTENTS

1. Product Layout

● **Front**

● **Back**

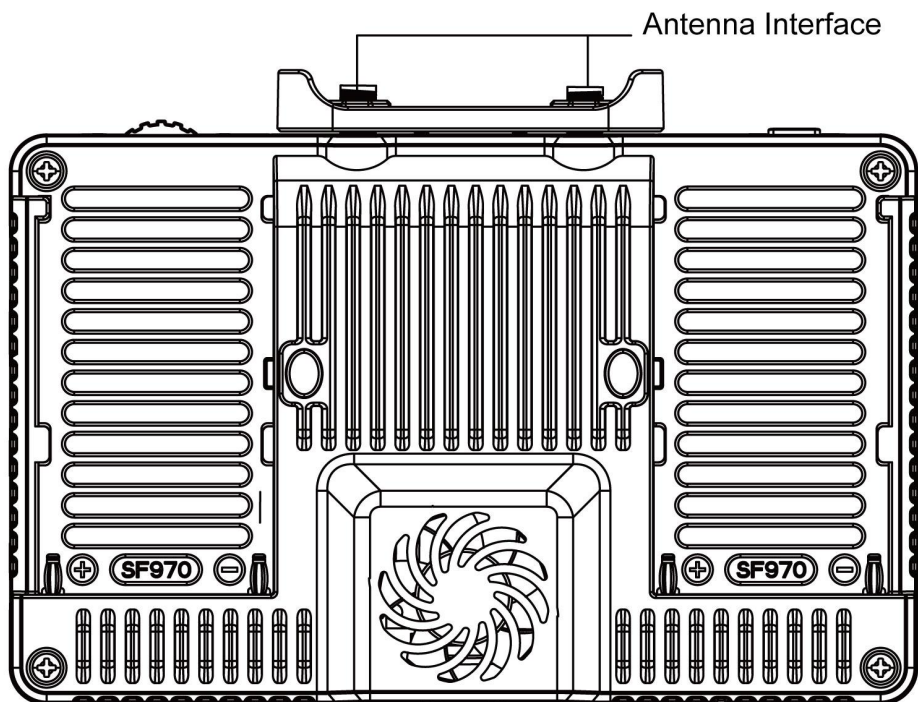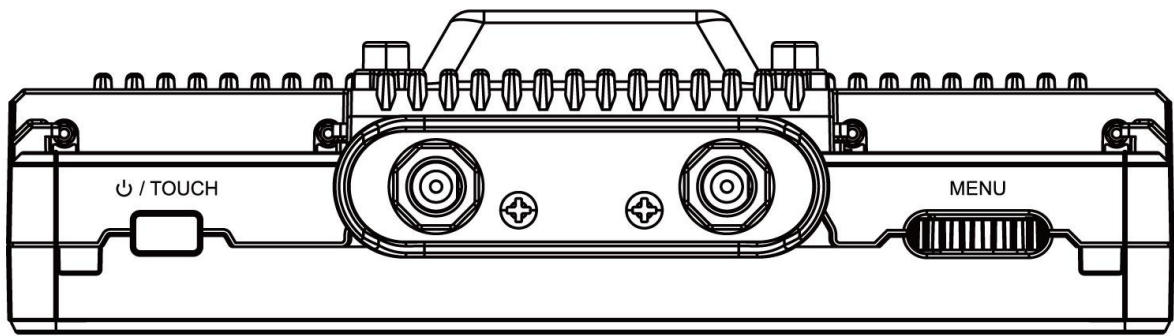Antenna Interface

1.1 Button Operation

⏻ / TOUCH :

- Turn on and off the power by pressing and holding the power button. Video appears within a few seconds.

- Lock and unlock the touch screen operation by pressing the power button.

Note: Install the antennas before powering on.

MENU:

- Press and hold the wheel to start the main menu. Press the wheel to start the shortcut menu.

- Rotate the wheel to select the needed option, press it again to enable/disable the relevant tool.

(Learn more details: **2. On-Screen Display Operation**)

1.2 Interface (Bottom)
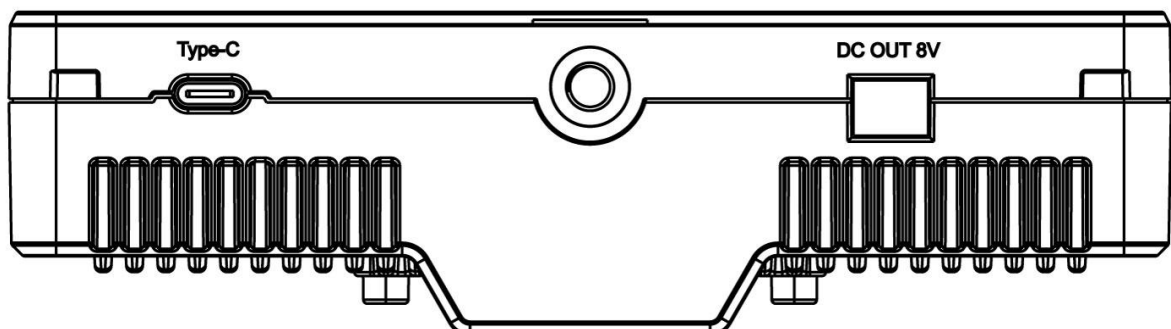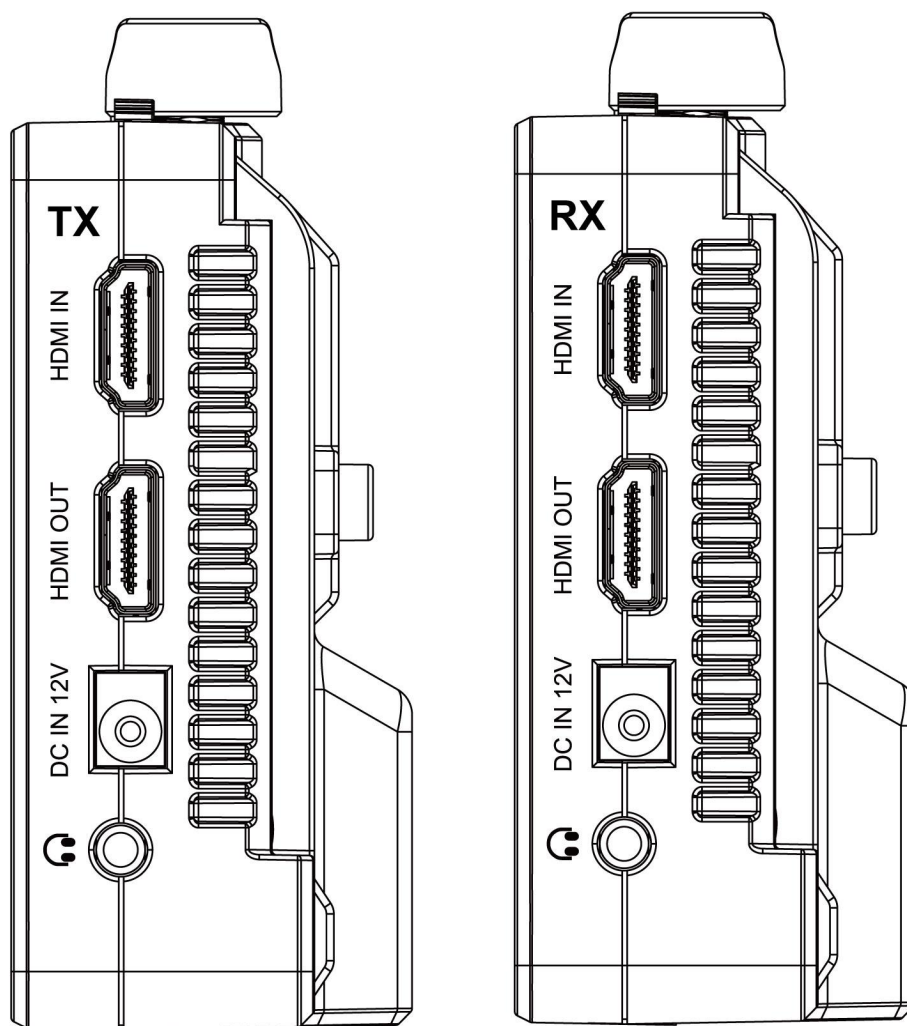
Type-C: For 3D LUTs and firmware upgrades

DC OUT 8V: Barrel-type output for powering camera via the camera adaptor. (Sony NP-FW50 & Canon LP-E6 & Panasonic DMW-BLF19, etc.)

1.3 Interface (Right)

TX: Transmitter

RX: Receiver

HDMI IN: 1.4, HDMI signal input

HDMI OUT: 1.4, HDMI signal output

DC IN 12V: Barrel (5.5mm outer, 2.1mm inner), DC 7~24V Input

🎧 **:** 3.5mm headphone jack

1.4 Power Supply

(1) The rear cover of the transmitter or receiver is installed with dual

battery slots, which is applicable to NP-F series of batteries.

● **Batteries of Sony cameras:**

Sony F970 F960 F950 F930 F770 F750 F730 F570 F550 F530

QM91D QM91 QM90D QM90 QM71D QM71 QM70D QM70 QM51D

QM51 FM71 FM70 series

●**Battery switching instruction**

➢ When the battery/batteries is/are placed in the battery slot(s), battery

icon will appear on the upper right of the screen.

➢ White battery icon: working; Gray battery icon: not working.

➢ Double-tap the gray battery icon and it will be switched to a working

state in about 3 seconds, then it will be turned white.

Remark: Actual battery duration depends upon battery

specifications. Please remove the battery from the monitor if will

not be in use for a long period of time.

1.5 Mounting

There is a ¼-20 threaded hole on the bottom for mounting.

1/4-20 thread **hole**
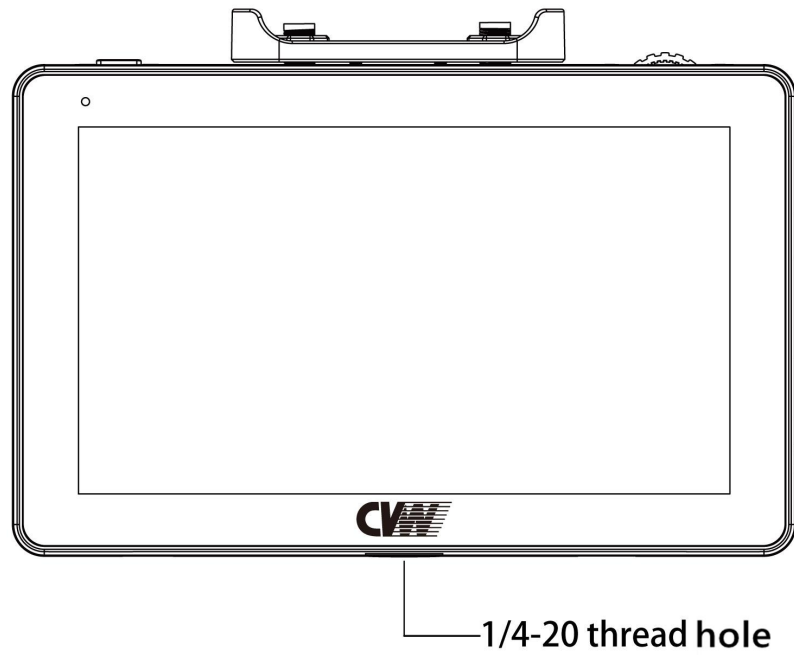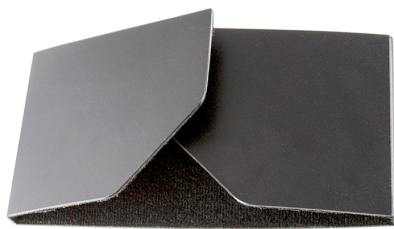
1.6 Sun Hood

① **Sun Hood**

② **Sun Hood Frame**

③ **Fixed Frame**

④ **Sun Hood Application**

First fasten the Sun Hood Frame ②to the monitor tightly ③.

Unfold the Sun Hood ①, and attach the Velcro part of the Sun Hood to the Sun Hood frame ②, make sure they are tightly secured, and then complete the Sun Hood installation ④.

2. On-Screen Display Operation

The indicator light is on (red) once the monitor is powered on.
Press ⏻ / TOUCH to turn on the monitor. The indicator light turns
yellow. Once the HDMI signal is fed, the indicator light turns from yellow
to green.

After the TX monitor input the HDMI signal, the RX monitor will receive
the signal from it. Swipe from the Right to Left to access channel menu
including switch, signal display, 9 channels and WPS pairing. Connect
and disconnect by tapping the power button ⏻ .

Wireless Pairing:

When there is a need to replace the transmitter or receiver, please tap
and hold WPS of both the transmitter and receiver about 1 second to
enter the pairing mode, and wait for the pairing to success.
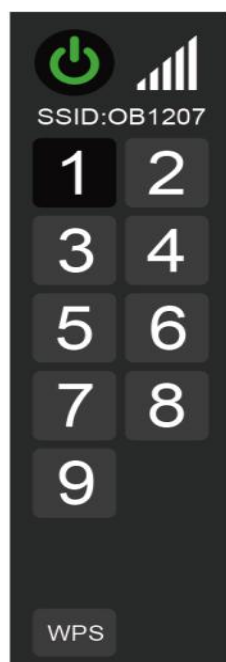
Troubleshooting Tips for wireless pairing:

The transmitter can multicast to up to 3 receivers. To enable multicasting, please pair the transmitter with the receiver one by one at a time.

*It is recommended to turn off the other paired receivers except the one in setting

* It is recommended to place the transmitter and the receiver at least 1 meter apart.

(1). Directly touch the screen for menu operation (turn on the screen touch function)

①．Double tap the screen to start the main menu and tap the relevant option to enter the sub menu. You can select the needed option and tap "<" or ">" to enable or disable it. Exit the menu by taping the or tap away.

②．Swipe up to start the shortcut menu and select the relevant tool, then tap the "<" or ">" to enable it.

③．Swipe up and down to adjust the backlight on the left side of the screen (1/2 split screen) or volume on the right side of the screen.

④．Swipe from Right to Left to access the channel Menu. There are 9 channels for selection.

⑤．Tap away to exit

Figure:
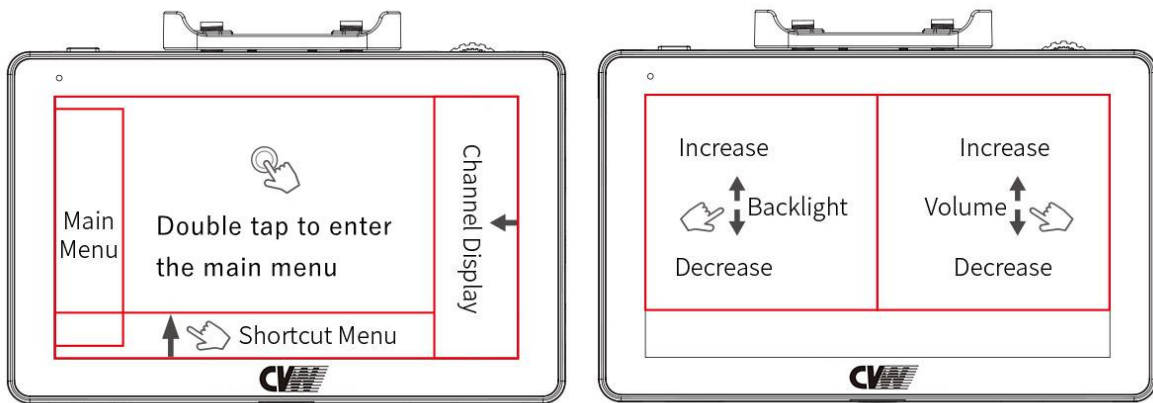
(2) Wheel Operation

①. By default the wheel can be rotated to adjust the backlight directly or rotate it to Settings ⚙, in which the backlight and volume can be adjusted in the sub menu.

②. The default function of the wheel can be assigned to backlight or volume. Press and hold the wheel until the main menu is launched. Release it and rotate to Settings, press the wheel to enter Wheel option, rotate to choose between backlight and volume, Press again to finish.

Note: Please follow the similar steps above to set up other options.

③. Press the wheel to start the shortcut menu. Rotate the wheel to select the needed tool, press to finish.

Note: The menu will automatically exit after about 5 seconds without any operation.

3. RTSP Mode Operation

①．Search and download the APP (CRYSTAL VISION)

Enter the "Support" page at www.cv-hd.com, choose the Swift Z, then get the relevant APP download information.

②．Power on transmitter and select the CH5-CH9.

③．Tap and hold the RTSP of transmitter about 3 seconds to enter the RTSP mode.（The RTSP frame shows black）

④．Open the APP of Crystal Vision, swipe right and connect the Swift Z Wi-Fi.

⑤．Navigate to the WLAN Setting page and select the SSID (AP), which starts with "CVW" to connect. The SSID(AP) is shown on the top of the channel menu.

⑥．Input the password (12345678) and select "CONNECT".

⑦．After the connection is successful, reopen the APP, enter the "Swift Z" page to select the connection (the "Connection" icon shows red), then receive the real-time video.

⑧．Interfaces：Lock Screen, Brightness, Waveform, Focus Assist, Zebra, Frame Guides, Zoom, False Color, Monochrome, 3D LUT, Audio Meters, Settings, Image Capture, Video Recording, Return, Live Streaming.

⑨．Settings: Channel selection, channel scan, password setting.

Notes:

* Please contact salesperson or local agent of CVW for upgrade files.

* If there are multiple transmitters are used together, please distinguish which transmitter's Wi-Fi the smart-phone/iPad is connected to.

* Please switch the receiver to RTSP mode, which is the same to transmitter. After that, the receiver also can monitor as the same as the smart-phone/iPad.

* Connecting SSID (AP) will cause your Android devices to be unable to access the Internet.

* Please install the new version of APP requires removing the old version.

* APP does not support Android 6.0 and below.

4. Tools

All Waves	OFF, ON
Parada	OFF, RGB, YUV, Y
Vector	OFF, ON
Histogram	OFF, ON
Focus Assist	OFF, ON The focus level and focus color items are displayed after the focus assist is turned on.
Focus Level	1～10
Focus Color	yellow, red, green, blue, white
Audio Meter	OFF, ON
Zebra	OFF, ON The zebra value item is displayed only after the zebra is turned on.
Zebra Value	1%～100%
Monochrome	OFF, gray, red, green, blue
False Color	OFF, type 1, type2
Return ←	Please use the scroll wheel to return to the previous menu or click on the main menu directly

Nine Grid	OFF, ON
Safety Marker	OFF, 70%, 80%, 90%, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1
Center Marker	OFF, ON

Marker Mat	OFF, 16:9, 16:10, 4:3, 1.85:1, 2.35:1 The Marker Mat Alpha item is displayed after the Marker Mat is turned on.
Marker Mat Alpha	0%, 25%, 50%, 75%
Marker Color	yellow, red, green, blue, white, black
Return ←	Please use the scroll wheel to return to the previous menu or click on the main menu directly

Scan Mode	Under Scan, Over Scan
Video Aspect	auto, 16:9, 16:10, 4:3, 5:4, 1.85:1, 2.35:1, stretch, user Under the **user**, you can customize the Video Width (100% ~ 200%), Video Height (100% ~ 200%)
Anamorphic Mode	OFF, 1.25x, 1.33x, 1.5x, 2.0x, 2.0x mag
Auto Mirror	OFF, ON
Flip H	OFF, ON
Flip V	OFF, ON
Zoom Times	OFF, 100%～300%
Freeze	OFF, ON
Pixel to Pixel	OFF, ON
Return ←	Please use the scroll wheel to return to the previous menu or click on the main menu directly

HDR	OFF, HLG 2020, HLG 709, HLG P3
LUT Switch	OFF, ON

	The LUT item is displayed after the LUT Switch is turned on.
LUT	SLOG2, SLOG3, LOGC, VLOG
LUT Import (Type-C)	After copying the 3D LUT file to the U disk and inserting it into the Type-C to USB connector, you can click the "<" or ">" in the LUT Import(Type C) to import the 3D LUT file or rotate the wheel to import the 3D LUT file(up to 50 LUTs).
Colortemp	5600K, 6500K, 9300K, user Under the "user" item, the red, green, and blue values of the image can be adjusted.
Backlight	1～100
Brightness	0～100
Contrast	0～100
Saturation	0～100
Hue	0～100
Sharpness	0～100
Return ←	Please use the scroll wheel to return to the previous menu or tap on the main menu directly

●

	Backlight, Volume After selecting the wheel option, you can tap the "<" or ">" in the wheel option, or rotate the wheel to select one of the shortcut functions to set it to the rotary wheel adjustment (when the menu is not displayed).
Wheel	
Language	中文, English, 日本語, Deutsch, Français, Italiano, Español, 한국, Русский
Transparency	OFF, low, middle, high

OSD Time	5s, 10s, 15s, 20s, 25s, always
Touch	OFF, ON Please press the TOUCH button to turn on the touch function again after choosing turn off
Volume	0～100
Mute	OFF, ON
Reset	OFF, ON After selecting the reset option, you can tap the "<" or ">" in the reset option or rotate the wheel to restore the factory settings.
Firmware Update	After copying the update file to the U disk and inserting it into Type-C to USB connector, and then connect to the Type-C interface of the monitor, you can tap the "<" or ">" in the firmware update option or rotate the wheel to update.
Return ←	Please use the scroll wheel to return to the previous menu or tap on the main menu directly

●

	Exit the menu

4. Technical Specifications

Panel Size	5.5" touch screen
Resolution	1920 × 1080 pixels
Frequency	5.1～5.9(GHz)

Audio Format	PCM
System Latency	70ms
Video Compression Format	H.264
Transmission	250m/800ft (open environment)
Antenna Mode	2dBi x 2
Dot Pitch	0.0639 (H) × 0.0213 (W) mm
Pixel Density	400PPI
Aspect Ratio	16:9
Brightness	500cd/m^2
Contrast	1000:1
Viewing Angle	80°/80°(L/R) 80°/80°(U/D)
Backlight	LED
Adjustable Backlight	Yes
Input	HDMI V1.4
Output	HDMI V1.4, 3.5mm stereo headphone jack
Power In	DC IN 12V, Barrel (5.5mm outer, 2.1mm inner)
Power Out	DC OUT 8V, Barrel (5.5mm outer, 2.1mm inner; Power DSLR or mirrorless camera)
HDMI Input/ Output Support Format	Wireless Transmission Opening 480P,576I,576P,720P60/59.94/50,1080I50/59.94/60 1080p23.98/24/25/29.97/30/50/59.97/60 Wireless Transmission Closing 480P,576I,576P,720P60/59.94/50,1080I50/59.94/60 1080p23.98/24/25/29.97/30/50/59.97/60 4K UHD 3840×2160p (30/29.97/25/24/23.98Hz) DCI 4K 4096×2160p (24Hz)
Power Input Voltage	7~24V
Power Consumption	≦18W

Unit Size (mm)	148Lx103.5Hx41W (mm)
Unit Weight	370g (TX) , 370g (RX)
Mount Point	one ¼-20 thread point on bottom
Working Temperature	-20℃～55℃
Storage Temperature	-30℃～65℃

5. Troubleshooting

5.1 Only black and white or monochrome color is displayed:

① please check saturation, brightness & contrast adjustment.

② Please check "Monochrome" is in black, white or monochrome image or other condition.

5.2 NO signal after power on

① Check if signal cable connecting is in good condition.

② Check signal cable connecting, and make sure to use the standard adapter to connect the monitor. If power is supplied by battery, please check if the battery is fully charged.

5.3 No sound

Please confirm whether the volume control is turned on, and adjust the volume.

■ If there are still other problems, please contact with our related technologists.

★ As we are improving product features and product performance, so if there is any change on the specification without prior notice.