bond 7UHD

Intelligent Gadget

for Cloud Monitoring and Collaboration

User Manual

RGBlink®

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Thank you for choosing our product!

This User Manual is designed to show you how to use this product quickly and make use of all the features. Please read all directions and instructions carefully before using this product.

Declarations

FCC/Warranty

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference, in which case the user will be responsible for correcting any interference.

Guarantee and Compensation

RGBlink provides a guarantee relating to perfect manufacturing as part of the legally stipulated terms of guarantee. On receipt, the purchaser must immediately inspect all delivered goods for damage incurred during transport, as well as for material and manufacturing faults. RGBlink must be informed immediately in writing of any complains.

The period of guarantee begins on the date of transfer of risks, in the case of special systems and software on the date of commissioning, at latest 30 days after the transfer of risks. In the event of justified notice of compliant, RGBlink can repair the fault or provide a replacement at its own discretion within an appropriate period. If this measure proves to be impossible or unsuccessful, the purchaser can demand a reduction in the purchase price or cancellation of the contract. All other claims, in particular those relating to compensation for direct or indirect damage, and also damage attributed to the operation of software as well as to other service provided by RGBlink, being a component of the system or independent service, will be deemed invalid provided the damage is not proven to be attributed to the absence of properties guaranteed in writing or due to the intent or gross negligence or part of RGBlink.

If the purchaser or a third party carries out modifications or repairs on goods delivered by RGBlink, or if the goods are handled incorrectly, in particular if the systems are commissioned operated incorrectly or if, after the transfer of risks, the goods are subject to influences not agreed upon in the contract, all guarantee claims of the purchaser will be rendered invalid. Not included in the guarantee coverage are system failures which are attributed to programs or special electronic circuitry provided by the purchaser, e.g. interfaces. Normal wear as well as normal maintenance are not subject to the guarantee provided by RGBlink either.

The environmental conditions as well as the servicing and maintenance regulations specified in this manual must be complied with by the customer.

Operators Safety Summary

The general safety information in this summary is for operating personnel.

Do Not Remove Covers or Panels

There are no user-serviceable parts within the unit. Removal of the top cover will expose dangerous voltages. To avoid personal injury, do not remove the top cover. Do not operate the unit without the cover installed.

Use the Proper Power Cord

Use only the power adaptor and connector specified for your product. Use only a power cord that is in good condition. Refer cord and connector changes to qualified service personnel.

Do Not Operate in Explosive Atmospheres

To avoid explosion, do not operate this product in an explosive atmosphere.

Installation Safety Summary

Unpacking and Inspection

Before opening bond 7UHD shipping box, inspect it for damage. If you find any damage, notify the shipping carrier immediately for all claims adjustments. As you open the box, compare its contents against the packing slip. If you find any shortages, contact your sales representative. Once you have removed all the components from their packaging and checked that all the listed components are present, visually inspect the system to ensure there was no damage during shipping. If there is damage, notify the shipping carrier immediately for all claims adjustments.

Site Preparation

The environment in which you install your MSP 405 should be clean, properly lit, free from static, and have adequate power, ventilation, and space for all components.

Chapter 1 About Your Product

1.1 Product Overview

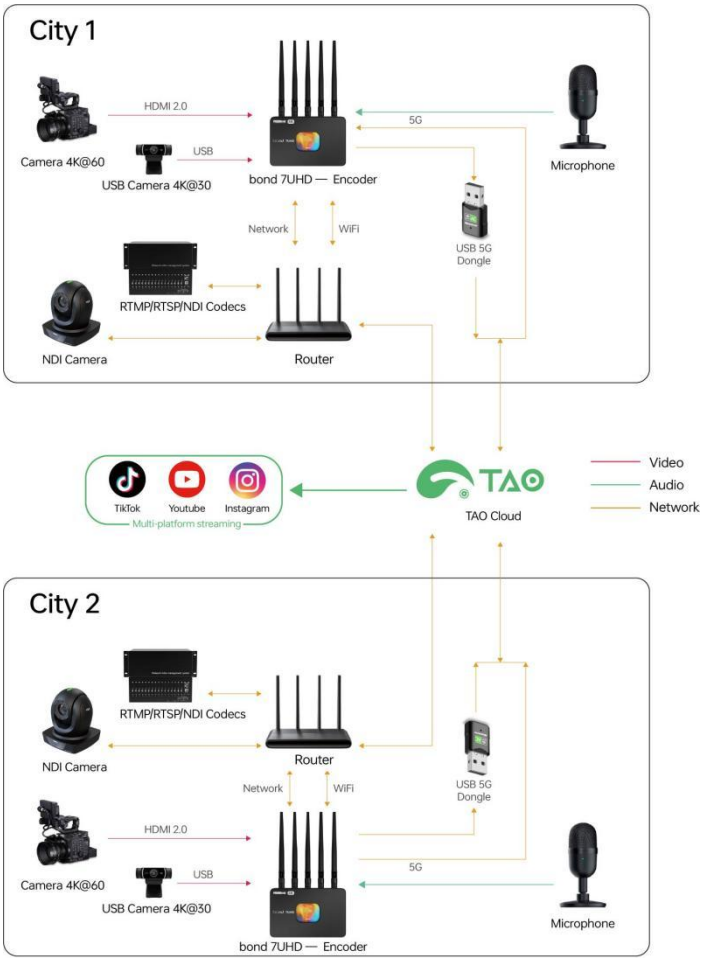
bond 7UHD is an intelligent tool for cloud monitoring and collaboration.

It boasts powerful performance, supporting integrating connection to the internet via multiple methods including Ethernet Wired Connection, WiFi Wireless Connection, SIM Card Mobile Connection, Smartphpne Tethering, and 5G Dongle Connection, offering link aggregation of bundling a bunch of these connection methods together.

bond 7UHD supports live streaming through binding with TAO Cloud. Once connected, you can link your camera with bond 7UHD and stream live to popular social media platforms such as TikTok, Youtube, Instagram, etc, enabling remote real-time sharing of shooting footage with collaborators. By binding to TAO Cloud, you can instantly upload photos, videos, and other footage to the TAO Cloud for efficient content production and creation.

The integrated OLED display provides real-time monitoring and information checking on device status, including IP address, resolution, streaming status, recording status, battery level, and network signal. It supports multiple power supply options via NP-F batteries, Type-C interface, and DC interface.

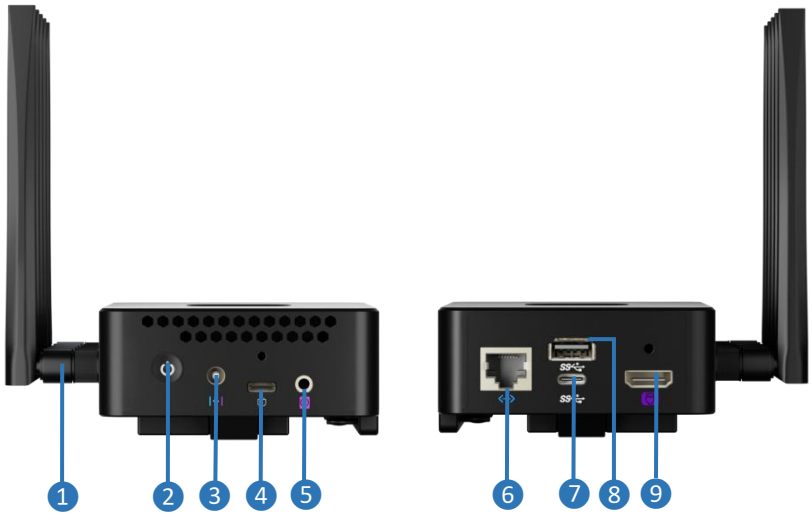
Its compact size and lightweight design make it highly portable. Additionally, the built-in 1/4 inch screw hole allows easy mounting on cameras, tripods, or other equipment, enhancing flexibility for live streaming anywhere and anytime.



1.2.1 Key Features

- Intelligent cloud live view and collaboration gadget
- Built-in 2-inch OLED screen for real-time monitoring
- Small and compact, easy to carry
- Synchronously record and upload
- Support power supply through NP-F battery, USB Type-C interface and DC interface
- Built-in 5G module for installing SIM card
- SIM Card/5G Dongle/WIFI Wireless Network/Ethernet Wired Network/Smartphone Tethering
- Support network aggregation
- Compatible with major cameras
- ¼in screw hole is provided for camera or rack mounting

1.2.2 Interface Panel



No.	Interface	Description
1	Antenna Port	Built-in 5G module support installation of up to 5*5G antennas.
2	Power Button	● Single Press ○ Power-off State: Press to boot the device. ○ Power-on State: Press to loop between: Home → Device Information Interface 1 → Device Information Interface 2 → Network Connection Status (if offline) → TAO Cloud Binding Interface → Reset Interface → Home. ○ Upgrade Interface: Press to cancel. ● Double Press ○ Reset Interface: Double press to perform factory reset. ○ Upgrade Interface: Double press to upgrade.
3	DC Power Port	● 12V/2A input. ● Support bidirectional power supply, support powering camera.
4	USB Type-C Power Port	● 12V/2A input. ● Connect to an external battery or power adapter.
5	Line-in Port	● 3.5mm analog audio socket for audio signal input. ● Connect it to audio mixer, CD player, or other such audio device.

6	LAN Port	Ethernet Port for upgrade, live streaming.
7	USB Type-C In Port	● Connect to a USB camera as the second input signal (UVC input). ● Recognized as a storage drive when connected to a computer.
8	USB Type-A Port	● Connect to a USB camera as the second input signal (UVC input). ● Insert a USB disk to upload videos, images, etc. (preliminary) ● Insert a U disk for recording. ● Insert the 5G USB dongle to convert 5G signals into Wi-Fi for the bond 7UHD. ● Use with standard USB Type-A cable for smartphone tethering.
9	HDMI In Port	● HDMI 2.0 input, HDCP 2.3 compliance. ● Connect it to camera, PC or other such equipment.

Tips: Due to variations in batches, the antenna design may differ from the actual product.

1.2.3 Front Panel

No.	Interface	Description
1	2-inch OLED Display	● Real-time signal monitoring. ● Display information such as IP address, input resolution, streaming & recording status, battery status, network signal, etc.
2	SIM Card Slot	For inserting the SIM card.

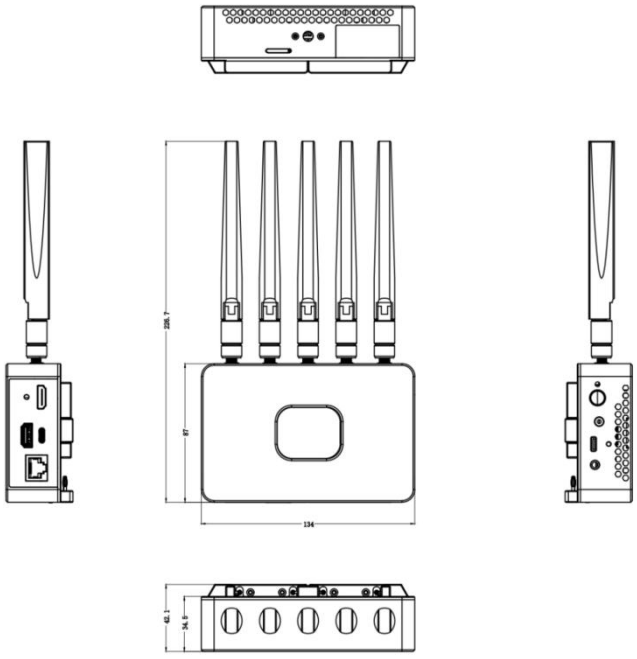
❸	1/4-inch Screw Hole	Allow for mounting bond 7UHD onto a bracket or stand for secure positioning.

1.2.4 Rear Panel

No.	Interface	Description
❶	NP-F Battery Plate	Dual NP-F battery plate design supports simultaneous installation of two NP-F batteries.

1.2.5 Dimensions

Following is the dimension of bond 7UHD for your reference: 134mm × 226.7mm × 42.1mm.



Chapter 2 Install Your Product

2.1 Connecting HDMI Input

The bond 7UHD supports two input methods: **HDMI input** and **UVC input**.

It features one HDMI 2.0 input port, allowing you to connect any device with HDMI output capabilities (such as a computer) directly to the bond 7UHD using an HDMI cable.

This HDMI 2.0 interface supports resolutions up to 4K@60p and includes deinterlacing functionality to ensure high-quality video output.

Additionally, the USB Type-A and USB Type-C ports on the bond 7UHD support UVC (USB Video Class) input. You can connect UVC-compatible device (for example, a camera) to either the USB Type-A or USB Type-C port to directly transmit video signals captured by the camera.

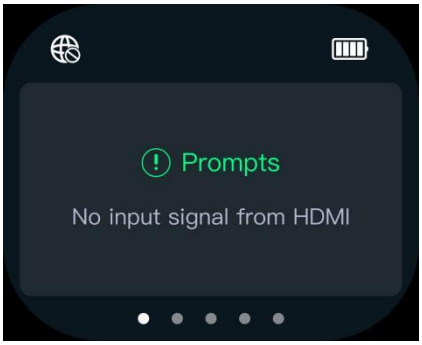
Connect to the USB Type-C Interface

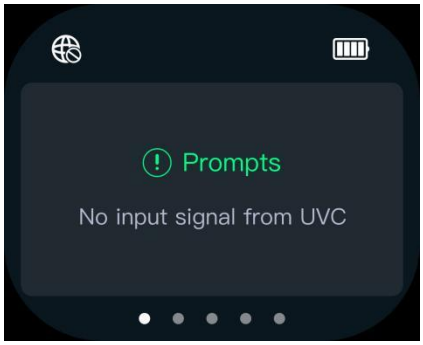
Connect to the USB Type-A Interface

Tips: Both the USB Type-C and USB Type-A input ports support UVC input for receiving video signals. The USB Type-C and USB Type-A cannot be used simultaneously for video input. Select and use only one of these two ports at a time.

Upon receiving an input signal, the bond 7UHD will will automatically recognize and display the input image after powering on. And the input resolution can be checked on Device Information Interface 1, confirming that the device has successfully captured the signal source.

If no input signal is detected, the home screen will display a "No Input Signal" status as shown below. Please verify that the HDMI/UVC output device is powered on and functioning properly. Also, reconnect the cable and ensure it is securely and correctly connected.





2.2 Connecting Audio Input

The left side panel of the bond 7UHD features a 3.5mm Line-in audio input interface for receiving audio signals from external devices. Connect an external audio device (such as a mixer, microphone, or CD player) to the bond 7UHD's Line-in interface using a standard audio cable. Once you have activated the Line-in switch on the overlay effects page (go to the web), you can mix the external audio source with the selected video signal for output.

2.3 Connecting USB Port for Recording

Insert a USB drive into the USB Type-A port marked with a icon to record live content transmitted through TAO Cloud or the web app. The USB drive supports a maximum capacity of 4TB and is compatible with the exFAT format.

2.4 Connecting the Network

The bond 7UHD provides multiple network connection options listed as follow:

1. SIM Card Mobile Connection
2. Ethernet Wired Connection
3. Wi-Fi Wireless Connection
4. 5G USB Dongle Connection
5. Smartphone Tethering

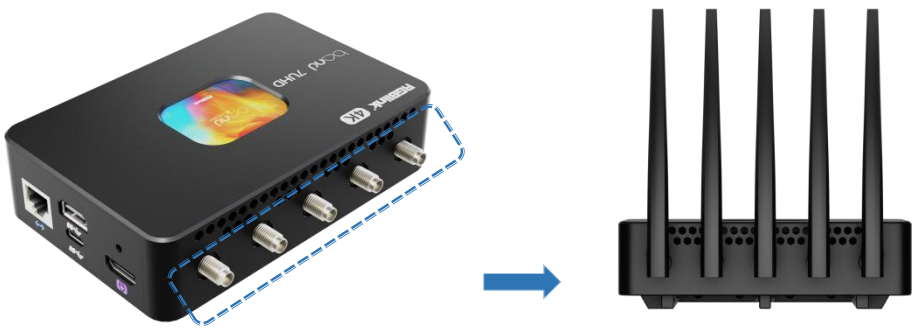
These connections enable device information checking, TAO Cloud binding, and other operations that require internet access. Therefore, please ensure at least one network connection is successfully established before proceeding with any operations.

2.4.1 SIM Card Mobile Connection

To connect using a SIM card, please prepare a 5G-compatible SIM card with active network service. Then follow the steps listed below:

1. Install the 5G Antenna

Locate the port for inserting the 5G antenna on the bond 7UHD. Connect the antenna to the port as shown in the image below, and rotate it to lock in place.



2. **Install the SIM Card**

For SIM card installation, follow these steps:

○ Insert a paperclip or SIM eject pin into the small hole of the SIM card holder located at the bottom of the bond 7UHD.

○ Place the SIM card into the card holder, and then reinsert the holder back into the slot.

2.4.2 Ethernet Wired Connection

Prepare a standard Ethernet cable and connect one end to the Ethernet port of the bond7 UHD and the other end to a port on your network switch or router.

2.4.3 USB 5G Dongle Connection

Use a 5G-compatible USB dongle for the bond 7UHD.

○ If your USB dongle requires a SIM card, please install a valid 5G network SIM card into the USB dongle.

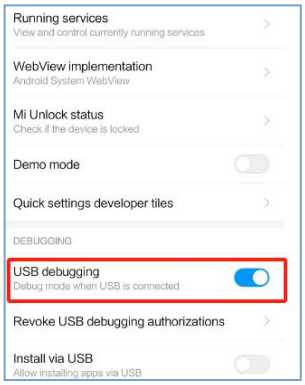
○ Insert the 5G USB dongle into the USB Type-A port of the bond 7UHD.

2.4.4 Smartphone Tethering

You can also provide network for bond 7UHD through Smartphone Tethering.

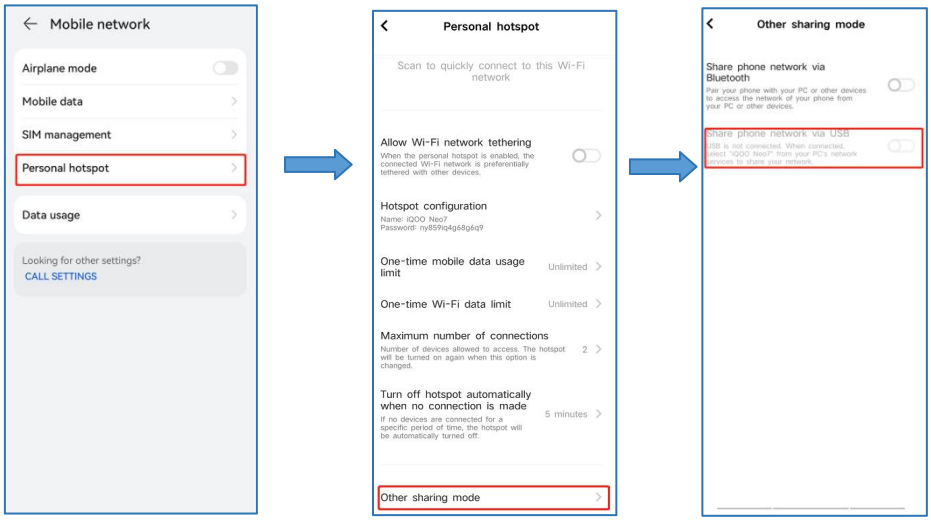
You can also provide network for bond 7UHD through Smartphone Tethering.You can also provide network for bond 7UHD through Smartphone Tethering.

- Open ‘Settings’> ‘Additional settings’> ‘Developer options”> Enable ‘USB debugging’.



- Simply connect a standard power cord from your smartphone to the USB Type-A port labeled on your bond 7UHD.

- Open ‘Settings’ > Select ‘Mobile Network’ > ‘Personal Hotspot’ > ‘Other Sharing Mode’ > Enable ‘Share Phone Network via USB’.



2.5 Plugging in Power

The bond 7UHD offers three power supply options.

①DC Interface

You can power the bond 7UHD via the DC power interface marked with a icon by connecting it to an external battery or power adapter.

②USB Type-C Interface

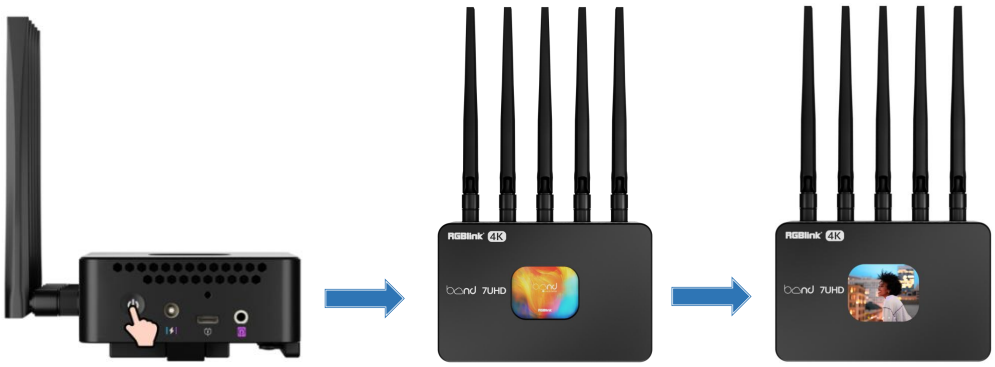
You can power the bond 7UHD through the USB Type-C interface marked with a icon by connecting it to an external battery or power adapter.

③NP-F Battery

The rear of the bond 7UHD features two NP-F battery mounts, allowing you to directly install NP-F batteries to power the device. If you have installed NP-F batteries, you can also supply power to the camera via the DC power interface.

2.6 Powering on Your bond 7UHD

Once you have connected the power supply, press the power button located on the left side to boot bond 7UHD. The screen will display the booting logo and then proceed to the home screen. Upon receiving a signal, the bond7 UHD will recognize and display the input image on the home screen while powered on.



Chapter 3 User Interface

The bond 7UHD will display the home screen once it is ready for operation. Then you can press the power button to navigate through different user interfaces: Home Screen → Device Information Interface 1 → Device Information Interface 2 → Network Connection Status Interface (if device not connected to the internet) → TAO Cloud Binding Interface → Reset Interface → Home Screen.

3.1 Home Screen

The bond 7UHD is equipped with a full-colour display that initially shows the startup logo upon power-up before automatically entering the home screen.

Once connected to a signal source, the bond 7UHD will automatically recognize and display it on the home screen for real-time monitoring.

Tips: The home screen displays HDMI video feed by default. You can select other signal sources through the web interface.

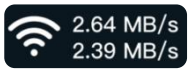
3.2 Device Information

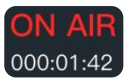
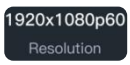
The bond 7UHD's LCD screen features two dedicated device information pages that display relevant information and status of the device.

From the home screen, press the power button to access **Device Information Interface 1**.

If the bond 7UHD is offline, icon will appear on the top left corner, indicating a failed network connection or out of network signal status.

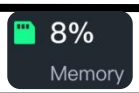
Once the bond 7UHD is successfully connected to the network, Device Information Interface 1 will display the following:

No.	Icon	Description		
1		Indicate the bond 7UHD is connected to the network via a hotspot.		
2		Indicate the bond 7UHD is connected to the network via Ethernet.		
3		Display the Wi-Fi connection status and data transmission rate.		
4		Show 5G network signal status.		
5		Battery Status		Full charge
				Half charge
				Low battery
				Charging

6		● Icon grayed out when recording is off.	
		● Show recording status and duration when recording is on.	
7		● Icon grayed out when streaming is off.	
		● Show real-time streaming status and duration when streaming is on.	
8		● Show resolution of the selected input signal.	
		● No resolution displayed if no input signal source is detected.	
9			Show the IP address obtained via Ethernet connection. (default IP address: 192.168.5.100)
			Show the IP address obtained via Wi-Fi connection.
			Show the IP address of the Wi-Fi hotspot.

From Device Information Interface 1, press the power button to access **Device Information Interface 2**, as shown below.

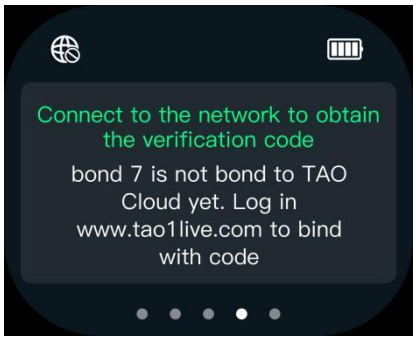
No.	Icon	Description
1		CPU Usage: Represent the percentage of CPU being utilized. A higher percentage indicates a greater CPU load.

2		Current Memory Usage: Show the ratio of memory used.
3		Temperature: Display the current operating temperature of bond 7UHD.
4		Version: Present the current firmware version of bond 7UHD.

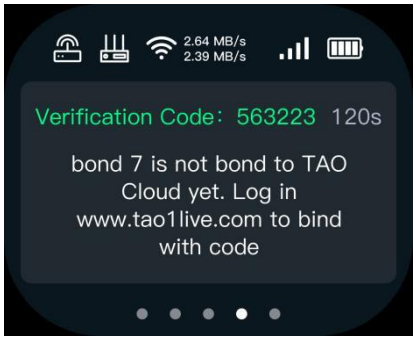
3.3 TAO Cloud Access

With TAO Cloud integrated directly into RGBlink device, such as bond 7UHD, you can do more content production, such as live streaming, cloud footage recording and uploading, etc.

From the Device Information Interface 2, press the power button to access the TAO Cloud Binding Interface. If your bond 7UHD is not connected to the internet, you will first need to connect the device to the network to obtain the verification code.



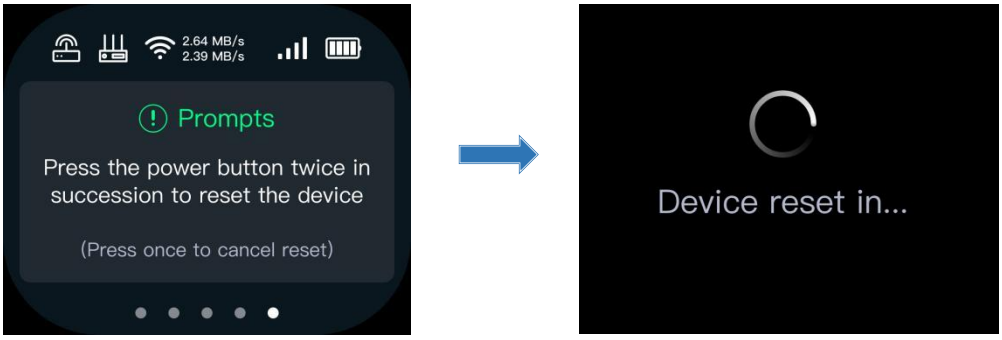
Once successfully connected to the network, the interface will display the verification code, as shown below. If the bond 7UHD has not yet been bound to TAO Cloud, you can use this verification code to complete the binding process. Once successfully bound, you can achieve real-time monitoring and upload footage to the cloud, enhancing the efficiency and convenience of content creation.



Tips: Refer to the "bond 7UHD_TAO Cloud Operation Guide" for details.

3.4 Factory Reset

From the TAO Cloud Access Interface, press the power button to access the Factory Reset Interface.



To perform a factory reset, press the power button twice to unbind the bond 7UHD from TAO Cloud and restore all settings to their factory default values.

Chapter 4 Order Code

4.1 Product Code

Order Code	Item
410-5513-06-0	bond 7UHD

Chapter 5 Support

5.1 Contact Us

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Chapter 6 Appendix

6.1 Specification

Interface	Input	HDMI 2.0	1×HDMI-A
		USB	1×USB Type-C
	Audio	Line-in	1×3.5mm Audio Jack
	Network/Upgrade/Stream	LAN	1×RJ45
	Antenna	5G Antenna	5×Antenna
	Storage/Upload	USB	1×USB Type-A
	Power	USB	1×PD USB Type-C
		DC	1×DC Jack
		Battery	2×NP-F Battery
Performance	HDMI 2.0 Input	Input Resolution	720p@50 | 1920×1080i@50/60 | 1920×1080p@24/30/50/60 | 3840×2160@60
		Format	RGB/YUV 4:4:4/YUV 4:2:2 8bits/10bits/12bits
		Deinterlacing	YES
		Embedded Audio	YES
		HDCP	2.3/1.4
	USB Type-C/UVC Input	Input Resolution	1920×1080p@30/50/60 | 3840×2160@30
	Audio Input	Audio Mixing	YES
		Analog Audio	LINE IN
	Record	Video	H.264, up to 32Mbps
		Audio	AAC, up to 48Kbps
	Storage	Built-in Storage	128GB
	Codec	Performance	H.264/H.265
		Protocols	HTTP/SRT/RTMP/RTSP/NDI
		Resolution	Up to 3840×2160p@60
	Network	Wired Network	1×RJ45 Gigabit port
		Mobile Network	SIM card installation
		Wireless Network	Wi-Fi 5 AP mode/STA mode
		Tethering	Android smartphone
		5G Dongle	USB 5G Dongle connectivity
Power	USB Type-C Input	12V/2A	
	Battery	2×NP-F Battery	
	DC Input	12V/2A	
Working	Temperature	0℃~55℃	

	Humidity	5%~85%	
Physical	Weight	Net Weight	0.42kg
	Dimension	Net Dimension	134mm × 226.7mm × 42.1mm

6.2 Revision History

The table below lists the changes of bond 7UHD User Manual.

Format	Time	ECO#	Description	Principal
V1.0	2024-07-22	0000#	First Release	Aster
V1.1	2025-03-26	0001#	Change the product codes	Alyssa

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