Quick Start Guide

Dual-Channel Video Encoder

3G-SDI + 4K HDMI H.265 Video Encoder

（V2.9）

Contents

- Packing List
- Device interfaces and functions
- Device connection, login and use guide
- Device upgrade and restore factory setting

Before using this product, it is recommended that you read the guide carefully. To ensure your personal safety and avoid physical or electrical damage to the device, please strictly follow the instructions of this guide to install and use it under the guidance of professionals. Incorrect electrical connections or physical installation may cause permanent damage to the device and even threaten personal safety.

Due to continuous product updates, the product you purchased may have undergone changes compared to the content in this manual. Please refer to the actual product inside the packaging for accurate information.

1 Packing List

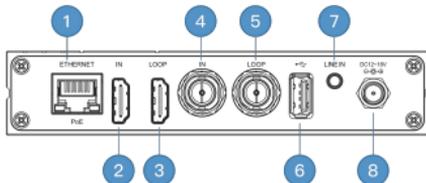| (1) Encoder×1 | (2) Power supply ×1 | (3) Cold boot screw ×1 |

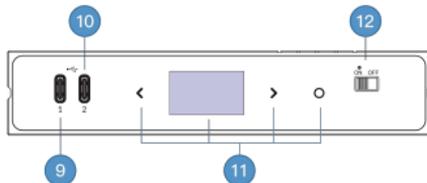| (4) Warranty Card ×1 | (5) Quick Start Guide ×1 |

2 Device Interface

(1) 1000M Ethernet (POE)
(2) HDMI Input
(3) HDMI Loop
(4) SDI Input
(5) SDI Loop
(6) USB TYPE-A

(7) 3.5mm LINE IN
(8) Power supply Interface
(9) USB TYPE-C
(10) USB TYPE-C
(11) LCD screen and touch button
(12) Power switch

3 Device Indicators

	Status		
LCD screen	Green Light	PVW	
	Red Light	PGM	
LED indicators	**Name**	**Color**	**Status**	**Description**
	Power	White	ON	Power connected
			OFF	Power off or failure

4 Application

HDMI video source

LOOP

Power adapter

PC

Switcher

Output signal

Network
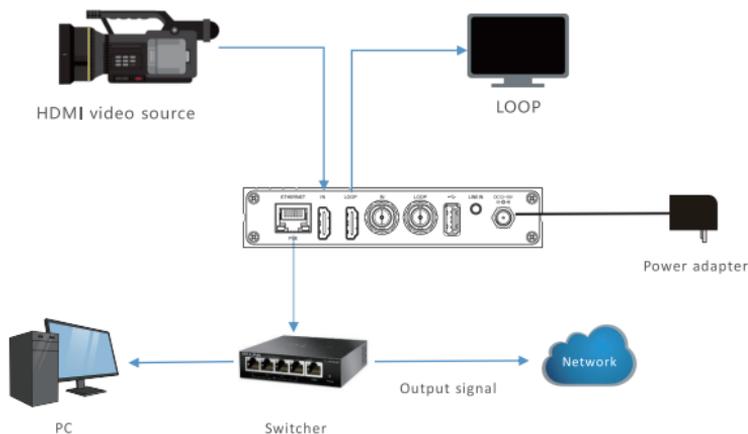
> ⚠️ **Note**
> - Please use the equipped power adaptor or directly use PoE to power the device, other unqualified power supplies may damage the device.
> - Device supports separate or mixed encoding from both HDMI and SDI simultaneously, in this quick start guide, we will only take HDMI input as an example；
> - Please make sure the camera is connected with HDMI IN port.
> - You can connect HDMI OUT for Loop function.

5 LCD screen and touch button

The device is equipped with an LCD screen and touch button on the front panel. With the built-in LCD screen, you can easily check the device status, input source, and network, etc. The LCD screen is also a big-sized Tally to display the preview/program status.

Press the button "❮" "❯" to switch the display module and press ◯ as "OK" to enter the current display module. For more details, please refer to the user manual.
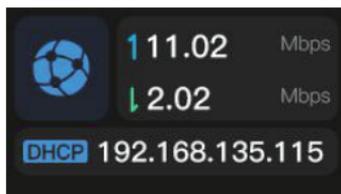

6 Check IP address

On the LCD screen, you can easily check the IP address of the device.

On the 4th page of LCD screen: Current network status. It indicates the real-time network uplink and downlink bitrates.

DHCP：Indicates the dynamic IP address obtained by the device.

7 Login to the device management page

After rebooting the device, the device will automatically obtain an IP address through DHCP. On the LCD screen, you can easily view the IP address of the device.

Open a web browser and enter in the IP address: http://device IP address/login to the web UI.

Note
- The username and password are admin by default.
- To ensure information security, it is recommended to change your password immediately after logging in for the first time.
- Due to the browser compatibility issues, it is recommended to use Chrome or Edge.

8 Work with your device

8.1 Video source checking

After the video source is connected, The device allows you to preview the real-time video through the browser.

> **Introduction**
>
> The video preview window is set to the "Image" mode by default, and the screen will be refreshed every 3 seconds; if the CPU performance of the computer is strong enough, you can click the button to switch to the "Video" mode, then you will see a smooth real-time video.

8.2 Stream service

Login to the WEB UI, you will see 3 inputs including HDMI, SDI and Mix on the left navigation bar. The device supports encoding both HDMI and SDI simultaneously. Click HDMI, SDI or Mix to set the parameters.

HDMI and SDI are with the same function, and HDMI encoding is by default. Take HDMI encoding as an example:

After connecting the HDMI input, you can set the resolution, frame rate, stream, and audio parameters on the UI. Once the settings are completed, make sure the HDMI Encoding is enabled (on the right as shown on the screenshot below):


If you need to switch HDMI/SDI video source, just click the icon on the left. Click "SDI" for SDI source encoding and "Mix" for mixed encoding.

> **Introduction**
> - Resolutions supported with HDMI input and loop:
>   3840x2160p30fps/1920x1080p60fps/1920x1080i 50/59.94/60fps backward compatible
> - Resolutions supported with SDI input and loop:
>   1920x1080p60fps/1920x1080i50/59.94/60fps/1280x720p25/29.97/30/50/59.94/60fpsbackward compatible.

On the WEB UI, click"Add" at the right side to add stream service. Take add RTSP as an example:
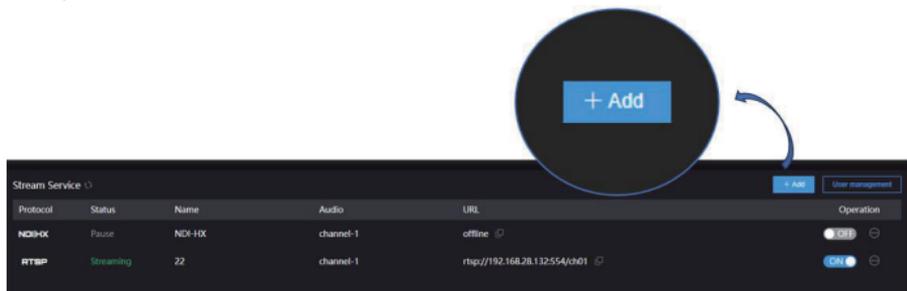

Select "RTSP" as stream type, fill in the name, service port and session ID, and keep the default configuration for other parameters, click "OK" to save it.

⚠ **Note**

● When using HDMI input and SDI input to add RTSP service at the same time, you need to use a different port number.

● Session ID is not a required field, if the Session ID is set in the device, then the decoder also needs to fill in this field. And session ID can be any combination of numbers, letters, and symbols

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After saving configurations, it will be displayed under the stream service, which is closed by default. Click on to start the stream service, it will come up a RTSP stream address in the corresponding address.
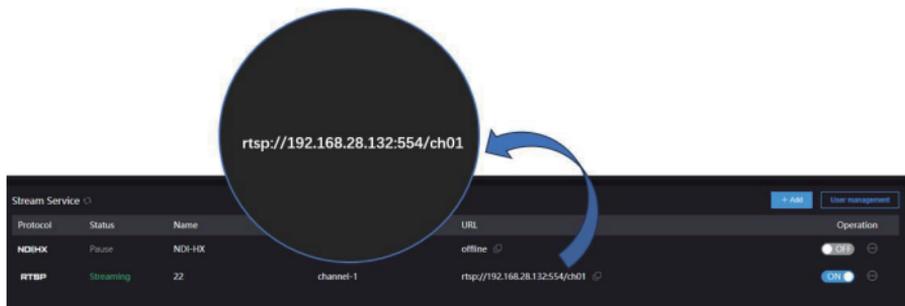
Click 🗋 to copy this address, you can check the encoded video stream by pulling the stream through VLC.

Download the VLC
Download and install the VLC through the official address https://www.videolan.org/vlc/. Please follow the official
guidelines of VLC for the download /installation.
VLC is a free, open source, cross-platform multimedia player and framework that can play most multimedia files, as
well as DVD, CD, VCD and various streaming protocols.

Click "Media" - "Open Network Stream" of VLC and enter the URL address of RTSP in the network and click the [Play] button in the lower right corner.
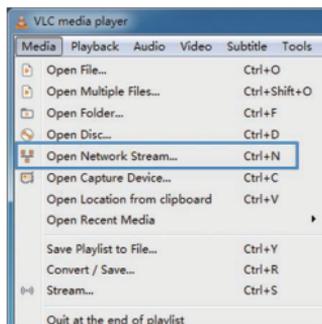
8.3 Mix encoding

The device supports both 3G-SDI and HDMI input or loop, as well as mix encoding.
Enter the Web UI, click Mix to enter the mix encoding mode, which can combine HDMI and SDI input video into picture-in-picture, and then encode and output to achieve the effect of multi view display. Click "Video Sources Switching" to switch the images between the inputs. Click "Layout settings", you can adjust the layout of the mixed encoding.
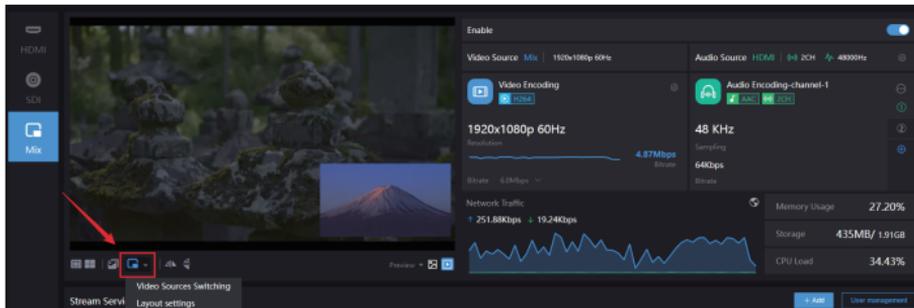
9 Firmware update

9.1 Obtaining Upgrade Firmware

Before upgrading, please contact your purchase channel to obtain upgrade firmware.
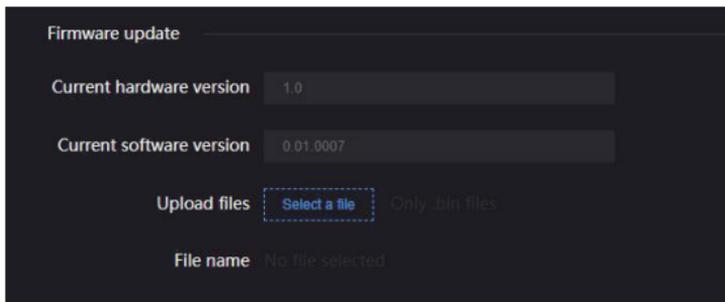
9.2 Update device firmware

Method 1: Update from the Web UI.

Login to the device management backend, click on "Settings" > "System Setting" >

"Firmware Upgrade" to access the firmware upgrade page. Check if the latest software version obtained is higher than the current software version. If the versions are the same or lower, there is no need to upgrade. If an upgrade is desired, upload the obtained firmware file and click on "Firmware Upgrade".

After uploading the firmware successfully, it needs to reboot the device. After clicking "OK", the device will be restarted, please be patient.

Method 2: Update in Recovery mode

If you cannot access the device Web UI, You can enter the Recovery mode for firmware update.

Step 1: Prepare a USB flash drive and copy the firmware file downloaded from the official website to the USB flash drive.

Step 2: Insert the USB flash drive into the device. After the device starts up, long press the ⬤ button for 10 seconds until the device enters Recovery mode.

Step 3: Select "Recover from USB", press ⬤ to confirm to start the upgrade.

Step 4: During the upgrading, it will prompt "Updating! Please keep the power on." (Please do not power off).
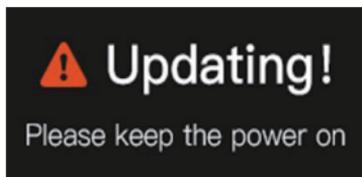
Step 5: When the Device screen displays "Firmware updated successfully", it has completed the firmware upgrade. At this time, any operation of the touch button will help you return to "RECOVERY", please select "Reboot" to restart the device.
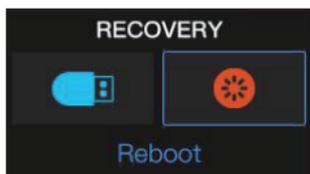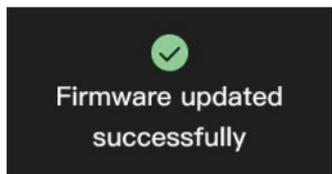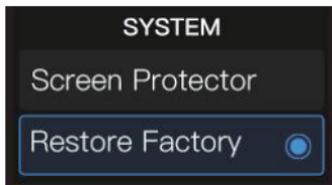

Note
- Do not power off the device during the upgrade. Otherwise, the device may fail to start.
- In general, the upgrade process takes about 3-5 minutes. If the upgrade is not complete within 5 minutes, try refreshing the page. If it still cannot be accessed, try contacting authorized dealer for technical support.
- If you need to use a USB flash drive to upgrade the firmware, it is recommended that the file system format of the USB flash drive is FAT32.

10   Restore factory settings

If the device cannot work normally after modified the parameters, please restore factory settings.

1) If you can login to web UI, then click "Settings>System settings>Restore factory settings".

2) If you cannot login to web UI, press ⭕ on the first page of LCD to enter "System settings", select "Restore Factory", press ⭕ again, then restore factory settings will be done.

⚠️ **Note: The following parameters will be changed to default values after restore factory settings.**

- Login user and password will be admin；
- All video encoding parameter, audio parameter will be restored to factory default settings.

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11   Others

To prolong the device life, please unplug the power and keep it properly if you do not use it for a long time.