



KILOVIEW E3 Dual-Channel Video Encoder User Guide

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KILOVIEW E3 Dual-Channel Video Encoder



Product Information

Leading solution provider of IP-Based video transmission

The E3 Dual-Channel Video Encoder is a high-quality video encoder that supports 3G-SDI and 4K HDMI input. It uses the H.265 video encoding standard to ensure efficient video compression while maintaining excellent video quality. With its advanced features and connectivity options, it is suitable for various video transmission applications.

Product Specifications

- **Model:** E3
- **Video Inputs:** 3G-SDI, 4K HDMI
- **Video Encoding:** H.265
- **Interface:** Power supply, 3.5mm LINE IN, USB TAPE-A, SDI Loop, SDI Input, HDMI Loop, HDMI Input, 1000M Ethernet (POE), USB TYPE-C (x2), LCD screen and touch button, Power switch
- **Power Supply:** AC100~240V power adapter or Power over Ethernet (PoE)

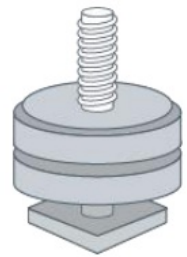
Product Usage Instructions

1. Check the Packing List to ensure all components are present.
2. Connect the power supply or use PoE to power the device. Do not use unqualified power supplies.
3. Connect the HDMI video source to the HDMI IN port. Optionally, you can connect HDMI OUT for Loop function.
4. Connect the device to a network using the 1000M Ethernet (POE) interface.
5. If needed, use the 3.5mm LINE IN interface for audio input.
6. Use the LCD screen and touch button on the front panel to check the device status, input source, and network information. Press the button to switch display modules.
7. To discover the device on the network, follow the instructions to download and install ONVIF Device Manager software. Use the software to find the device's IP address and view device information.
8. To access the device management page, open a web browser and enter the device's IP address followed by "/login" in the address bar. The default username and password are "admin". It is recommended to change the password after logging in for the first time to ensure information security.

Note: Please refer to the user manual for more detailed instructions and additional features of the E3 Dual-Channel Video Encoder.

Packing List

1.



E3 Encoder×1

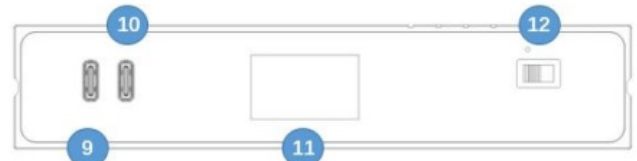
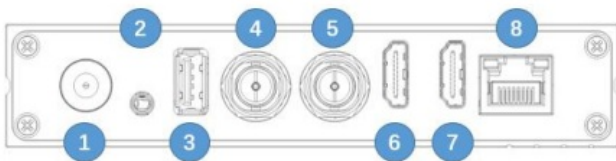
2. Power supply ×1

3. Cold shoe ×1



- 4. Warranty Card ×1
- 5. Quick Start Guide ×1

Device Interface

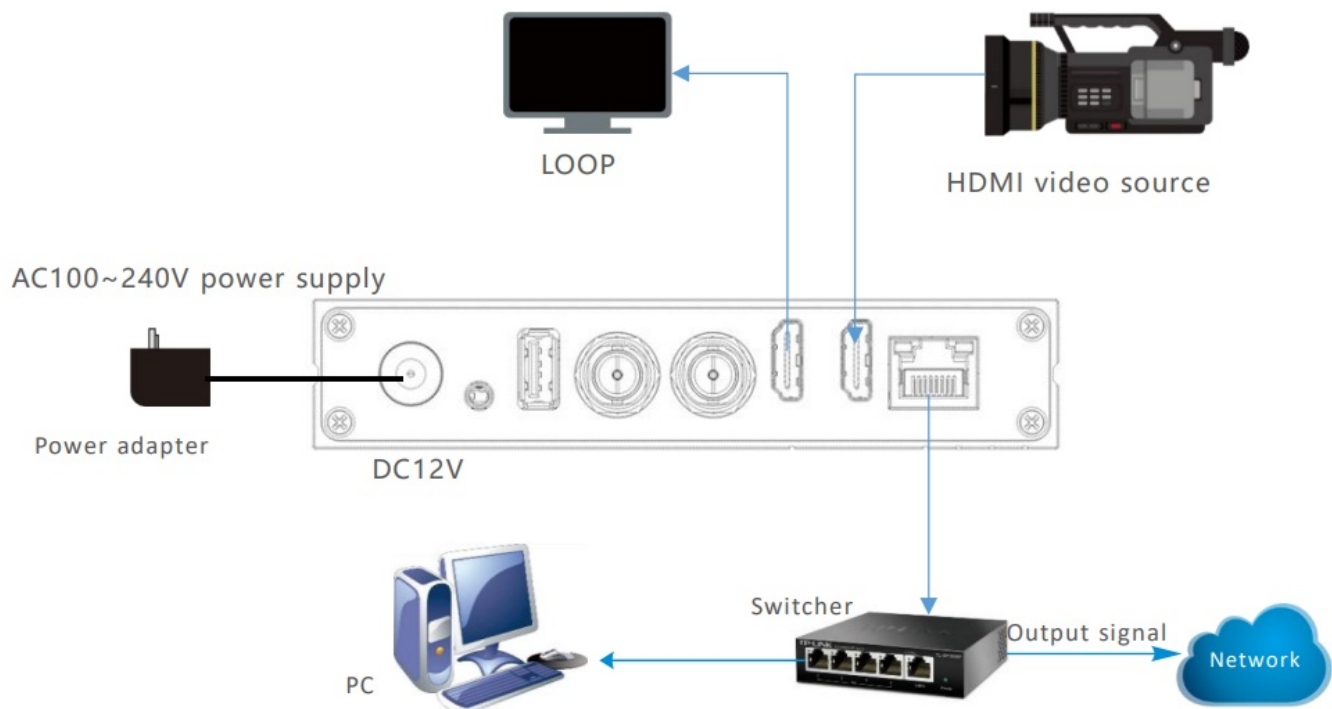


- 1. Power supply Interface
- 2. 3.5mm LINE IN
- 3. USB TAPE-A
- 4. SDI Loop
- 5. SDI Input
- 6. HDMI Loop
- 7. HDMI Input
- 8. 1000M Ethernet (POE)
- 9. USB TYPE-C
- 10. USB TYPE-C
- 11. LCD screen and touch button
- 12. Power switch

Device Indicators

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

Application



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.

LCD screen and touch button

E3 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.

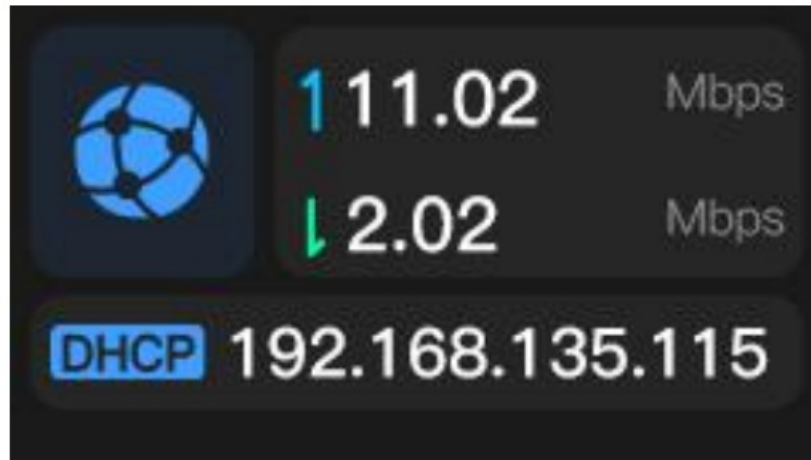
Press the button “◀▶” to switch the display module and press “OK” as “OK” to enter the current display module. For more details, please refer to the user manual.



Device discovery

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.



Use ONVIF Device Manager .

- Download ONVIF Device Manager for free
- Visit the website <https://sourceforge.net/projects/onvifdm/> to download and install ONVIF Device Manager. Please follow the software operation guidelines for the download method/installation.
- ONVIF Device Manager is a network video app for managing network video, network video storage and network video analysis to realize services such as discovery device, media, imaging, analysis and PTZ.



- **Step 1:** Start ONVIF Device Manager, all devices in the network can be found in the left device list.
- **Step 2:** Click the device in the list, the device information will be displayed in the Identification bar.

Note

The working network that the current device is connected needs support DHCP. After the device automatically acquires the IP, it can be discovered by the software through Onvif.

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://deviceIPaddress/login` to the web UI.

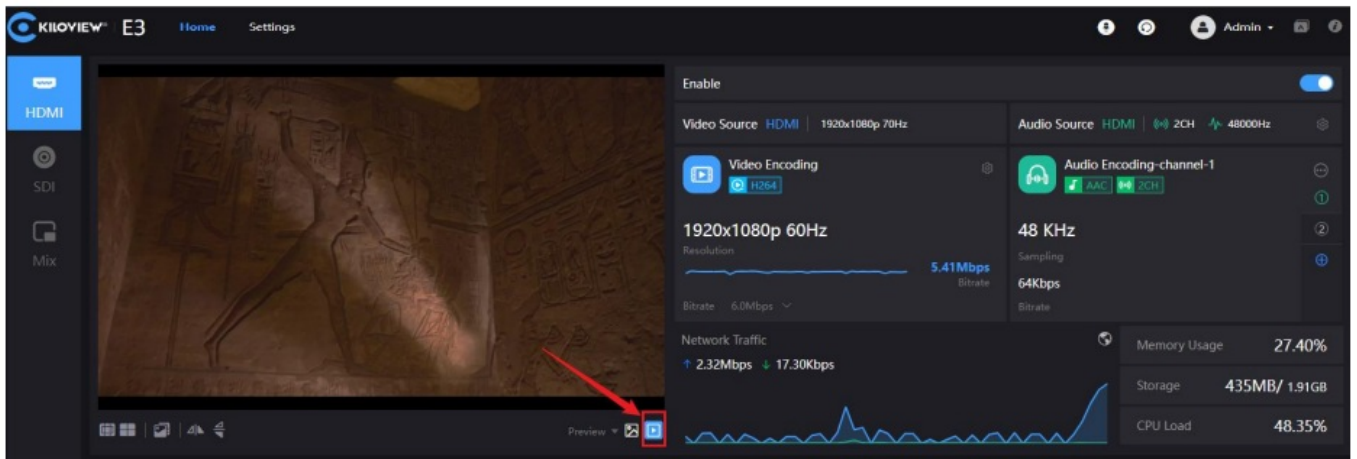
Note

- 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.

Work with your device

Video source checking

After the video source is connected, E3 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.



For more details of E3 encoder user guide, please visit

<https://www.kiloview.com/en/kiloview-e3>

Stream service

Login to the WEB UI, you will see 3 inputs including HDMI, SDI and Mix on the left navigation bar. E3 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

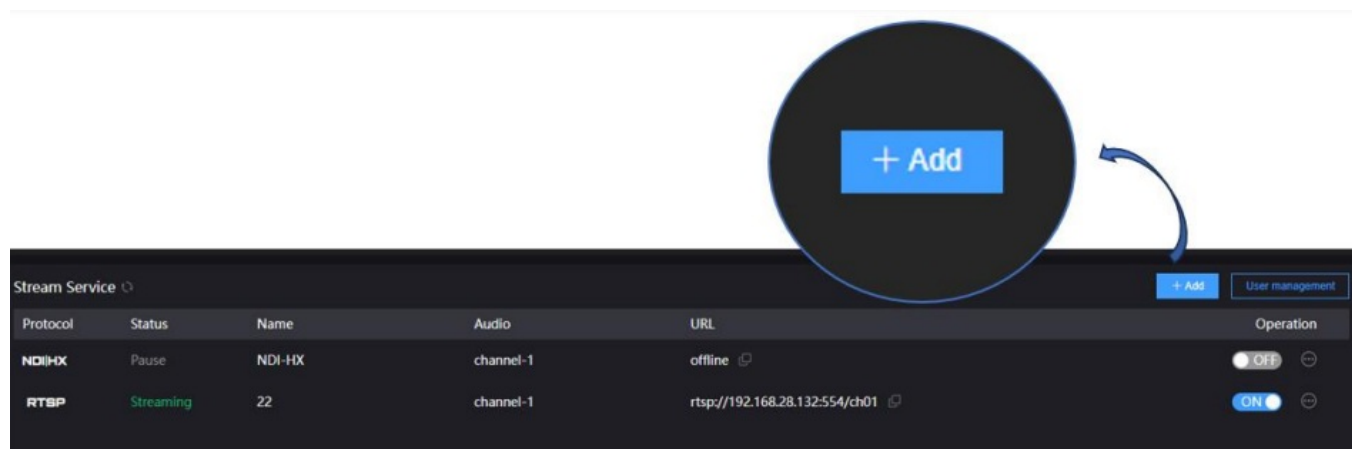
- **Resolutions supported with HDMI input and loop:** 3840x2160p30fps/1920x1080p60fps/1920x1080i

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.

Add streaming service

Type: RTSP

* Name: Please Enter

Audio: channel-1

Service port: 554

Tunnel Port: 8554

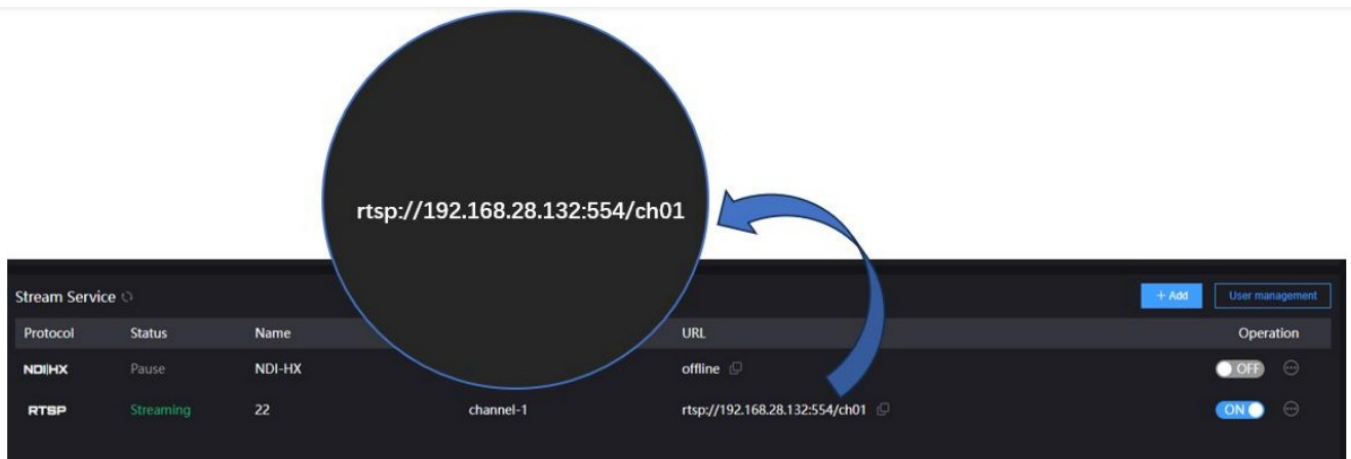
Session ID: ch01


RTSP Authorization: OFF

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 E3, then the decoder also needs to fill in this field. And session ID can be any combination of numbers, letters, and symbols

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.



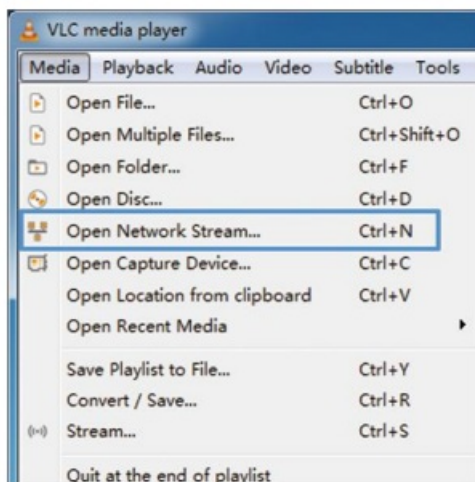
Click  to copy this address, you can check the encoded video stream by pulling the stream through VLC.

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.

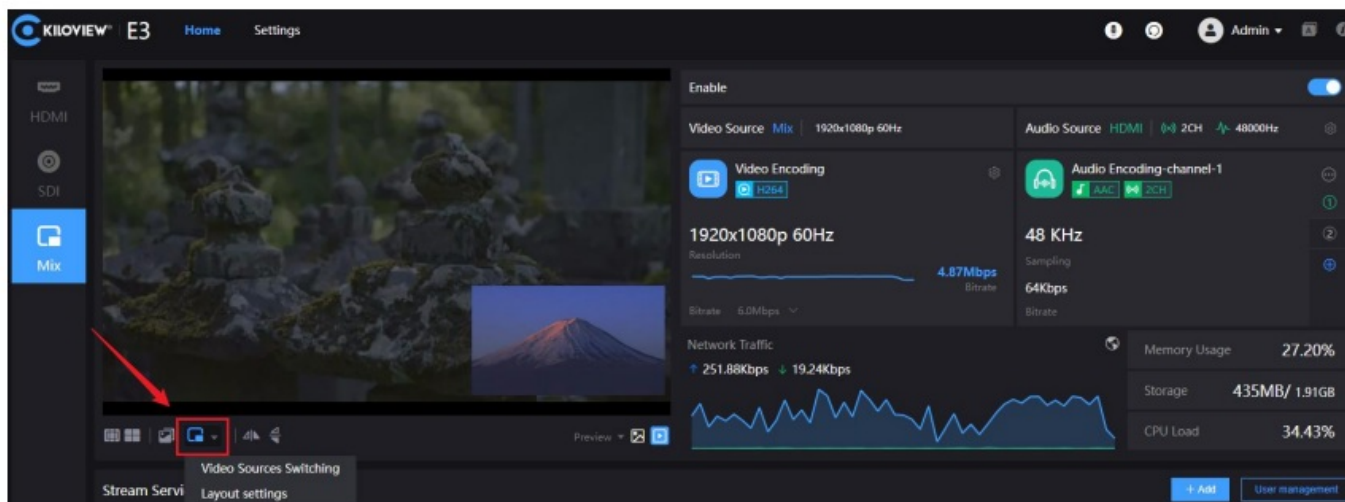
Click “Media” – “Open Network Stream” of VLC and enter the URL address of RTSP in the network and click the [Play] button in the lower right corner.



Mix encoding

E3 supports both 3G-SDI and HDMI input or loop, as well as mix encoding.

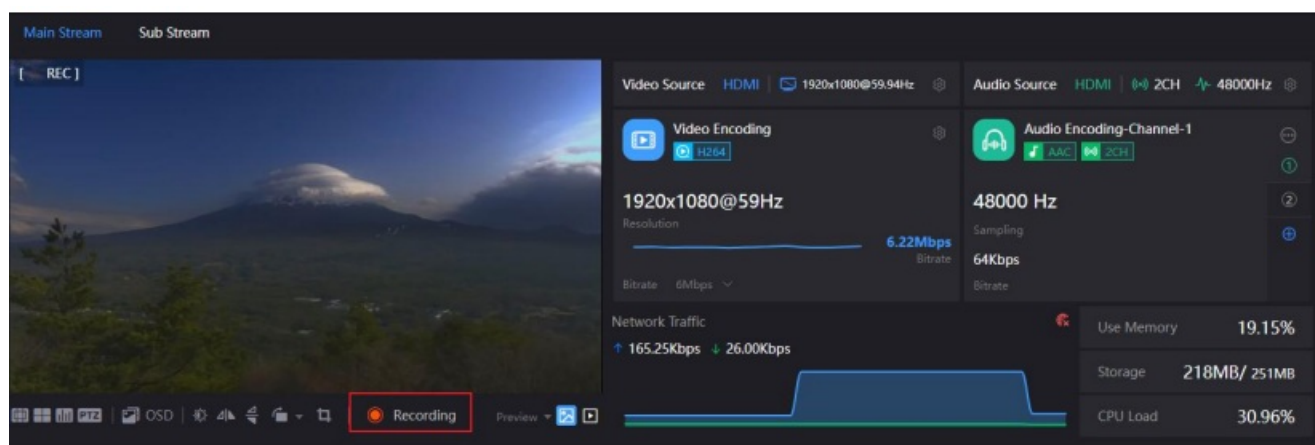
Enter the Web UI, click Mix to enter the mix encoding mode, which can combine HDMI and SDI input video into picture-in-picture, and then encode and output to achieve the effect of multi view display. Click “Video Sources Switching” to switch the images between the inputs. Click “Layout settings”, you can adjust the layout of the mixed encoding.



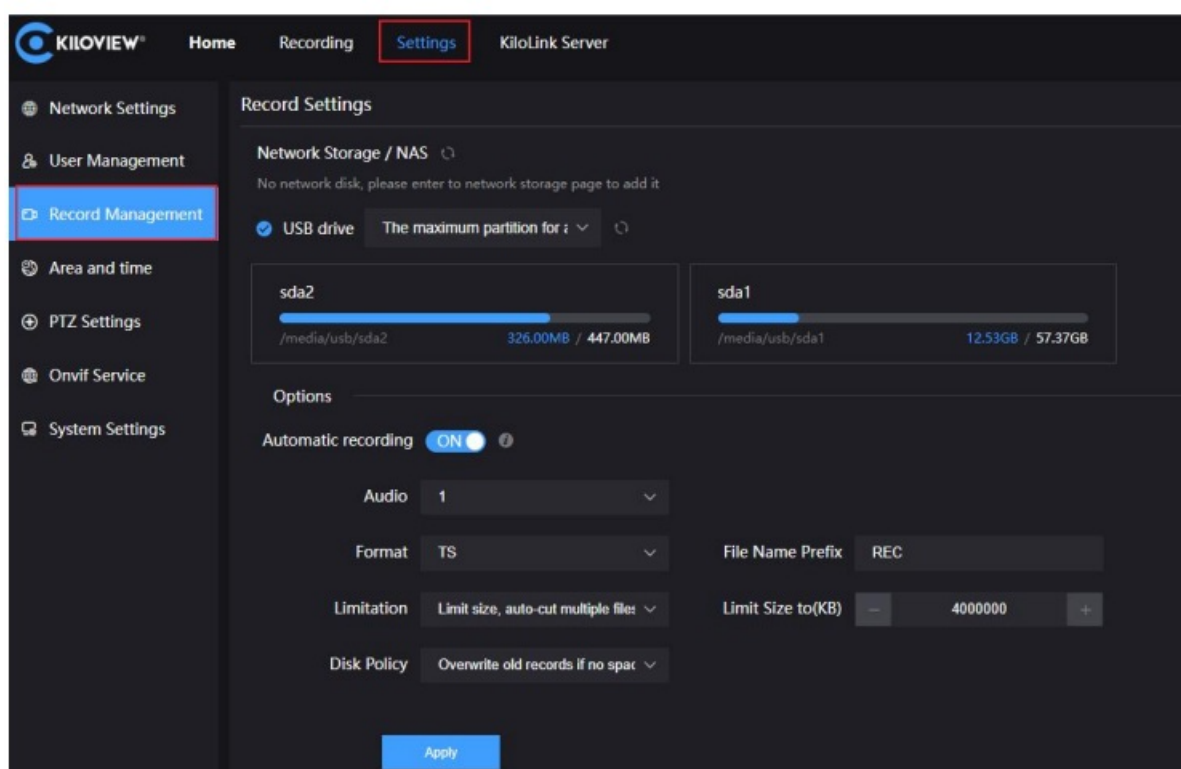
Recording

E3 supports local recording by USB and NAS recording. Take local recording as an example, operate as follows

1. Insert the USB memory into E3.
2. E3 can turn on recording.



3. **Record Settings:** Click "Settings" in the WEB UI, click Record Management, you can see the record parameters and configurations.

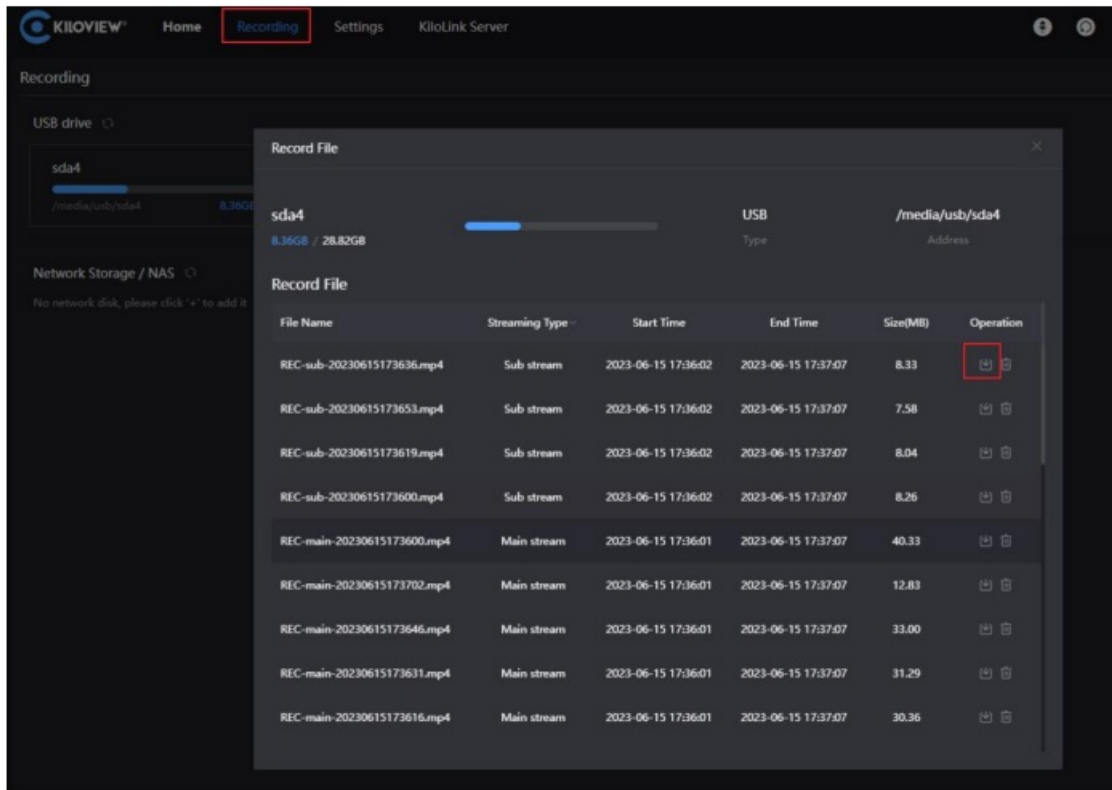


Note

If the power supply is cut down in the process of recording, for the recording file format selected as.avi/.mp4 and other formats, the video file may be permanent damaged, but .TS format video files would be saved. Also, TS files are supported by most video players.

If you record in a format other than .TS, please manually stop the recording and remove the storage device when the recording is completed to ensure the recording files can be played properly.

4. Click stop recording, you can view the recording status and memory usage, as well as download the files to the computer.



Note

E3 has one USB TAPE-A and two USB TAPE-C expansion port which can support the expansion functions such as recording as well as external Tally, Intercom by headset, PTZ control and more.

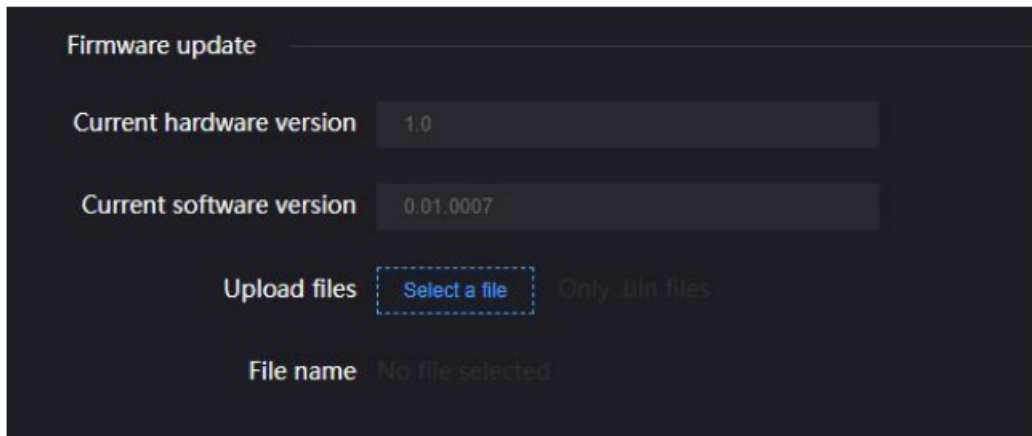
Firmware update

Download firmware


- Kiloview will continuously provide the firmware of updating functions, please visit
- <https://www.kiloview.com/en/support/download/>
- Select “video encoders” > “E3”, find and download the latest firmware.


Update device firmware

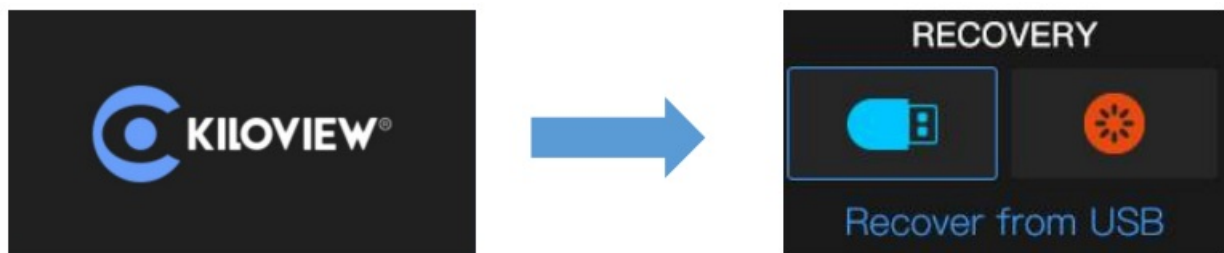
- **Method 1:** Update from the Web UI.
- Login to the web page of E3, click “Settings”>” System setting”>”Firmware Upgrade” to check if there is any latest firmware available to download. If yes, select the downloaded firmware and click “Firmware update”. After uploading the firmware successfully, it needs to reboot the device. After clicking “OK”, the device will be restarted, please be patient.




Method 2 Update in Recovery mode

There are three buttons on the LCD including Left, Right and OK button. If you cannot access the E3 web UI, connect the power supply and wait for the KILOVIEW logo to be shown on the LCD, press and hold  button for 10s to enter the recovery mode.

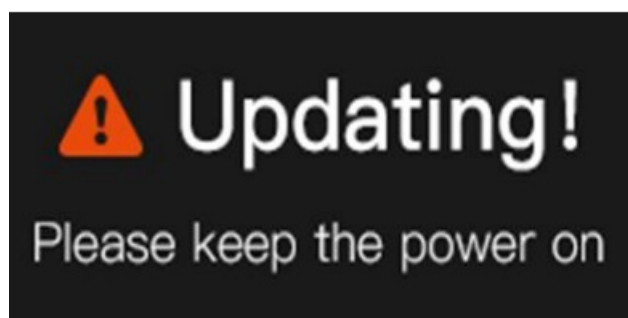
- **Step 1:** Copy the firmware file downloaded from Kiloview website to a USB flash drive.
- **Step 2:** Insert the USB flash drive into the E3, after the device is turned on (about 2s), wait for the Kiloview logo to appear on the screen, long press and hold  for more than 10s until the device enters recovery mode.



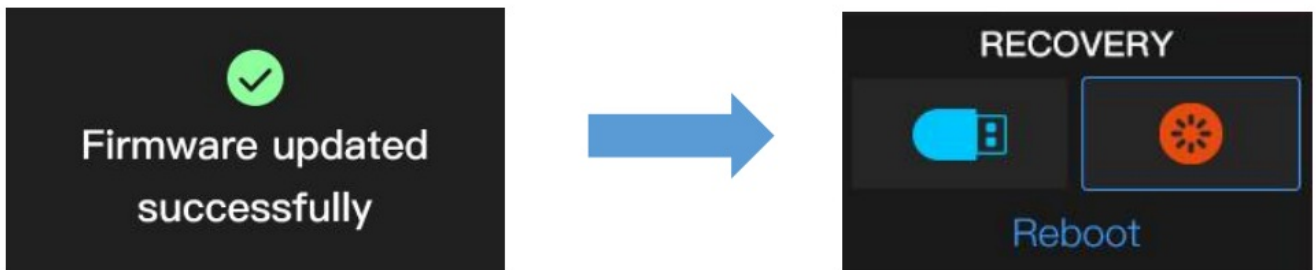
- **Step 3:** Select "Recover from USB", press  to confirm to start the upgrade.



- **Step 4:** During the upgrading, it will prompt "Updating! Please keep the power on." (Please do not power off).



- **Step 5:** When the E3 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.





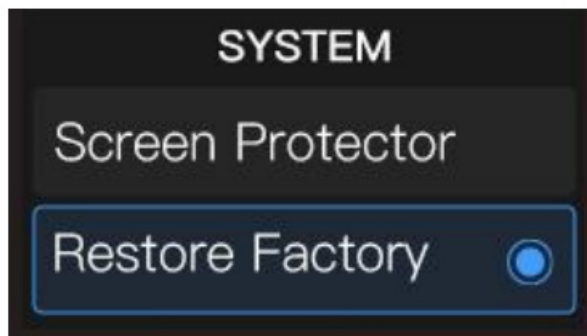
Note

- 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 Kiloview or Kiloview 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.

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.

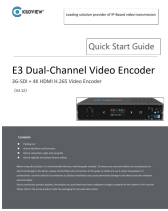


Note: The following parameters will be changed to default values after restore factory settings.

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

Others

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

	<p>KILOVIEW E3 Dual-Channel Video Encoder [pdf] User Guide</p> <p>E3 Dual-Channel Video Encoder, E3, Dual-Channel Video Encoder, Channel Video Encoder, Video Encoder, Encoder</p>
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References

-  [ODM download | SourceForge.net](#)
-  [Kiloview E3 - Kiloview](#)
-  [Download Center – Kiloview](#)
-  [Official download of VLC media player, the best Open Source player - VideoLAN](#)

Manuals+.