

Quick Start Guide

REN-100 Video Encoding Card

Dual Input NDI|HX encoding card

(2022-01 version)

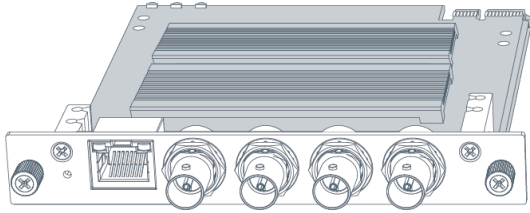


Contents

- Packing List
- Device interfaces and functions
- Device connection, login and applications
- Device upgrade and restore the factory settings

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.

1 Packing List



(1) **Device** ×1

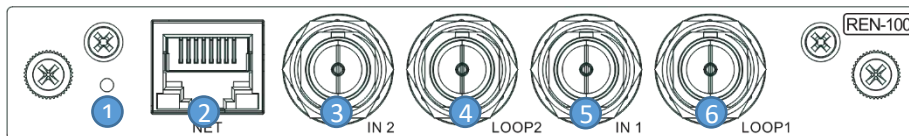


(2) **Warranty Card** ×1



(3) **Quick Start Guide** ×1

2 Device Interface



(1) Reset

(2) 100M Ethernet

(3) SDI 2 input

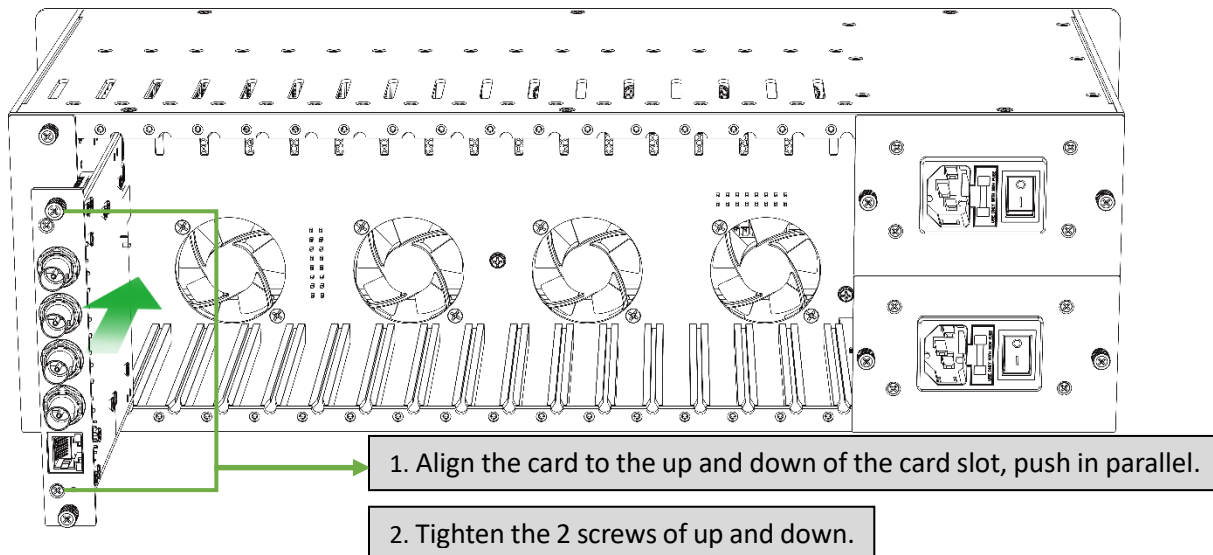
(4) SDI 2 loop out

(5) SDI 1 input

(6) SDI 1 loop out

3 REN-100 Card Installation

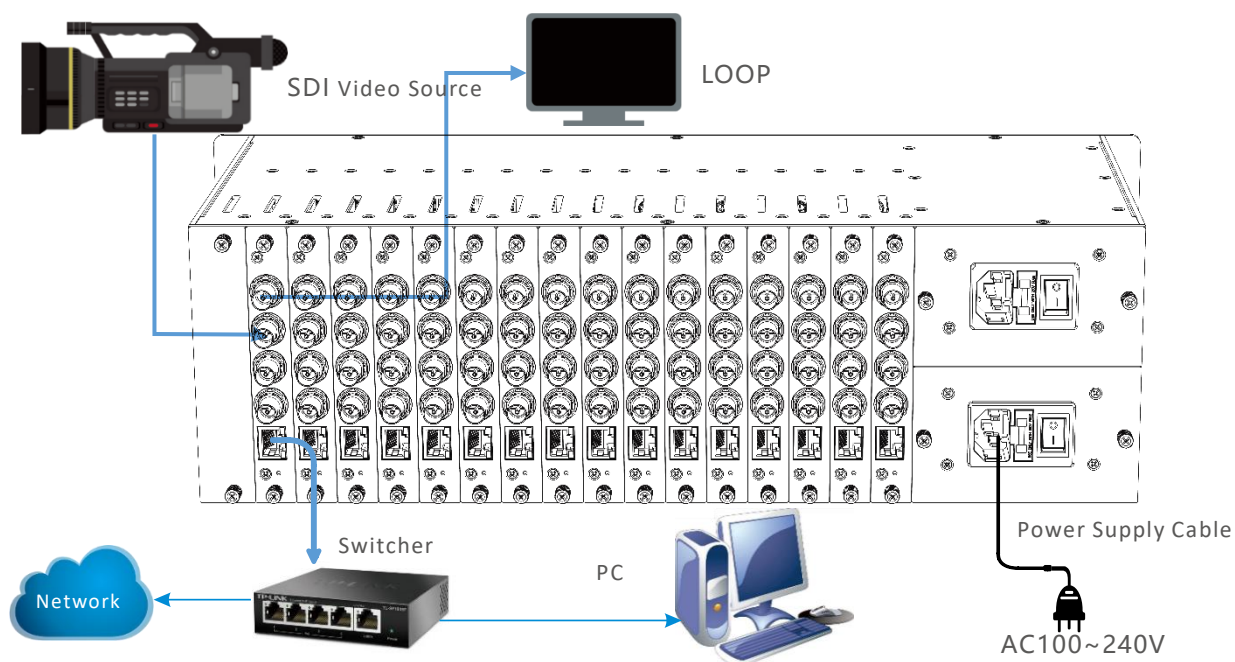
Align the card to the up and down of the card slot, push in parallel and tighten the 2 screws of up and down. When disassembling, loosen the two screws, and pull out the card in parallel.



Website for more information about Kiloview RU03S:

<https://www.Kiloview.com/en/support/docs/3u/card-board/>

4 Device Connection



Note

- RU03S chassis equips with dual power supplies, one power supply is working well. When dual power supplies are connected, it will be used as a redundant power supply.
- REN-100 encoding card supports two SDI inputs simultaneously.
- Loop is not a must, connect to the SDI OUT port when needed.
- Turn on/off the device by the power switch if the power cable connected.

5 Device Discovery

5.1 Install Kiloview Multiview NDI Player for free



Download Kiloview Multiview for free

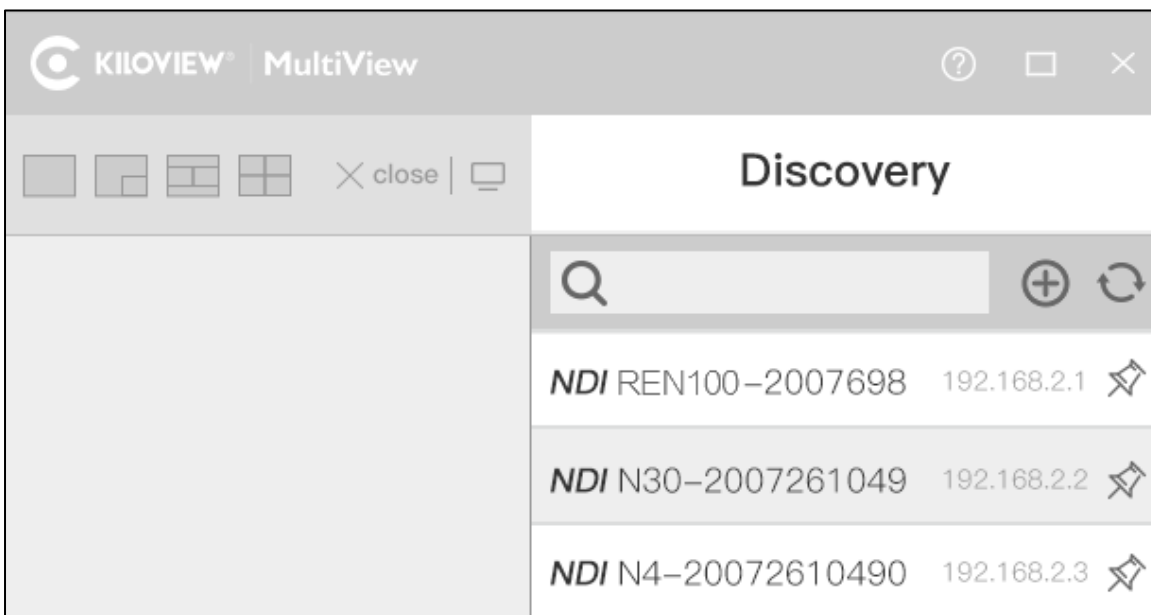
Visit website <https://www.Kiloview.com/en/ndi/multiview/>, select "NDI Series" "Multiview" and click download, then install software step by step as instructions.

Kiloview Multiview is a free software for NDI video discovery, management and multi-view, which is popular and highly praised all over the world.

Start the Kiloview Multiview, open the setting interface.



Find the device in the device discovery list. Enter management interface through web browser.



Note

REN-100 naming rules: REN100- <serial number>.

Serial number refers to the numbers pasted on the device label.

Two ways of accessing to the device management page

Method 1: Drag the device directly in the discovery list to the left window, wait and click the icon ⓘ appeared in the upper right to access Web UI directly.

Method 2: Open Web browser, enter: <http://device IP address/> (Kindly note the device IP address for REN-100 is showed in the discovery device list.)

SDI1 and SDI2 should use two different IP addresses to log into two different WEB management pages, but the steps are the same.

5.2 Use Studio Monitor in the NDI SDK Tools



Download NDI SDK Tools

Download and install NDI SDK Tools through NDI official website <https://www.ndi.tv/tools/>. Kindly follow the NDI official instructions for download method and installation process.

Studio Monitor is one of the NDI SDK Tools for free, which is provided officially by NDI for discovery and monitoring NDI video.

Right click on the Studio Monitor interface, find the name of REN-100 in the pop up menu, click it for playing NDI video. At the same time, a gear icon will appear in the lower right corner, click it and then a browser window will pop up for logging in and accessing the Web UI of REN-100.



Note

- REN-100 naming rules: REN-100-**<Serial Number>**. Serial number refers to the numbers pasted on the device label.
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5.3 Solutions for the device cannot be found

If the device with REN-100 can't be found in the network with the above two methods due to the network, please kindly try to access the device by its default IP address. The default IP address of SDI1 is 192.168.1.168, for SDI2 is 192.168.1.167. For example, enter <http://192.168.1.168/> in the browser to enter the Web UI.

6 Login to the device management page

Enter to the Web page of the device, both the username and password are *admin* by default.



Note

- 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, Firefox or Edge.

7 Device Working

7.1 Video source checking

Enter to the device web page, click "Encoding and Stream" - "Encoding and Stream Settings" to check the Motion JPEG stream. When there is no video signal input, the Motion JPEG stream displays a blue image. If the video input, there will be a real-time video displayed and changes every three seconds.

Motion JPEG Snapping



Video: Motion JPEG (Default)
Scaling size: Default (640x368)
Instant bitrate: 174 Kbps
Instant frame rate: 5 fps
Audio engine bundle: [Channel 1 \[Change... \]](#)
Audio Codec: AAC / Stereo
Bitrate: 64000 bps
Actual sampling: 48000 Hz

 SET

 **RTSP**
(RTSP always start) Access by: <rtsp://192.168.28.121:554/mjpeg01>  

 **KMP Media Service**
Start (Manual disabled or no publish point, service stopped.) 



Note

If the video source connected, there is still a blue screen or video displayed abnormality. Please check the input video source, the video resolution format or cables, etc.

7.2 Encoding streams checking

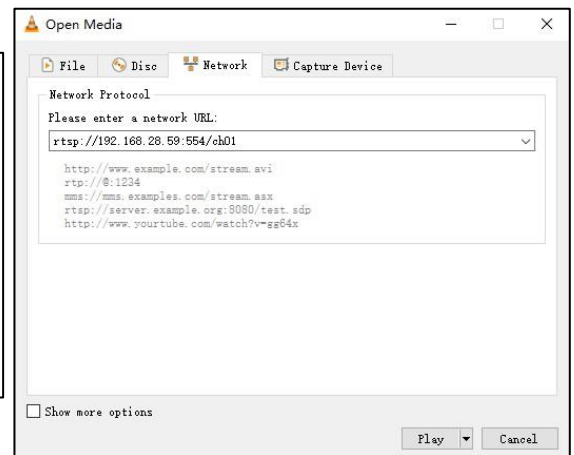


Download the VLC

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.

1. Click the "Encoding and Stream" - "Encoding and Stream Settings";
2. In the H.264 stream, copy the URL address displayed on the right side of RTSP;
3. Open "Media" ----"Network Streaming" of VLC;
4. Enter the URL address of RTSP in the network, and click the [Play] button in the lower right corner;
5. VLC will play the input video of device.

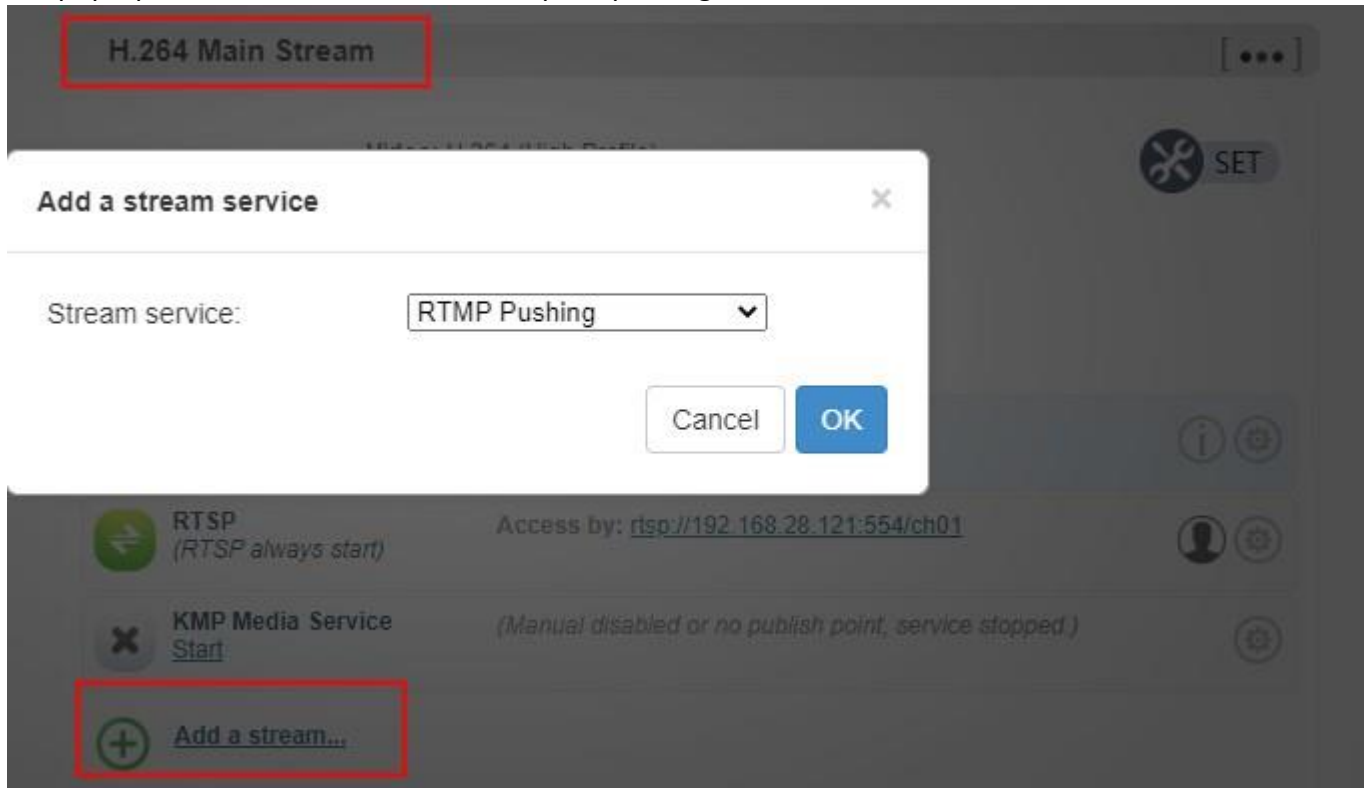


Website for more information about the REN-100:

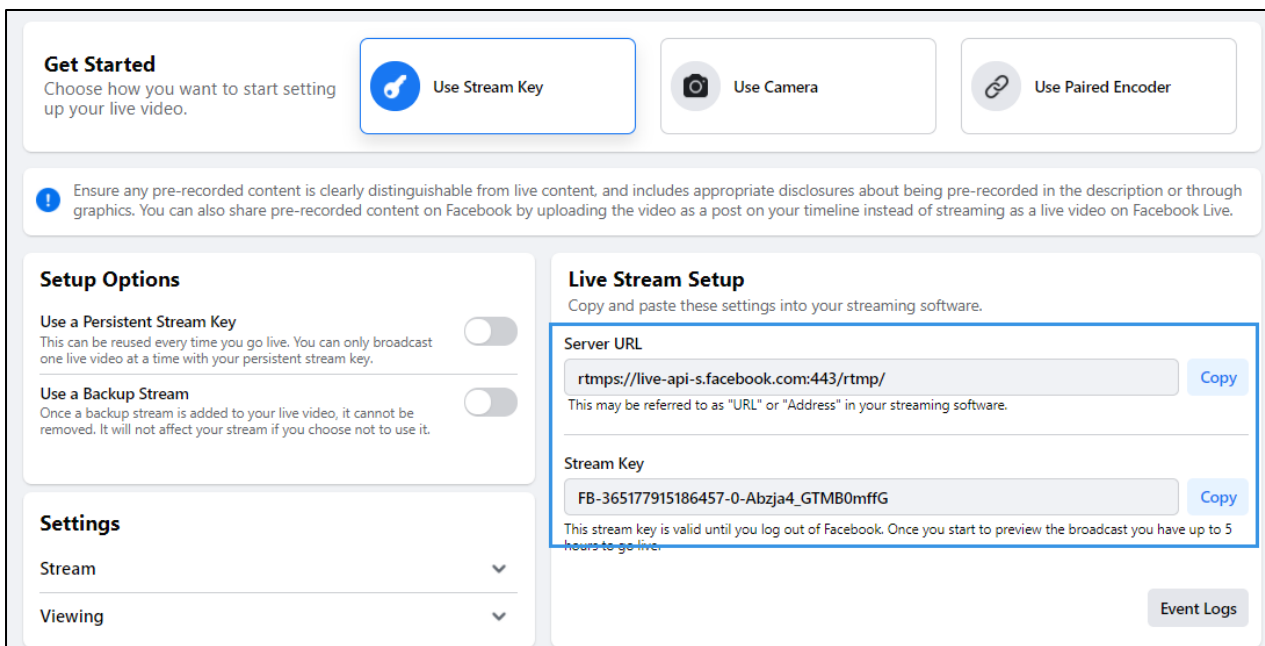
<https://www.Kiloview.com/en/support/docs/REN100/>

7.3 RTMP Live Streaming

First, add an RTMP push point on the device side. Click "Encoding and Stream" --- "Encoding and Stream Settings", and then click "Add a Streaming Service" under the H.264 main stream, and select "RTMP Push" in the pop-up window ". After confirmed, a push pint is generated.



Take FACEBOOK as an example, first obtain the RTMP push URL on the live platform. Login to FACEBOOK, click "Live Video" to enter the live room, and click "Use Stream Key" for live broadcast. Fill in the URL of live broadcast and Stream Key into the URL address of the RTMP push point, and start the streaming service. You can see the video in the live broadcast room.





Introduction

- If the platform RTMP streaming address and live broadcast code are separate, please use the symbol "/" to add the live broadcast code after the RTMP address. The format is: rtmp address/live code.
- Please make sure the device is connected to the network, and configure the correct IP address, DNS and other parameters.

8 Firmware Upgrading

8.1 Download upgrade firmware



Kiloview will continue to provide the firmware of updating functions and fixing bug for REN-100, please visit:

<https://www.kiloview.com/en/support/download/>

Select "video encoders" > "REN-100", find and download the latest firmware.

8.2 Upgrade device firmware

Login to the web page of REN-100, click "Settings"-- "Firmware Upgrade" to check whether the latest firmware version downloaded is higher than your current version. If yes, select the downloaded firmware and click "Firmware Upgrade".

After uploaded the firmware successfully, it needs to reboot the device. After clicking "ok", the device will restart, please be patient.

Firmware/Software Update

 **Current Firmware Version: 2.5.0**
Current Software Version: 4.7.2512
Device Serial No: 210111294

Please check the device type and firmware/software version are correct before upgrading. To upload the firmware, click the Choose File button, select the firmware file and click Upgrade.
NOTE: To finish the process, the device will reboot once the firmware has been uploaded.

 Upload Firmware: No file chosen



Note

- Please not power off during the upgrade process, otherwise the device couldn't work.
 - Generally, it will take 3-5 minutes to upgrade the device. If it's still not completed after 5 minutes, please try refreshing webpage, if you still can't access it, please try to contact technical support.
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9 Restore factory settings

If the device cannot work normally after modified the parameters or forgot internet IP configuration and couldn't search and find the device, please restore factory settings.

Two methods for restoring factory settings:

- 1) If you can login to web page, then via the WEB page, click "Settings—System settings--Restore factory settings".
 - 2) If you can't login to web page, press the RESET button for 5 seconds in the bottom of device.。
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Note: After restoring factory setting, below parameters will be turned to default value:

- Login username and password will be "admin";
 - IP address will be restored as 192.168.1.168, subnet mask will be 255.255.255.0;
 - All encoding parameters of video and audio will be restored to default value;
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For more questions, please contact us via :

<https://www.kiloview.com/en/support>



Please scan with browser.

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