KILOVIEW®

AV over IP筑路人

快速入门手册

N5/N6 视频编解码器

NDI High Bandwidth+NDI|HX
全能编解码器

(V2.0)

通过本手册，您可以了解到

- 装箱清单
- 设备接口和功能
- 设备连接、登录和基本应用
- 设备升级和恢复出厂设置

在您正式使用本产品之前，建议您仔细阅读本产品使用说明书。为确保您的人身安全及避免设备受到物理或电气损伤，请严格遵照本说明书的指导或在专业人员指导下进行安装使用本产品。不正确的电气连接或物理安装方式将有可能造成设备的永久损伤，甚至威胁人身安全。

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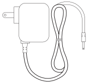
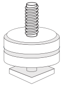
1 设备清单

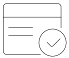
(1) 主机（N5/N6）×1



(2) 电源适配器×1



(3) 冷靴×1

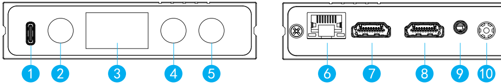


(4) 合格证/保修卡×1

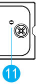
(5) 《快速入门》手册×1

2 设备接口

以下为 N6 设备接口图



(1) Type-C 拓展接口
(2) 触摸按钮（向左/上翻页）
(3) LCD 显示屏
(4) 触摸按钮（向右/下翻页）
(5) 触摸按钮（确定）
(6) 1000M 以太网口- PoE
(7) HDMI IN （注:N5 为 SDI IN）
(8) HDMI OUT（注:N5 为 SDI OUT）
(9) LINE IN/OUT
(10) 电源接口
(11) Tally 状态灯



注意

- 上图为 N6 的接口示意图，N5 和 N6 两种设备的禅意的差异仅体验在 SDI/HDMI 接口不同。

3 设备指示灯

	编码模式下用于指示当前视频的状态	
Tally/LCD显示屏	绿色常亮	指示当前视频处于PVW预监状态
	红色常亮	指示当前视频处于PGM输出状态

注意

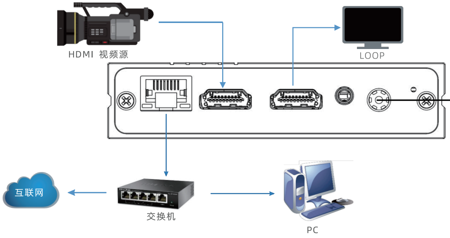
- 当 N5/N6 处于编码模式下，接收到 NDI 的 TALLY 信号后，LCD 显示屏会显示当前视频处于 PGM 或 PVW 状态（红色或绿色）。

4 应用场景

注意

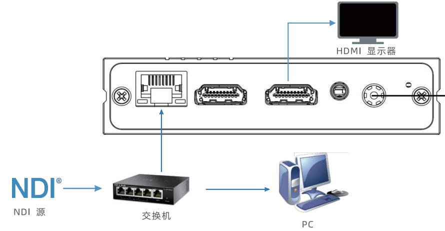
- 以下示例图均以 N6 为例，N5 为 SDI 接口输入；
- 同一设备的编码模式和解码模式不可同时使用。
- 编码器模式下，需确保摄像机输出的视频信号连接 HDMI IN/SDI IN 接口；
- 解码器模式下，需确保视频信号线缆连接的是 HDMI/SDI 输出口。

4.1 编码模式



编码模式应用系统连接图

4.2 解码模式



解码模式应用系统连接图

电源适配器

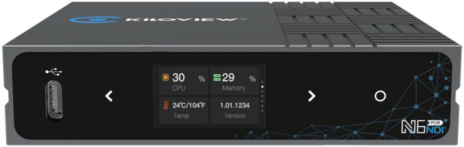
5 显示屏和触摸按钮

N5/N6 在正面面板上提供了彩色 LCD 显示屏和触摸按钮。

在显示屏上，您可以便捷地查看设备状态、获取配置参数、以及进行工作模式切换、IP 地址配置之类的快捷操作。LCD 显示屏同时也是一个超大的 Tally 状态显示器。

通过点击触摸按钮 “<” “>” 可进行显示模块的切换，按下“O”表示 “确定”，可进入当前显示模块，查看详细信息、修改基本配置参数或者修改 N5/N6 的工作模式等。更加详细的操作步骤，请见用户手册。

示例图以 N6 为例：

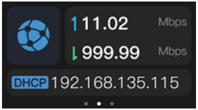


电源适配器

6 发现设备

6.1 查看 IP 地址

在 LCD 显示屏上，您可以便捷地查看设备的 IP 地址。LCD 显示屏的第三页内容为：设备当前的网络状态。上下箭头表示实时网络上下行速率，DHCP：表示设备获取的动态 IP 地址。



11.02 Mbps
999.99 Mbps
DHCP 192.168.135.115

6.2 使用 Kiloview Multiview 免费工具

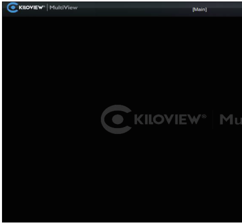
下载 Kiloview Multiview 免费工具

访问网址 https://www.kiloview.com/cn/ndi/multi

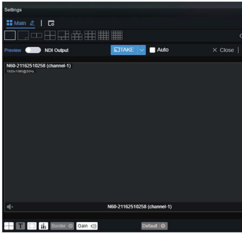
据提示一步一步安装软件即可。

Kiloview Multiview 是一款全世界广受好评的、免费

第一步：启动 Kiloview Multiview 软件，打开设置界面



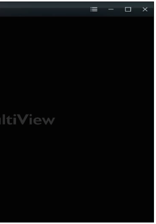
第二步：在设备发现列表中找到你要的设备，通过 Web



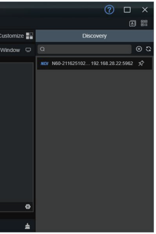
N60-21162510258 (channel-1)
1920x1080@50Hz
N60-21162510258 (channel-1)

view，点击[申请免费体验]按钮，获取 multiview，根

的 NDI 视频发现、管理、多画面监看的工具软件。



浏览器访问它的管理界面



NDI N60-211625102... 192.168.28.22:5962

说明

- N5/N6 设备的命名规则：N5/N6-<设备序列号>，其中<设备序列号>为贴在设备标签上的一串数字。
- **访问方法一：**将发现列表中找到的设备直接鼠标拖放到左边的窗格，稍等片刻，右上角将出现一个 ⓔ 图标。点击它可以直接打开 N5/N6 设备的 Web 管理页面。
- **访问方法二：**打开 Web 浏览器，在地址栏输入：http://设备 IP 地址/（其中设备 IP 地址是在发现列表中显示的 N5/N6 设备的 IP 地址）。

7 登录设备管理页面

打开 N5/N6 的 Web 管理界面后，默认登录设备的用户名是：**admin**，密码是：**admin**。

注意

- 为保证信息安全，建议您初次登录后、立即修改密码！
- 首次登录设备时，或每次升级固件后再次登录，将出现《**最终用户许可协议**》的阅读窗口，请您务必仔细阅读并在接受许可协议后方可使用！

8 工作模式

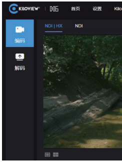
注意

- N5/N6 设备目前只能工作在“编码器模式”或者“解码器模式”二者之一。但您可以在二者之间任意切换。

8.1 编码模式

设备默认工作在**“编码器模式”**。在 N5/N6 Web 管理界面的左边，有编码器/解码器两种模式切换的图标。当设备处于其它工作模式时，点击“编码”图标可以切换回**“编码器模式”。**

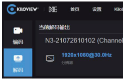
视频预览窗口默认为“图片”模式，画面每 3 秒刷新一帧，如果维护电脑的 CPU 性能较强，可以点击按钮切换为“视频”模式，预览窗口的流畅度将有所提升。



8.2 解码模式

在 N5/N6 Web 管理界面的

换到**“解码器模式”。**



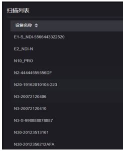
当前解码输出

N3-21072610102 (Channel

1920x1080@30.0Hz

N5/N6 处于解码器工作模式

到要解码显示的 NDI 源，点



扫描列表

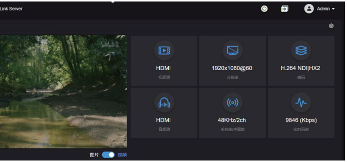
设备名称

E1-S_NDI-5566443322520
E2_NDI-N
N10_PRO
N2-44444555556DF
N20-19162010104-223
N3-20072120406
N3-20072120410
N3-S-998888878887
N30-20123513161
N30-2012356212AFA

可以点击 NDI 源右边的“+”

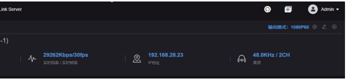
位置，允许您将常用的 NDI

号 Preset，切换解码输出。



HDMI 视频源
1920x1080@60 分辨率
H.264 NDI|HX2 编码
HDMI 音频源
48KHz/2ch 采样率/声道数
9846 (Kbps) 实时码率

上边，有编码器/解码器两种模式切换的图标。点击“**解码**”图标可以切

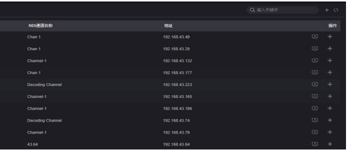


输出格式：1080P60

29262Kbps/30fps 实时码率 / 实时帧率
192.168.28.23 IP地址
48.0KHz / 2CH 音频

时，将自动搜索网络中的 NDI 源，并显示于解码管理界面的下方。找

击其右边的图标“⏏”，即可解码输出。



NDI通道名称	地址	操作
Chan 1	192.168.43.49	+
Chan 1	192.168.43.20	+
Channel-1	192.168.43.132	+
Chan 1	192.168.43.177	+
Decoding Channel	192.168.43.223	+
Channel-1	192.168.43.165	+
Channel-1	192.168.43.186	+
Decoding Channel	192.168.43.74	+
Channel-1	192.168.43.79	+
43.64	192.168.43.64	+

图标，将源添加到预置列表（Preset）中。N5/N6 提供 9 个 Preset

源保存在 Preset 列表中。这样，您可以在任何时候快速地选择 1-9

获取更多关于 N5/N6 编码和解码模式的使用帮助，请访问 Kiloview 官方网站地址

https://www.kiloview.com/cn/support/docs/N6/

9 固件升级

9.1 下载升级固件

Kiloview 将持续为 N5/N6 设备提供更新功能、修复 Bug 的固件。访问：

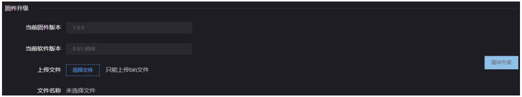
https://www.kiloview.com/cn/support/download/

在筛选列表中，选择 **“NDI” > “N6”**，并在 **“程序”** 标签中找到最新的固件下载。

9.2 升级设备固件

登录 N5/N6 管理后台，点击“系统设置”>“固件升级”，进入固件升级页面。检查下载的最新软件版本是否高于当前软件版本，如果版本一致或更低，则无需升级。若要升级，上传从官网下载的固件文件，然后点击“固件升级”。

通常，上传固件成功后，系统将提示您重启，如需确认，请点击确认；如果自动重启，请耐心等待。



当前固件版本 1.0.0
当前软件版本 0.01.0006
上传文件 只能上传bin文件
文件名称 未选择文件

注意

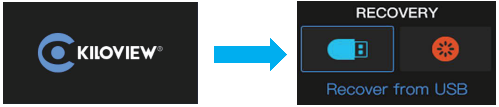
- 建议使用 Windows 操作系统的 Google Chrome 或者 Edge 浏览器升级。
- 升级过程中，请勿断电，否则可能导致设备无法启动。
- 一般来说，升级的过程大约需要 3-5 分钟。如果超过 5 分钟升级仍未提示完成，请尝试刷新网页；如果仍然无法正常访问，请尝试联系技术支持。

9.3 Recovery 模式升级设备固件

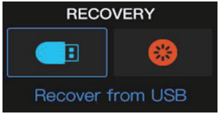
如果使用 9.2 所述方式无法进入 N5/N6 管理后台，可以使用 Recovery 模式进行固件升级，具体步骤如下：

第一步：准备好一个 U 盘，把从官网下载好的固件文件拷贝到 U 盘。

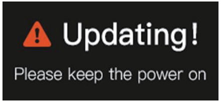
第二步：将 U 盘或插入 N5/N6，设备开机后（2s 左右），待屏幕出现 Kiloview 徽标，长按住“○”键 10s 以上直至设备进入 Recovery 模式。



第三步：通过点击触摸按钮选择“Recover from USB Device”（从 U 盘安装固件），选择完成后按下“○”确认即可开始升级。



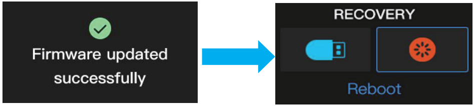
第四步：N5/N6 固件升级过程中，会提示“Updating! Please keep the power on.”（系统升级中！切勿断电）。



Updating!

Please keep the power on

第五步：当 N5/N6 屏幕显示“Firmware updated successfully”（升级完成）时，则表示 N5/N6 已完成固件升级。此时任意操作触摸按钮将帮助您返回 Recovery 菜单，请选择 Reboot 将设备重启。



Firmware updated successfully

注意

- “长按下触摸按钮 10 秒以上”进入 recovery 模式仅在设备启动时有效。
- 升级固件有且仅存储在根目录文件夹有效。
- 未找到固件，弹窗提示“No firmware found”（未找到升级固件），操作触摸按钮可返回选择界面。
- 固件升级过程中，任何操作无效。
- 如果固件升级失败，会提示“Failed to update the firmware”（固件升级失败），请联系技术支持。

10 恢复出厂设置

如因设备参数配置不当导致设备不能正常工作，或者当忘记网络 IP 配置并且无法搜索查找到设备时，可以尝试恢复设备的出厂设置。恢复出厂设置有两种方法：

方法一：当设备能正常登录 Web 管理页面时，通过 Web 界面的“设置”>“系统设置”>“恢复出厂设置”。

方法二：当设备不能正常登录 Web 管理页面时，通过操作 N5/N6 正面的触摸按钮，将设备恢复出厂设置。

注意：恢复出厂设置后，以下参数将会改变至默认值

- 登录用户 admin 的密码将恢复为 admin。
- 您的设备将恢复至默认使用的 DHCP 动态获取 IP 地址的模式，同时一个 failover 地址 192.168.1.168 将会被绑定到网卡上。
- 所有视频编码/解码参数、音频参数等将恢复到出厂的默认值。

11 其它

如设备长期不使用，为延长设备使用寿命，请拔掉电源，妥善保管设备。

KILOVIEW®

Your AV over IP Trailblazer

Quick Start Guide

N5/N6 Converter

NDI High Bandwidth+NDI|HX

Full Functional Codec

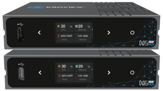
(V2.0)

Contents

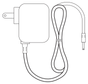
- Packing List
- Device interfaces and functions
- Device connection, login and use guide
- Device upgrade and restore to factory settings

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.

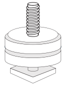
1 Packing List



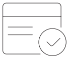
(1) N5/N6×1



(2) Power Supply ×1



(3) Cold Shoe ×1

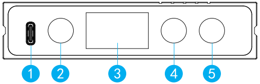


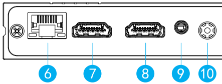
(4) Warranty Card ×1

(5) Quick Start Guide ×1

2 Device Interface

The following is the interface diagram of N6 as example:





(1) Type-C Extension Interface

(2) Touch Screen（Left/Page up）

(3) LCD Screen

(4) Touch Screen（Right/Page down）

(5) Touch Screen（OK）

(6) 1GbE Port with PoE

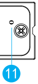
(7) HDMI IN （Note: SDI IN for N5）

(8) HDMI OUT（Note: SDI OUT for N5）

(9) LINE IN/OUT

(10) Power Port

(11) Tally



Note

- The picture above is a schematic diagram of the interface of the N6. The difference between the N5 and N6 devices is only in the SDI/HDMI interface.

3 Device indicators

	Used to indicate the status of the current video in encoding mode	
Tally/LCD Screen	Green Light	PVW
	Red Light	PGM

Note

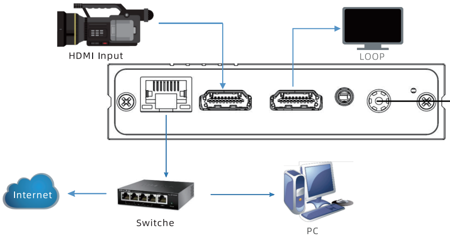
- When N5/N6 is in encoding mode, after receiving the tally signal from NDI, the LCD display will show that the current video is in PGM or PVW state (red or green).

4 Application Scenario

Note

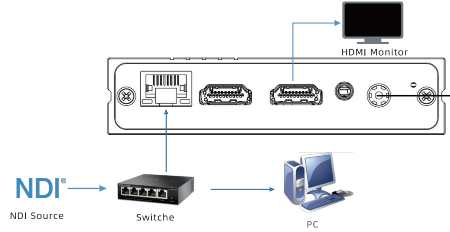
- The following example diagrams all take N6 as an example, and N5 is the SDI interface input.
- The encoding mode and decoding mode of the same device cannot be used at the same time.
- In encoder mode, make sure that the video signal output by the camera is connected to the HDMI IN/SDI IN interface.
- In decoder mode, make sure that the video signal cable is connected to the HDMI/SDI output port.

4.1 Encoding Mode



Encoding mode application system connection diagram

4.2 Decoding Mode



Decoding mode application system connection diagram

Power Adapter

Power Adapter

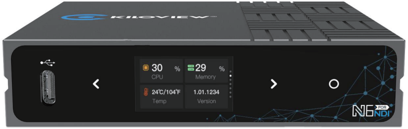
5 Display and touch buttons

N5/N6 provides a color LCD display and touch buttons on the front panel.

On the display, you can conveniently view the device status, obtain configuration parameters, and perform shortcut operations such as working mode switching and IP address configuration. The LCD display is also a large tally status display.

Display modules can be switched by clicking the touch button "<" ">" , clicking "○" means "OK" , you can enter the current display module, view detailed information, modify basic configuration parameters or modify the working mode of N5/N6, etc. For more detailed operation steps, please refer to the user manual.

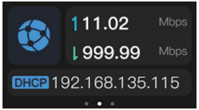
Take N6 as an example:



6 Discover Devices

6.1 Check IP address

On the LCD display, you can easily view the IP address of the device. The content of the third page of the LCD display is: the current network status of the device. The up and down arrows indicate the real-time network uplink and downlink rates, and DHCP: indicates the dynamic IP address obtained by the device.



6.2 Install Kiloview Multiview NDI player for free

Download Kiloview Multiview for free

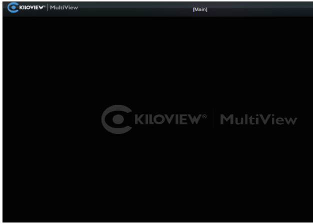
Visit the website https://www.kiloview.com/en/ndi/multiview, c

software step by step.

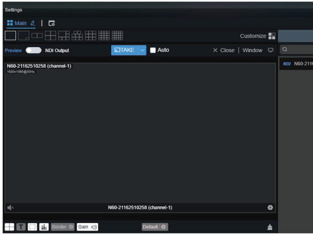
Kiloview Multiview is a free software for NDI video discovery, ma

popular and highly praised all over the world.

Step 1: Start the Kiloview Multiview software to configure the par



Step 2: Find the device in the discovery list and enter to the browser



lick the [Get it Now] to install the

nagement and multi-view, which is

ameters

device web page through

Discovery
525102… 192.168.28.22:5962

Introduction

- N5/N6 naming rules: N5/N6-<serial number>. Serial number refers to the numbers on the device label.
- Two ways of accessing to the device web 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 page directly.

- Method 2: Open web browser, enter: http://device IP address/ （Kindly note the device IP address is the one of N6 in the discovery list).

7 Login to the device Web page

Enter to the web page of the N5/N6 and both the username and the password are "admin" by default

Note

- To ensure information security, it is recommended to change your password immediately after your firs login.
- For the first login or upgrading the firmware, you need to agree the "End User License Agreemen (EULA)". Please read carefully.

8 Work with your device

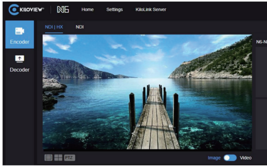
Note

- N5/N6 CANNOT be an encoder and a decoder simultaneously now, but you can switch freely.

8.1 Encoding Mode

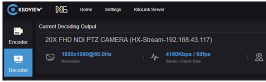
The device is under encoding mode by default. There are icons for switching between encoding mode and decoding mode on the left of the N5/N6 Web page. When the device work under "Decoder" mode, click icon "Encoder" to switch back to encoding mode.

The video preview is in "Image" mode by default, and will be refreshed in every 3 seconds. If your computer's CPU performance is well, you can click the button to switch to "Video" mode, which will improve the smoothness of the preview.



8.2 Decoding Mode

There are icons for switching between encoding moc N5/N6 web page. Click icon "Decoder" to switch ba



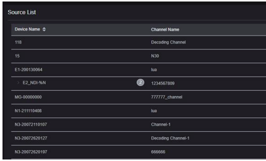
Current Decoding Output

20X FHD NDI PTZ CAMERA (HX-Stream-192.168.43.117)

1920x1080@60.0Hz
Resolution

4160Kbps / 60fps
Bitrate / Frame Rate

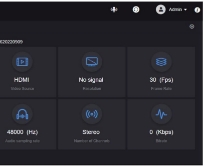
When the N5/N6 is in decoding mode, the NDI sourc bottom of the decoder web page automatically. Fin icon "⍐" on the right of it to decode and output .



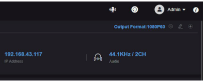
Source List

Device Name ⇕	Channel Name
118	Decoding Channel
15	N30
E1-200130064	lua
› E2_NDI-%N ②	1234567809
MG-00000000	777777_channel
N1-211110408	lua
N3-20072110107	Channel-1
N3-20072620127	Decoding Channel-1
N3-20072620197	666666

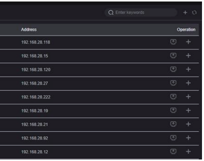
Sources can be added to the Preset list by clicking " supports up to 9 Presets, and you can save the frequ which could ensure you quickly select Presets 1-9 at a


620220909
HDMI
Video Source
No signal
Resolution
30 (Fps)
Frame Rate
48000 (Hz)
Audio sampling rate
Stereo
Number of Channels
0 (Kbps)
Bitrate

de and decoding mode on the left of the
ck to decoding mode.


Output Format:1080P60
192.168.43.117
IP Address
44.1KHz / 2CH
Audio

es in the network will be displayed at the
d the NDI source to be decoded, click the


Address	Operation
192.168.28.118	+
192.168.28.15	+
192.168.28.120	+
192.168.28.27	+
192.168.28.222	+
192.168.28.19	+
192.168.28.21	+
192.168.28.92	+
192.168.28.12	+

+" on the right of the NDI source. N5/N6
uently used NDI sources in the Preset list,
ny time to decode and output.

For more details of the N6 in decoding mode, please visit at our website:

https://www.kiloview.com/en/support/docs/N5 or https://www.kiloview.com/en/support/docs/N6

9 Firmware Upgrading

9.1 Download Firmware

Kiloview will keep update the new firmware of N5/N6. Please visit:

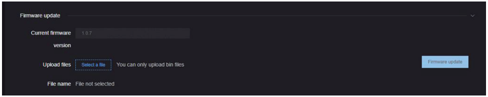
https://www.kiloview.com/ensupport/download/

Select "NDI" list > "N5" or "N6" to find the latest firmware to download.

9.2 Upgrade Device Firmware

Login to the web page of N5 or N6, click "Settings">"Firmware Upgrade" to check if there is any latest firmware

available to download. 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 update
Current firmware version: 1.0.7
Upload files: You can only upload bin files
File name: File not selected

Note

- Google Chrome or Edge with Windows OS is recommended for upgrading.
- Please do not power off during the upgrade process, otherwise the device could not work.
- Generally, it will take 3-5 minutes to upgrade the device. If it is still not completed after 5 minutes, please try refreshing web page. If still cannot access it normally, please try to contact technical support for assistance.

9.3

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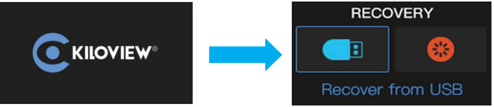
Upgrade device firmware in recovery mode

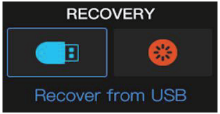
u cannot enter the N5/N6 web page with the method described in 9.2, you can use the very mode to upgrade the firmware. The specific steps are as follows:

1: Prepare a USB flash drive, copy the firmware file downloaded from Kiloview website to SB flash drive.

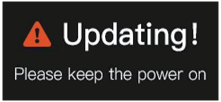
2: Insert the USB flash drive into the N5/N6, after the device is turned on (about 2s), wait e Kiloview logo to appear on the screen, long press and hold "○" for more than 10s the device enters recovery mode.



3: Select "Recover from USB Device" (install firmware from U disk) by clicking the touch n. After the selection is complete, press "○" to start the upgrade.



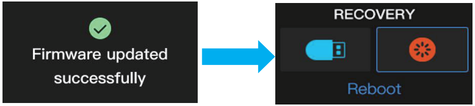
4: During the upgrading, it will prompt with "Updating! Please keep the power on." se do not power off)



Updating!

Please keep the power on

5: When the N5/N6 screen displays "Firmware updated successfully", the N5/N6 has leted the firmware upgrade. At this time, any operation of the scroll wheel will help you n to "RECOVERY", please select "Reboot" to restart the device.



Firmware updated successfully

Note

- "Press and hold the scroll wheel for more than 10s to enter recovery mode" is only available when the device is starting.
- Upgrade firmware is available only in the root folder.
- If the firmware cannot be found, the pop-up window will show "No firmware found", please operate the scroll wheel to return to the selection screen.
- During the firmware upgrading, any operation is invalid.
- If the firmware upgrade fails, it will prompt "Failed to update the firmware", please contact technical support for help.

10 Restore factory settings

If the device cannot work normally after modified the parameters or forgot 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) When the device cannot log in to the web management page normally, the device can be restored to the default settings by operating the touch button on the front of the N5/N6.

Note: After restoring factory setting, below parameters will be turned to default value:

- Login username and password will be "admin".
- Your device will be restored to obtain a DHCP-assigned IP address by default and the failover address 192.168.1.168 will be bound to the device.
- All encoding/decoding parameters of video and audio will be restored to default value.

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.