

## Quick Start Guide

# N50/N60 Converter

NDI High Bandwidth+NDI|HX  
Full Functional Codec

(Version 2024-9)



### 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) N50/N60×1



(2) Power Supply ×1



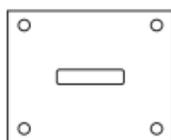
(3) Cold Shoe ×1



(4) Warranty Card ×1

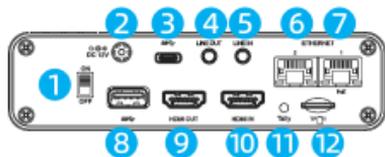


(5) Quick Start Guide ×1



(6) V-mount ×1

## 2 Device Interface



(1) Power ON/OFF

(2) Power Port

(3) Type-C Extension



(9) HDMI OUT (Note: SDI OUT for N50)

(10) HDMI IN (Note: SDI IN for N50)

(11) Tally

- |                        |                      |
|------------------------|----------------------|
| (4) LINE OUT           | (12) TF slot         |
| (5) LINE IN            | (13) Power Indicator |
| (6) 1GbE Port          | (14) LCD Screen      |
| (7) 1GbE Port with PoE | (15) Scroll Wheel    |
| (8) USB Extension      |                      |

### 3 Device Indicators

		Video status under encoding mode		
Tally/LCD Screen	Green Light	PVW		
	Red Light	PGM		
Power lights	Name	Color	Status	Description
	Power	White	ON	Power connected
			OFF	Power off or failure

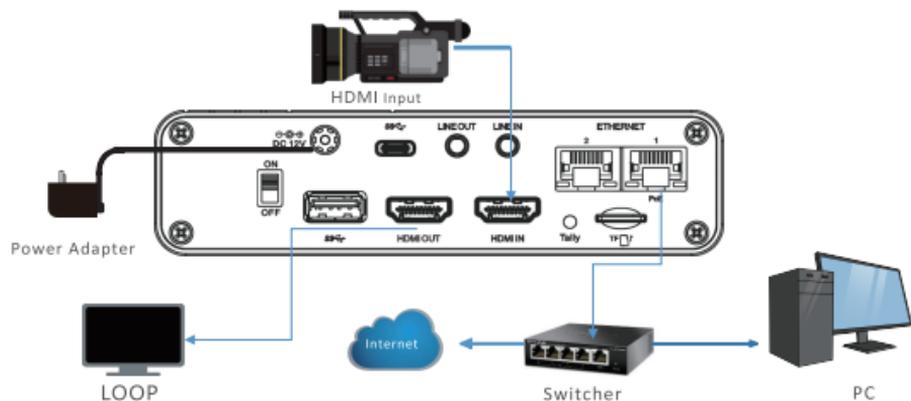


#### Note

- In this manual, the interface diagram of N60 is used for demonstration. The device interface difference between N50 and N60 is HDMI and SDI. The label (9) of N50 is SDI OUT, and the label (10) is SDI IN.
- 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.
- **POE Note** : N50/N60 only supports PoE on "ETHERNET 1" port, "ETHERNET 2" port is not available.  
Please use PoE+ (802.11AT) standard switcher, other switchers may cause abnormality or damage due to output power mismatch.

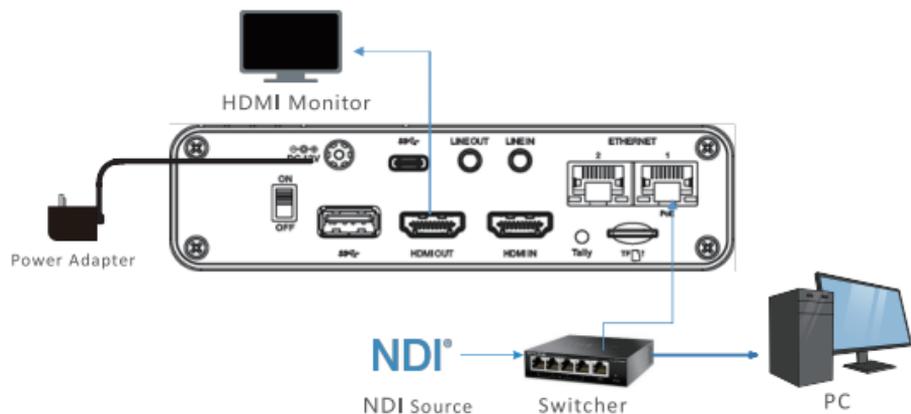
## 4 Application Scenario

### 4.1 Encoding Mode



Encoding mode application system connection diagram

### 4.2 Decoding Mode



Decoding mode application system connection diagram

## 5 LCD Screen and Scroll Wheel

The N50/N60 has a big color LCD screen and a scroll wheel on the front panel.

With the screen, it is easy to check the device status, to get configuration parameters, to switch working mode and configure IP address, etc. Also, the LCD screen is a large Tally status indicator.

With the scroll wheel, it allows you to switch the display module. Press the wheel to enter the current display module and check detailed parameters, change the basic configurations or the working mode of the N50/N60. For more detailed operations, please refer to the user manual.

Take N60 as an example:



## 6 Device Discovery

### 6.1 Check IP address

On the LCD Screen, it is easily to check the IP address of your device.

After the N50/N60 powered on, you can turn the scroll wheel to switch the images to your currently connected network port, "ETHERNET 1" (network 1) or "ETHERNET 2" (network 2), to check the current IP address of the device.



ETHERNET 1 (Network 1)

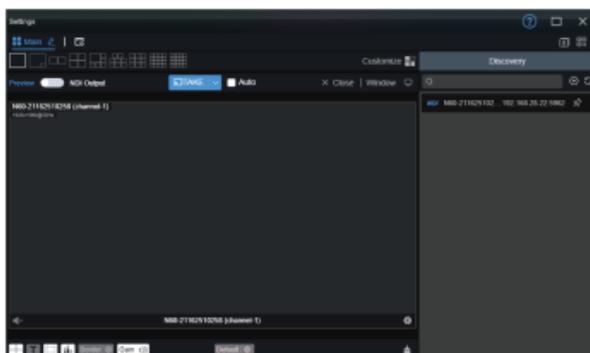


ETHERNET 2 (Network 2)

## 6.2 Install Kiloview Multiview NDI player for free

Step 1: To start Kiloview Multiview software, click the icon to open the settings interface: ☰.

Step 2: Find the device in the discovery list and enter to the device web page through browser.



Download Kiloview Multiview for free

Visit the website <https://www.kiloview.com/en/ndi/multiview>, click the [Get it Now] to install the software step by step.

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



## Introduction

- N60 naming rules: N60-<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 N60 in the discovery list).

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## 7 Login to the device Web page

Enter to the web page of the N50/N60 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 first login.
  - For the first login or upgrading the firmware, you need to agree the "End User License Agreement (EULA)". Please read carefully.
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## 8 Work with your device

### 8.1 Encoding Mode

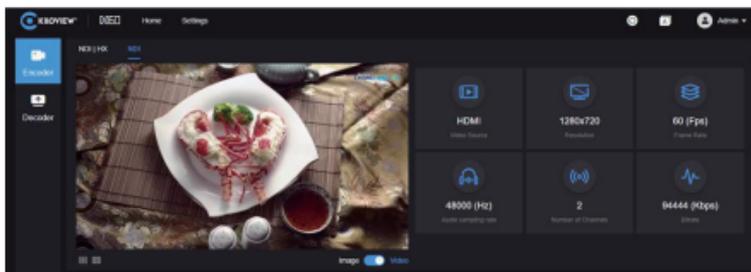
The device is under encoding mode by default. There are icons for switching between encoding mode and decoding mode on the left of the N50/N60 Web page. When the device work under "Decoder" mode, click icon "Encoder" to switch back to encoding mode.



### Note

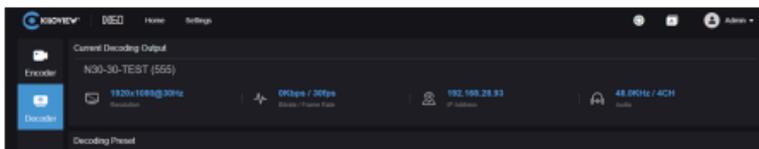
- N50/N60 CANNOT be an encoder and a decoder simultaneously, but you can switch freely.
-

The video preview is in "Image" mode by default, and will be refreshed 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.

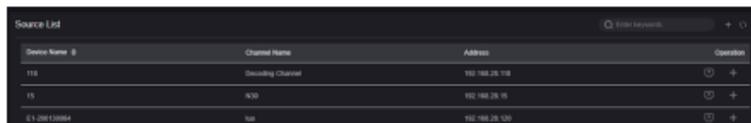


## 8.2 Decoding mode

There are icons for switching between encoding mode and decoding mode on the left of the N50/N60 web page. Click icon "Decoder" to switch back to decoding mode.



When the N50/N60 is in decoding mode, the NDI sources in the network will be displayed at the bottom of the decoder web page automatically. Find the NDI source to be decoded, click the icon , on the right of it to decode and output.



Sources can be added to the Preset list by clicking "+" on the right of the NDI source. N50/N60 supports up to 9 Presets, and you can save the frequently used NDI sources in the Preset list, which could ensure you quickly select Presets 1-9 at any time to decode and output.



For more details of the N50/N60 in decoding mode, please visit at our website:

<https://www.kiloview.com/en/support/docs/N50/> or

<https://www.kiloview.com/en/support/docs/N60/>

## 9 Firmware upgrading

### 9.1 Download firmware



Kiloview will keep update the new firmware of N50/N60. Please visit:

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

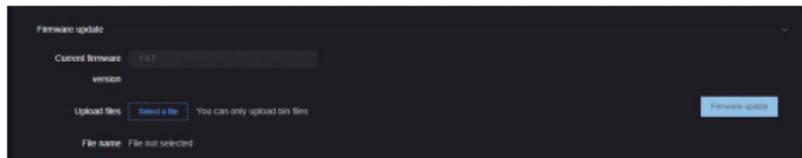
Select "NDI" list > "N50" to find the latest firmware to download. or

Select "NDI" list > "N60" to find the latest firmware to download.

### 9.2 Upgrade device firmware

Login to the web page of N50/N60, 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.



#### Note

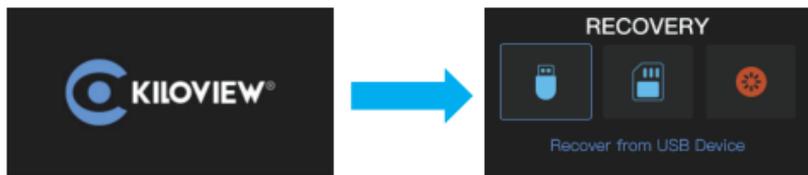
- Google Chrome or Edge with Windows OS is recommended for upgrading.
- Please do not power off during the upgrade process, otherwise the device could not work.
- Generally, it will take 3-5 minutes to upgrade the device. If it is still not completed after 5 minutes, please try refreshing web page. If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

### 9.3 Upgrade device firmware in recovery mode

If you cannot access the N50/N60 web page with the method described in 9.2, please use the Recovery mode to upgrade the firmware, as follows.

Step 1: Prepare a USB flash drive or TF card, copy the firmware file downloaded from Kiloview website to the USB flash drive/TF card.

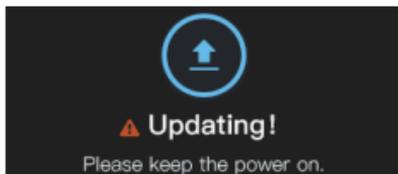
Step 2: Insert the USB flash drive or TF card into the N50/N60, after the device is turned on (about 2s), wait for the Kiloview logo to appear on the screen, long press and hold the scroll wheel for more than 10s until the device enters recovery mode.



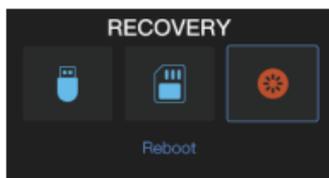
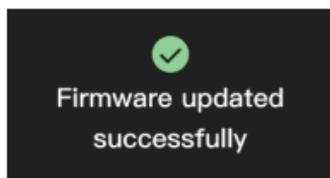
Step 3: Select "Recover from USB Device" or "Recover from TF Card" by turning the scroll wheel, press the wheel to confirm the selection to start the upgrade.



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



Step 5: When the N50/N60 screen displays "Firmware updated successfully", the N50/N60 has completed the firmware upgrade. At this time, any operation of the scroll wheel will help you return to "RECOVERY", please select "Reboot" to restart the device.



#### 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.

- 1) If you can login to web page, then via the web page, click "Settings>System settings>Restore factory settings".
- 2) If you cannot login to web page, press the RESET button for 5 seconds in the bottom of device.

## 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.



**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](http://192.168.1.168) will be bound to the device.
- All encoding/decoding parameters of video and audio will be restored to default value.

## 快速入门手册

# N50/N60 视频编解码器

NDI High Bandwidth+NDI|HX

全能编解码器

(2024-9 版)



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。

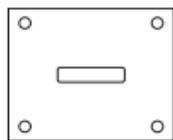
## 1 设备清单



(1) 主机 (N50/N60) ×1

(2) 电源适配器×1

(3) 冷靴×1

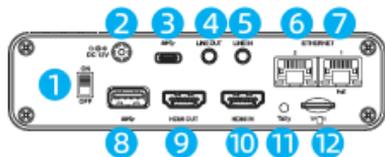


(4) 合格证/保修卡×1

(5) 《快速入门》手册×1

(6) 冷靴支架×1

## 2 设备接口



(1) 电源开关

(2) 电源接口

(3) Type-C 拓展接口

(9) HDMI OUT (注:N50 为 SDI OUT)

(10) HDMI IN (注:N50 为 SDI IN)

(11) Tally 状态灯

- (4) LINE OUT
- (5) LINE IN
- (6) 1000M 以太网口
- (7) 1000M 以太网口-PoE
- (8) USB 拓展接口
- (12) TF 卡槽
- (13) 电源指示灯
- (14) LCD 显示屏
- (15) 滚轮旋钮

### 3 设备指示灯

Tally/LCD显示屏	编码模式下用于指示当前视频的状态			
	绿色常亮	指示当前视频处于PVW预览状态		
	红色常亮	指示当前视频处于PGM输出状态		
电源指示灯	名称	颜色	状态	说明
	Power	白色	常亮	电源已连接
			熄灭	电源关闭或故障

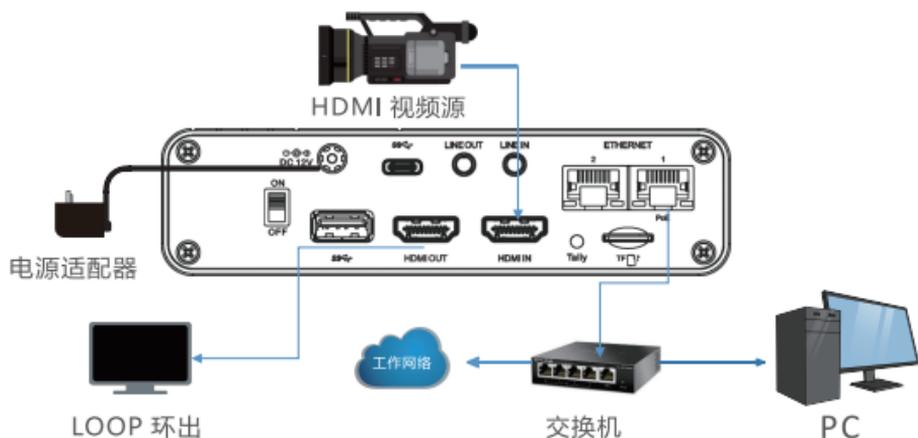


#### 注意

- 本手册中均使用 N60 的接口图进行演示，N50 和 N60 的设备接口差异 HDMI 和 SDI，N50 的(9)号标签为 SDI OUT，(10)号标签为 SDI IN。
- 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。
- **PoE说明：**N50/N60 只有“ETHERNET 1”网口支持 PoE 功能，您无法使用“ETHERNET 2”网口为 N50/N60 供电。  
请使用 PoE+(802.11AT) 标准的交换机，其他交换机可能会因输出功率不匹配导致工作异常或损坏。

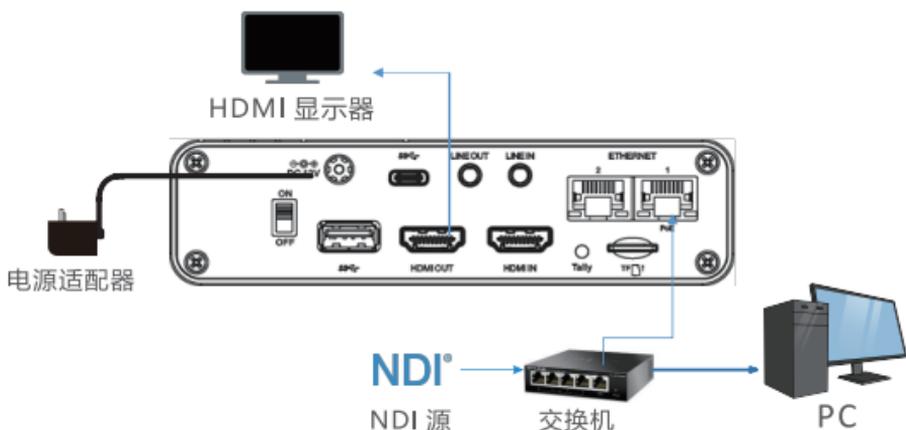
## 4 应用场景

### 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

## 5 显示屏和滚轮旋钮

N50/N60 在正面板板上提供了彩色 LCD 显示屏和滚轮旋钮。

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。

通过滚轮旋钮可进行显示模块的切换，按下滚轮表示“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 N50/N60 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 N60 为例：

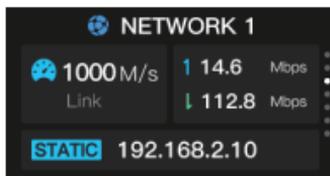


## 6 发现设备

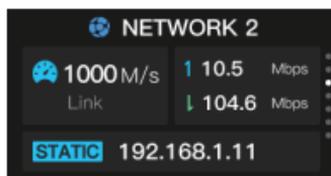
### 6.1 查看 IP 地址

在 LCD 显示屏上，您可以便捷地查看设备的 IP 地址。

N50/N60 开机后，您可以转动滚轮旋钮将显示屏的画面切换至您当前连接的网口，“ETHERNET 1”（网口 1）或“ETHERNET 2”（网口 2），即可查看到设备当前的 IP 地址。



ETHERNET 1（网口 1）



ETHERNET 2（网口 2）

### 6.2 使用 Kiloview Multiview 免费工具



## 下载 Kiloview Multiview 免费工具

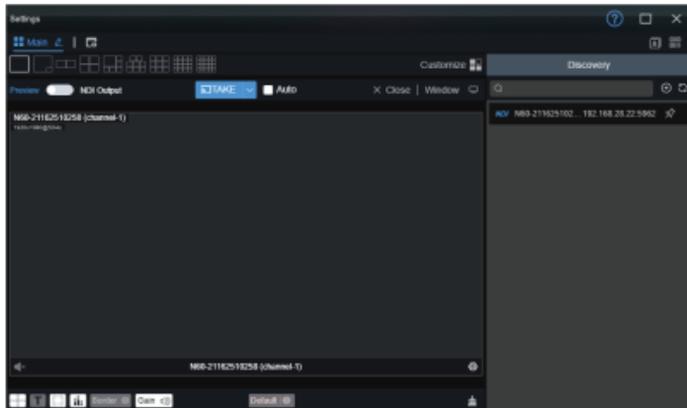
访问网址 <https://www.kiloview.com/cn/ndi/multiview>，点击[申请免费体验]按钮，获取 multiview，根据提示一步一步安装软件即可。

Kiloview Multiview 是一款全世界广受好评的、免费的 NDI 视频发现、管理、多画面监看的工具软件。

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 浏览器访问它的管理界面





## 说明

- N50/N60 设备的命名规则：N50/N60-**<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 N50/N60 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 N50/N60 设备的 IP 地址）。

## 7 登录设备管理页面

打开 N50/N60 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

### 8.1 编码模式

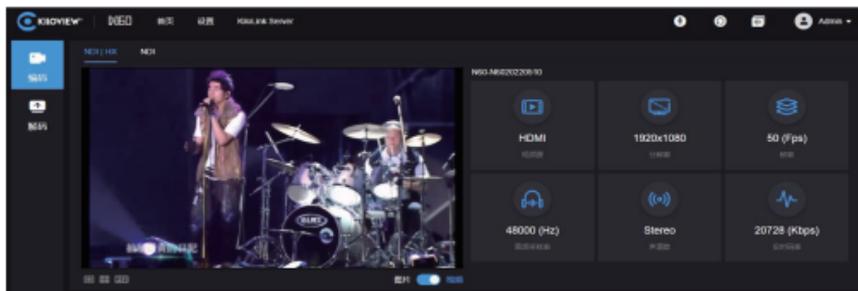
设备默认工作在“编码器模式”。在 N50/N60 Web 管理界面的左边，有编码器/解码器两种模式切换的图标。当设备处于其它工作模式时，点击“编码”图标可以切换回“编码器模式”。

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。



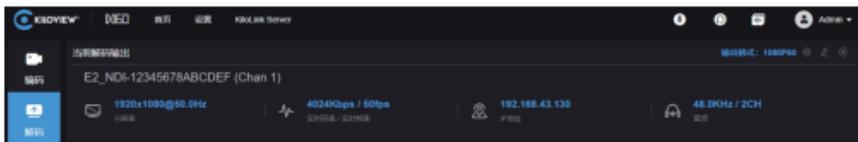
## 注意

- N50/N60 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。



## 8.2 解码模式

在 N50/N60 Web 管理界面的上边，有编码器/解码器两种模式切换的图标。点击“解码”图标可以切换到“解码器模式”。



N50/N60 处于解码器工作模式时，将自动搜索网络中的 NDI 源，并显示于解码管理界面的下方。找到要解码显示的 NDI 源，点击其右边的图标 ，即可解码输出。

名称/源 ID	NDI 源名称	IP 地址	操作
E1_E_NDI-1080X1080-222	Chan 1	192.168.43.49	+
E2_NDI-H	Chan 1	192.168.43.20	+
N16_PND1	Channel 1	192.168.43.132	+
N1-4444455555666	Chan 1	192.168.43.117	+
N2-FF992210104-222	Decoding Channel	192.168.43.222	+
N3-2007120408	Channel 1	192.168.43.955	+
N3-2007120408	Channel 1	192.168.43.960	+
N3-0-0000000000000	Decoding Channel	192.168.43.74	+
N3-2912311981	Channel 1	192.168.43.70	+
N3-2912319821020A	43.84	192.168.43.84	+

可以点击 NDI 源右边的“+”图标，将源添加到预置列表（Preset）中。N50/N60 提供 9 个 Preset 位置，允许您将常用的 NDI 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 号 Preset，切换解码输出。



获取更多关于 N50/N60 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/N60/>

## 9 固件升级

### 9.1 下载升级固件



Kiloview 将持续为 N50/N60 设备提供更新功能、修复 Bug 的固件。

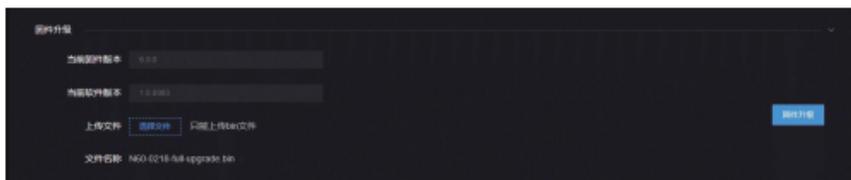
访问：<https://www.kiloview.com/cn/support/download/>

在筛选列表中，选择“NDI”>“N60”，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 N50/N60 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。



#### 注意

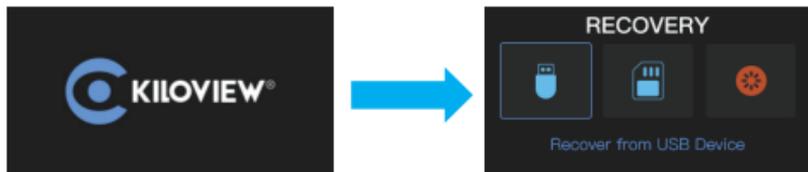
- 建议使用 Windows 操作系统的 Google Chrome 或者 Edge 浏览器升级。
- 升级过程中，请勿断电，否则可能导致设备无法启动。
- 一般来说，升级的过程大约需要 3-5 分钟。如果超过 5 分钟升级仍未提示完成，请尝试刷新网页；如果仍然无法正常访问，请尝试联系技术支持。

### 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 N50/N60 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 盘或者 TF 卡，把从官网下载好的固件文件拷贝到 U 盘/TF 卡。

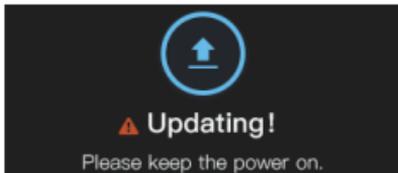
第二步：将 U 盘或者 TF 卡插入 N50/N60，设备开机后（2s 左右），待屏幕出现 Kiloview 徽标，长按住滚轮旋钮 10s 以上直至设备进入 Recovery 模式。



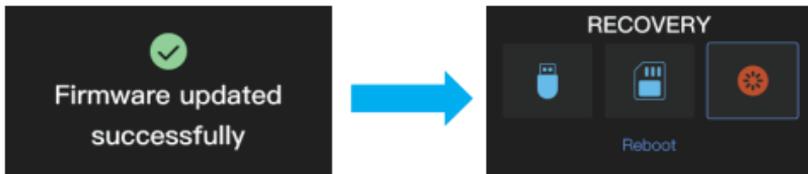
第三步：通过旋转滚轮旋钮选择“Recover from USB Device”（从 U 盘安装固件）或者“Recover from TF Card”（从 TF 卡路径安装固件），选择完成后按下滚轮旋钮确认即可开始升级。



第四步：N50/N60 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）。



第五步：当 N50/N60 屏幕显示“Firmware updated successfully”（升级完成）时，则表示 N50/N60 已完成固件升级。此时滚轮旋钮的任意操作将帮助您返回 Recovery 菜单，请选择 Reboot 将设备重启。





### 注意

- “长按下滚轮旋钮 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），操作滚轮旋钮可返回选择界面。
  - 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。
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## 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 N50/N60 正面的滚轮，将设备恢复出现设置。



### 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。
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## 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。