

Quick Start Guide

P3 mini 4G Bonding Video Encoder

4G+ H.265 Bonding Video Encoder

(V1.0)

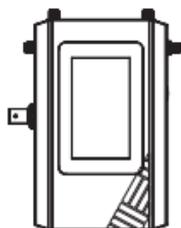


Kiloview P3 mini is a new generation of wireless bonding video encoder based on KiloLink, supporting multi connections bonding. P3 mini is equipped with dual video inputs of 3G-SDI and HDMI, supporting a resolution of 1080p60. Upgraded H.265 encoding capability and perfectly adaption to KiloLink Server Pro ensure the best quality of multi-protocol live streaming and video transmission.

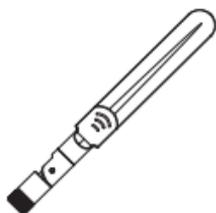
- Packing List
- Device interfaces
- Device installation
- Device connection, login and use guide
- Device upgrade and restore factory setting

Before you start using this product, it is recommended that you carefully read the user manual. To ensure your personal safety and to avoid physical or electrical damage to the device, please strictly follow the guidance in this manual or install and use the product under the supervision of a professional. Incorrect electrical connections or physical installation may cause permanent damage to the device and even pose a threat to personal safety.

1 Packing List



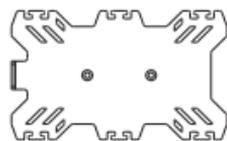
(1) P3 mini Encoder x1



(2) Wi-Fi antenna x1



(3) 4G antenna x3



(4) Power bank Bracket x1



(5) Cold boot screw x1



(6) Power Adapter x1



(7) Bracket screw mount x1

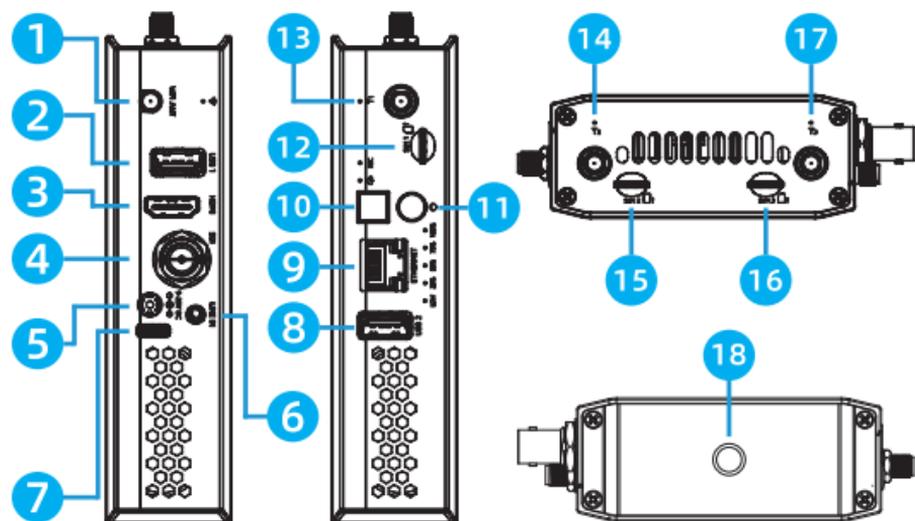


(8) Warranty Card x1



(9) Quick Start Guide x1

2 Device Interface



(1) Wi-Fi SMA Interface

(2) USB TYPE-A

(3) HDMI Input

(4) SDI Input

(5) Power Port

(6) 3.5mm LINE IN

(7) PD Charging Port

(8) USB TYPE-A

(9) 1000M Ethernet

(10) Quick Stream Switch

(11) Power Switch

(12) SIM card slot 1

(13) 4G SMA Interface 1

(14) 4G SMA Interface 2

(15) SIM card slot 2

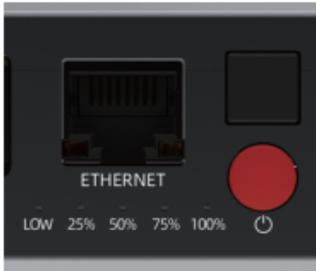
(16) SIM card slot 3

(17) 4G SMA Interface 3

(18) 1/4 inch screw mount

3 Battery indicator light

After the battery is installed, the P3 mini battery indicator light can help users understand the current device power usage. The colors of the indicator light correspond to different states are as follows:

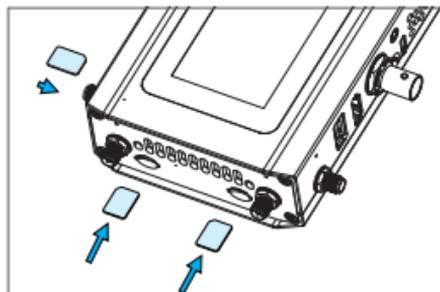
Indicator light	Explanation
	<p>The device has five indicator lights, labeled as LOW, 25%, 50%, 75%, and 100%. Each light indicates the current battery level. When the battery level drops below 25%, the LOW light will illuminate with a red warning to indicate low battery. When the battery level is between 25% and 100%, the corresponding indicator light for that battery level range will stay on.</p> <p>During charging, the lights corresponding to the battery levels will flash according to the charging progress. When all the battery level indicators are constantly on, it means the battery is fully charged.</p>

4 Device installation

Before using the multi-bonding feature of the P3mini device, ensure that SIM cards, antennas, and other external accessories are correctly installed. The specific installation method is as follows:

4.1 Installation of 4G SIM Card

The Nano-SIM card installation process is as follows:

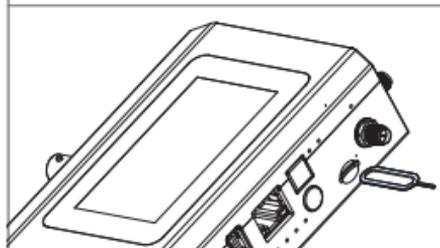


The three Nano-SIM card slots in the left image are for SIM card installation. Follow these steps:

Align the SIM card notch with the slot.

Push the SIM card in until it is securely seated.

After installation, wait about 1 minute. The device will automatically detect the signal. If the signal is normal, the SIM card is successfully installed.



Remove the SIM card: Please use a pin as shown in the left image to gently push the SIM card inward until it pops out, then you can remove it.

4.2 Antennas Installation

The P3 mini requires antennas for the 3 channels of 4G cellular network and Wi-Fi. The installation procedure is as follows:



The P3 mini has two external antennas: Wi-Fi and 4G.

Align each antenna's SMA connector with its corresponding port.

Screw in the antenna securely.

Do not mix the antennas; check the markings to ensure correct installation.



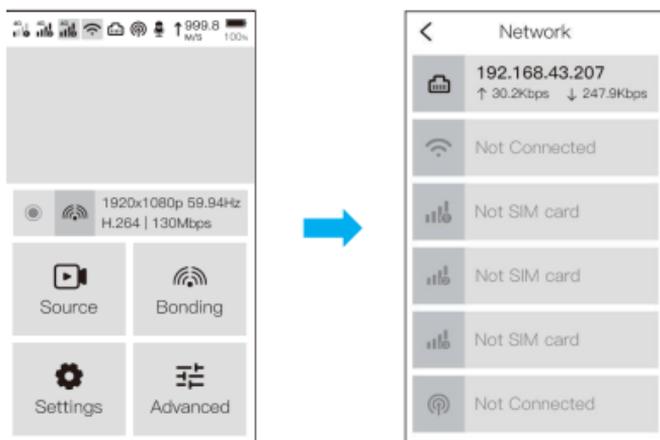
Note

- Please use the device's standard power adapter or a compliant PD charger to power the device. Other non-standard power sources may damage the device.
- Please ensure that the Wi-Fi antenna and 4G antenna ports are correctly used. Incorrectly installing the antennas can significantly affect the device's signal quality and performance.

5 Viewing the Device's IP Address

On the LCD screen, you can easily view the device's IP address.

Click "Settings" on the main interface of the LCD screen and then click "Network" to view the corresponding IP address of the current network connection.



6 Login to the device management page

In addition to using the LCD display to quickly set up and operate the device, this device also supports operating and managing the device through the WEB management system. If you need to log in to the device management page, just open the web browser and enter: <http://device IP address/> in the address bar to access the device management system.



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.
 - This device requires KiloLink Server Pro to provide bonding service support.
-

7 Use of the Device

7.1 Video source checking

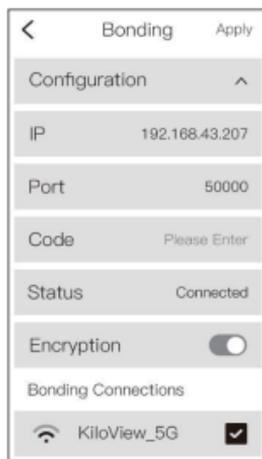
After connecting the video source, you can preview the input video source in real-time on the LCD screen.

7.2 Bonding Service

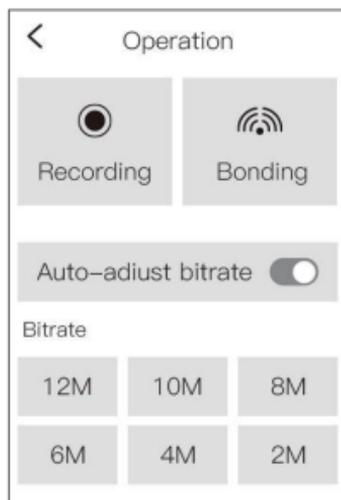
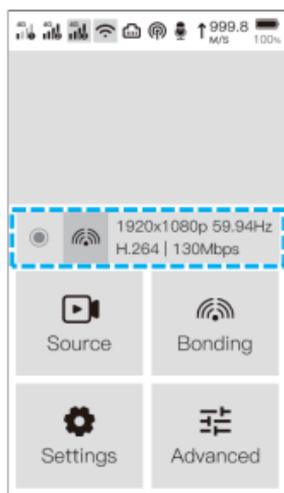
The P3 mini uses the KiloLink patented multi-link bonding transmission algorithm, which provides exceptional bonding transmission and anti-network jitter capabilities and supports the bonding of 4G cellular, Wi-Fi, and Ethernet. To achieve bonding transmission with the P3 mini, a KiloLink Server Pro server with a public IP address is required, and device registration information must be configured on the server side (for details on configuring and using the KiloLink Server Pro server, please refer to the "User Manual for the KiloLink Server Pro"). Before performing aggregation transmission on the device side, you also need to configure the connection parameters between the P3 mini and KiloLink Server Pro on the device side.

To configure the connection between the device and KiloLink Server Pro:

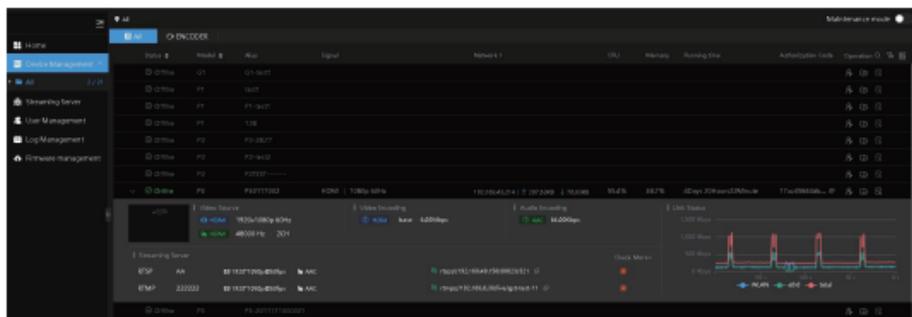
1. Click the "Bonding" button on the main interface to enter the device bonding configuration page.
2. Enter the server address, server port, authorization code, and other details, set encryption options if needed, and select the network communication links that need to participate in bonding communication.
3. Click the "Apply" button to configure and establish the connection parameters (as shown below):



After configuration is complete, when live streaming to KiloLink Server Pro, please click on the general quick dialog on screen for streaming (as shown below):



Once the streaming is successful, you can view the corresponding device streaming information and status on the backend management interface On the Web of Kiloview Sever (as shown in the figure below).



Note

To ensure optimum performance, please make sure your KiloLink Server Pro is updated to the latest version.

For obtaining and deploying the KiloLink Server Pro version, please refer to: <https://www.kiloview.com/en/kilolink-server-pro/>

8 Firmware update

Kiloview will continue to provide firmware updates and bug fixes for the P3 mini device.

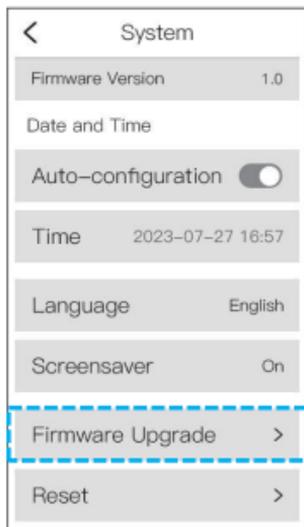
Visit: <https://www.kiloview.com/en/support/download/>

In the filtering list, select "Video Encoder" > "P3 mini", and find the latest firmware download under the "Firmware" tab.

Firmware upgrades can be performed in two ways:

log in to the P3 mini GUI interface, click on "Settings" > "System Settings" > "Firmware Upgrade", upload the firmware to upgrade according to the prompts.

insert a USB drive containing the P3 mini firmware upgrade, and click on "Settings" > "System Settings" > "Firmware Upgrade" on the P3 LCD screen to perform the firmware upgrade.



Note



- During the upgrade process, do not power off the device, as it may cause the device to fail to start.
 - The upgrade process takes approximately 3-5 minutes. If the upgrade is not completed within 5 minutes, please try restarting the device. If you still cannot access it normally, please contact technical support.
 - If using the USB storage for firmware upgrade, it is recommended to format the USB storage with the FAT/FAT32/exFAT file system.
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9 Restore factory settings

If the device cannot work normally after modified the parameters, please restore factory settings. There are two methods to perform a factory reset:

Method 1: Through the web interface, go to "Settings" > "System Settings" > "Factory Reset".

Method 2: Through the display screen interface, go to "Settings" > "System Settings" > "Restore Factory Settings".



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

- The login user and password will be [admin](#);
 - All video encoding parameters and audio parameters will be restored to factory default settings.
-

10 Others

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



For more information on using the P3 mini encoder, please visit the Kiloview official website.

<https://www.kiloview.com/en/p3-mini/>

快速入门手册

P3 mini 4G 无线聚合编码器

4G + H.265 无线聚合视频编码器

(V1.0)



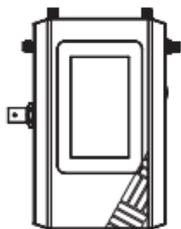
P3 mini 是千视基于 KiloLink 传输技术打造的全新一代无线聚合编码器。它支持同时多路无线聚合连接；设备支持 PD 和 DC 充电，可使用 TYPEC 口供电，确保全天候运行。P3 mini 采用 H.265/H.264 编码技术，配备 3G-SDI 与 HDMI 双接口输入，支持 1080p60 的分辨率。设备与 KiloLink Server Pro 软件配合，提供远程管理和全协议的流媒体转发服务，并支持跨互联网语音对讲功能，全面满足各种应用需求。

通过本手册，您可以了解到

- 设备清单
- 设备接口
- 设备安装
- 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



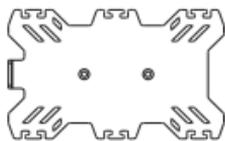
(1) 主机×1



(2) Wi-Fi 天线×1



(3) 4G 天线×3



(4) 充电宝支架×1



(5) 冷靴螺丝×1



(6) 电源适配器×1



(7) 冷靴螺丝板×1

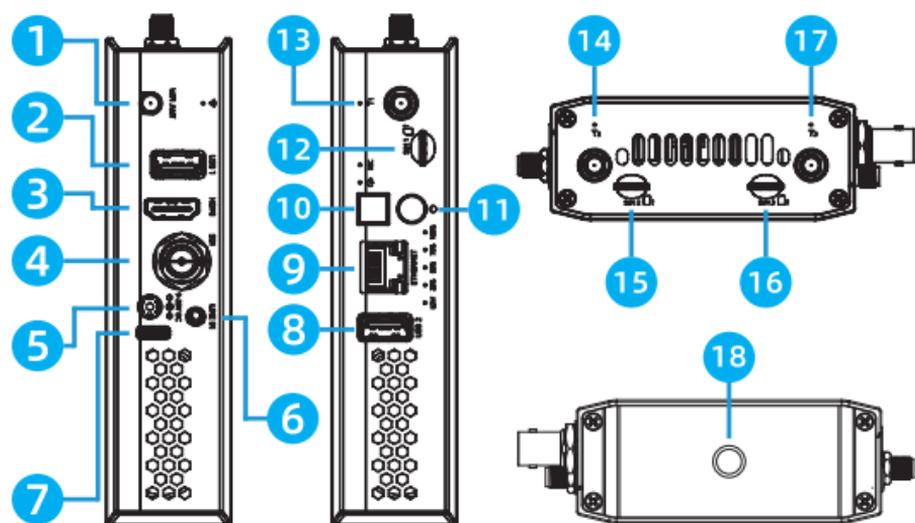


(8) 合格证/保修卡×1



(9) 《快速入门》手册×1

2 设备接口



(1) Wi-Fi 天线接口

(2) USB 2.0 TYPE-A

(3) HDMI IN

(4) SDI IN

(5) 电源接口

(6) LINE IN(3.5mm)

(7) PD 供电接口

(8) USB 2.0 TYPE-A

(9) 千兆以太网口

(10) 快捷推流开关

(11) 电源开关

(12) Nano-SIM 卡槽 1

(13) 4G 天线接口 1

(14) 4G 天线接口 2

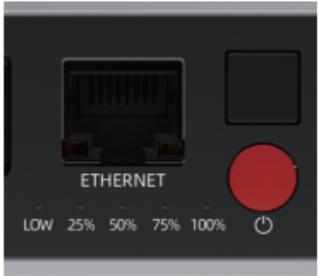
(15) Nano-SIM 卡槽 2

(16) Nano-SIM 卡槽 3

(17) 4G 天线接口 3

(18) 1/4" 冷靴螺丝孔

3 电池指示灯

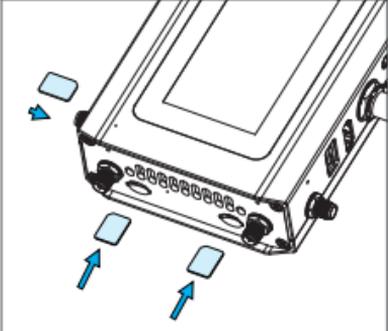
电池指示灯	说明
	<p>设备上有五个指示灯，分别标识为 LOW、25%、50%、75%和100%。每个灯亮起时，表示当前的电池剩余电量。当电池电量低于25%时，LOW灯会亮起红色警示，提示电量较低。当电池电量在25%至100%区间时，相应电量区间的指示灯会常亮。</p> <p>当设备在充电时，电量对应标识档位灯会根据充电进度闪烁，当所有电量区间指示灯常亮时代表电量已充满。</p>

4 设备安装

P3 mini 设备在使用多路聚合功能前，需正确安装 SIM 卡、天线等外部配件。具体安装方法如下：

4.1 安装 SIM 卡

安装 Nano-SIM 卡的具体操作如下：

	<p>左图所示的三个 Nano-SIM 卡槽位置可用于安装 SIM 卡。</p> <p>安装步骤如下：</p> <ol style="list-style-type: none">1. 如左图所示，将 SIM 卡的缺角对准要插入的卡槽位置。2. 将 SIM 卡推到底部，确保卡片牢固固定在卡槽中。 <p>安装完成后，插入 SIM 卡并等待约 1 分钟，设备将自动检测接入的卡槽信号，若信号正常，则表示 SIM 卡安装成功。</p>
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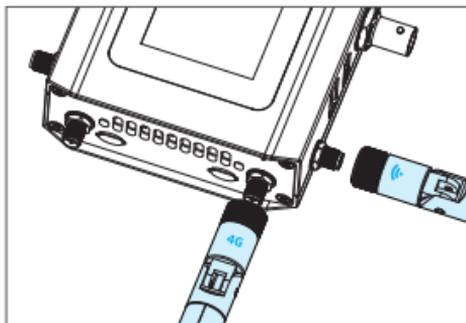


取出 SIM 卡的操作步骤如下：

1. 如左图所示，使用顶针轻轻向内顶入 SIM 卡，直至 SIM 卡弹出。
2. SIM 卡弹出后，您即可将其取出。

4.2 安装天线

P3 mini 主机安装天线的方法如下：



P3 mini 的外置天线有两种，分别是 Wi-Fi 天线和 4G 天线。安装方法如下：

1. 如左图所示，将天线的 SMA 接口对准设备对应的天线接口。
2. 拧紧天线螺口，确保天线稳固连接。

注意：Wi-Fi 天线和 4G 天线不能混插，混插会导致天线信号异常。请在接插天线时仔细辨别天线上丝印的标识，以确保正确安装。



注意

- 请使用设备标配电源适配器、符合标准的 PD 充电器或充电宝给设备供电，其它不合格电源可能会损坏设备。
- 请确保正确使用 Wi-Fi 天线和 4G 天线，错误安装天线会显著影响设备的信号质量和性能。

5 查看设备的 IP 地址

在 LCD 屏幕主界面点击“设置”->“网络”即可查看当前网络联接对应的 IP 地址。



6 登录设备管理页面

本设备除了可以利用 LCD 显示屏对设备进行快捷的设置和操作外，还支持通过 WEB 管理系统来操作和管理设备。如需登录设备管理页面，只需打开 Web 浏览器，在地址栏输入：<http://设备IP地址/> 即可访问设备管理系统。



注意

- 缺省登录设备的用户名是 `admin`，密码是 `admin`。
 - 考虑到浏览器的兼容性问题，建议使用 Chrome 或 Edge。
 - 本设备需 KiloLink Server Pro 为 P3 mini 提供聚合服务支持。
-

7 使用设备

7.1 视频接入检查

视频源接入并正确选择输入接口后，可通过 LCD 显示屏实时预览接入的视频源。

7.2 聚合服务

P3 mini 搭载了千视 KiloLink 专利多链路聚合传输算法，具备强大的聚合传输和抗网络抖动能力，支持 4G 蜂窝网、Wi-Fi 和以太网的多路聚合传输。要实现 P3 mini 的聚合传输功能，需配备一台具有公网 IP 地址的 KiloLink Server Pro 服务器，并在服务端注册设备（关于 KiloLink Server Pro 服务器的配置与详细使用方法，请参考《KiloLink Server Pro 用户手册》）。

具体配置设备与 KiloLink Server Pro 的连接方法：

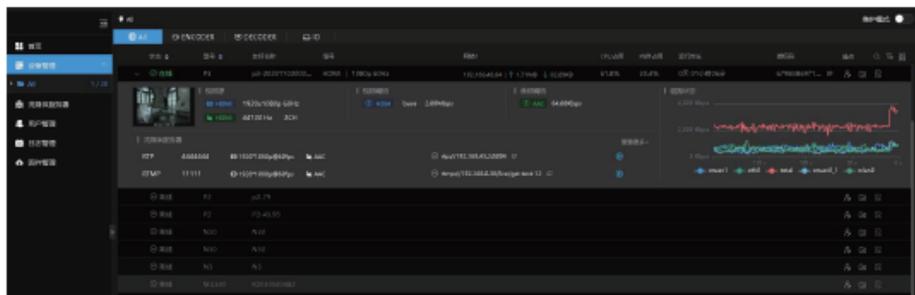
1. 点击设备主界面的“聚合”按键进入设备的聚合配置页面。
2. 填写：服务器地址、服务器端口、授权码等信息，设置是否加密，并选择需要参与聚合通信的网络通信链路。
3. 点击“应用”按键配置好进行连接的参数。（如下图）：



配置完成后，需向 KiloLink Server Pro 直播推流时，点击屏幕推流区域弹出快捷界面进行推流（如下图）：



推流成功后，可登录 KiloLink Server Pro 的 web 管理界面查看对应的设备推流信息和情况（如下图所示）：



说明

为保证您的使用效果，请确保您的 KiloLink Server Pro 已更新至最新版本。

获取与部署 KiloLink Server Pro 版本，可参考：

<https://www.kiloview.com/cn/support/docs/video-tutorial/software/kilolink-server/position/>

8 固件升级

当 P3 Mini 有新的功能改进、性能优化以及问题修复时，会发布新的固件以提供更新。升级前，请访问公司官网的资料下载页面获取升级包：

<https://www.kiloview.com/cn/support/download/>。在筛选列表中，选择“视频编码器” >

“P3 mini”，并找到最新的固件进行下载。

固件升级可以通过以下两种方式进行：

1. 登录 P3 mini 的管理后台，依次点击“设置”>“系统设置”>“固件升级”，根据页面提示上传固件进行升级。
2. 插入存有升级固件的 U 盘，通过设备的小屏幕依次点击“设置”>“系统设置”>“固件升级”，进行固件升级。



注意

- 升级过程中，请勿断电，否则可能导致设备无法启动。
- 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，请尝试重启设备；如果仍然无法正常访问，请尝试联系技术支持。
- 如需使用 U 盘进行固件升级，建议 U 盘的文件系统格式为 FAT/FAT32/exFAT。

9 恢复出厂设置

如因设备参数设置不当等原因导致设备不能正常工作，可以尝试恢复设备的出厂设置。操作步骤如下：通过 Web 界面的“设置”>“系统设置”>“恢复出厂设置”，即可恢复设备到出厂默认状态。



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`。
 - 所有设备配置信息将恢复到出厂的默认值。
-

10 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。



获取更多关于 P3 mini 编码器的使用帮助，请访问 Kiloview 官方网站地址

<https://www.kiloview.com/cn/encoder/p3-mini>
