Your AV over IP Trailblazer

Quick Start Guide

P3 5G Bonding Video Encoder

3G-SDI + 4K HDMI H.265 Bonding Video Encoder

(V1.1)

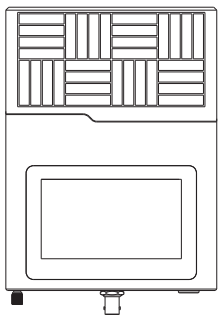


Contents

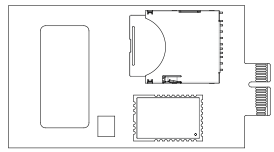
- Packing List
- Device installation
- Device interfaces and functions
- Device connection, login and use guide
- Device upgrade and restore factory setting

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.
Due to continuous product updates, the product you purchased may have undergone changes compared to the content in this manual.
Please refer to the actual product inside the packaging for accurate information.

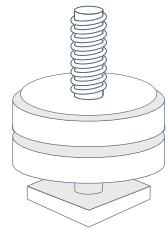
1 Packing List



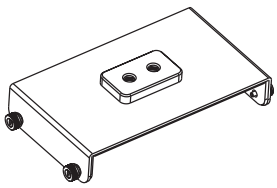
(1) P3 Encoder ×1



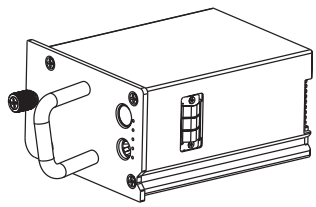
(2) WIFI module ×1



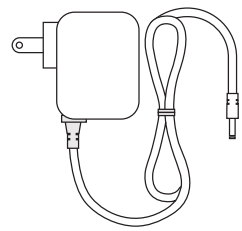
(3) Cold boot screw ×1



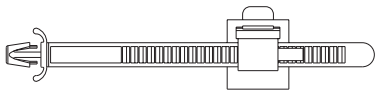
(4) Bracket x1



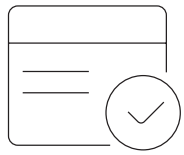
(5) Battery x1



(6) Power supply x1



(7) HDMI Cable Straps x1



(8) Warranty Card ×1



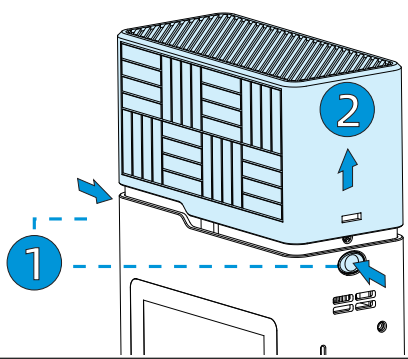
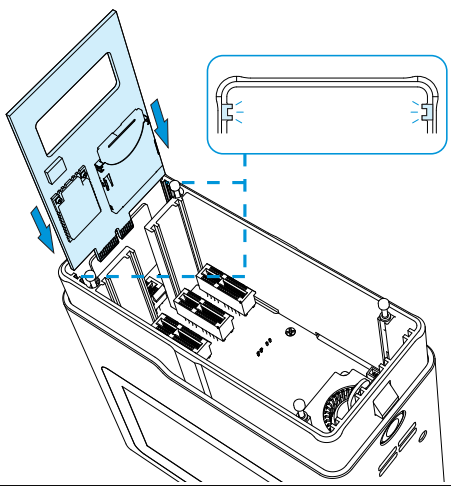
(9) Quick Start Guide ×1

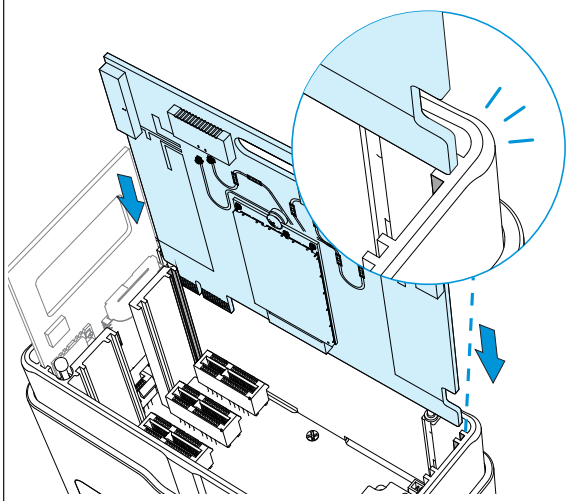
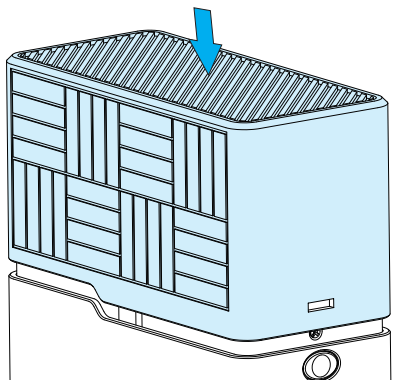
2 Device installation

P3 supports simultaneous multi-channel wireless aggregation connection, including 4 channels of 5G (or 4G) cellular network, WiFi (2.4G/5G dual-band), and gigabit Ethernet. Its dual battery module design enables continuous power supply and battery replacement for all-weather operation.

2.1 Installation of 4G/5G/WIFI Modules

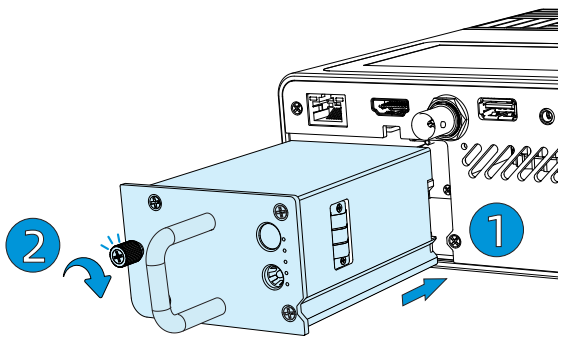
P3 supports one WIFI module and 4 4G/5G modules for flexible combination according to user needs in the default configuration of P3 products. The 4G/5G antenna module of P3 is located inside the device. To install or expand the wireless communication module, the upper cover of the device needs to be opened to install the 4G/5G/WIFI communication module. The installation process for the modules is as follows:

	Open the upper cover: Press the upper cover switch on both sides of the device simultaneously, then lift the upper cover upwards.
	Install the WIFI module: The WIFI module is connected to the device via the PCI-E interface on the side of P3. Push the WIFI module along the slot on both sides until the gold fingers are completely inserted into the PCI-E interface.

	Install the 4G/5G module: The 4G/5G module is connected to the device through the horizontal PCI-E interface inside P3 (P3 supports up to 4 PCI-E interfaces, and users can freely expand). Align the gold fingers of the 4G/5G module facing down with the PCI-E interface, then push it along the slot on both sides until the gold fingers are completely inserted into the PCI-E interface.
	Close the upper cover: Push the upper cover of the device to the bottom, and the upper cover switch will automatically snap the upper cover tightly.

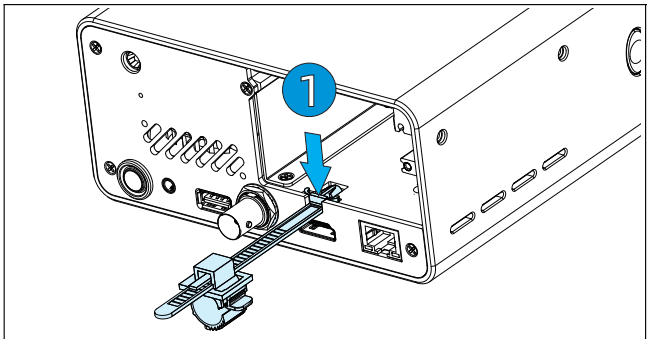
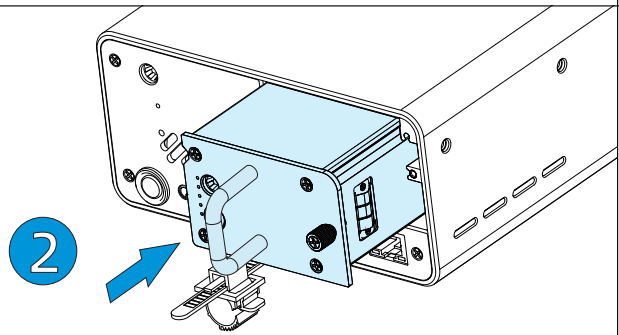
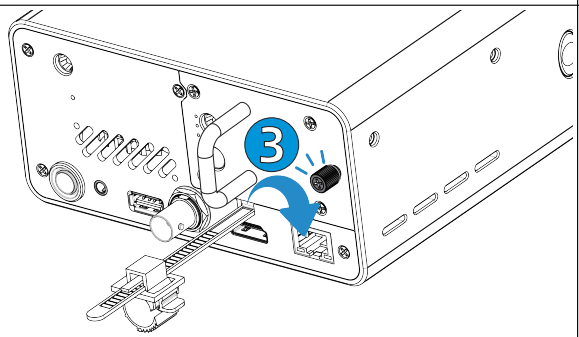
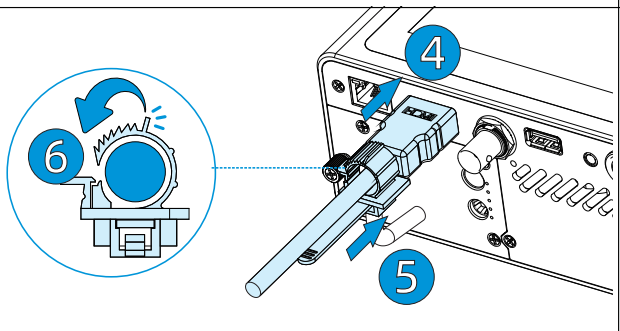
2.2 Battery Installation

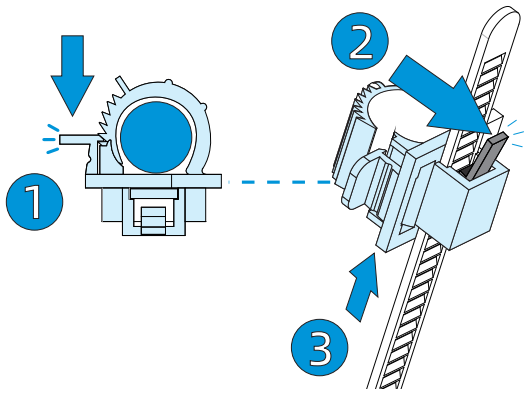
In addition to the external battery, P3 also has a built-in battery inside the device. The internal battery can power the device during the process of replacing the external battery, ensuring uninterrupted operation of your P3. The battery installation process is as follows:

	There is a rotating screw on the external battery of P3. When installing the battery, align the battery with the battery slot and push it to the bottom, then tighten the screw on the battery to complete the battery installation process.

2.3 Installation of HDMI Cable Strap

The HDMI cable tie is used to help secure the HDMI cable and prevent it from becoming loose. The installation procedure for the HDMI cable tie is as follows:

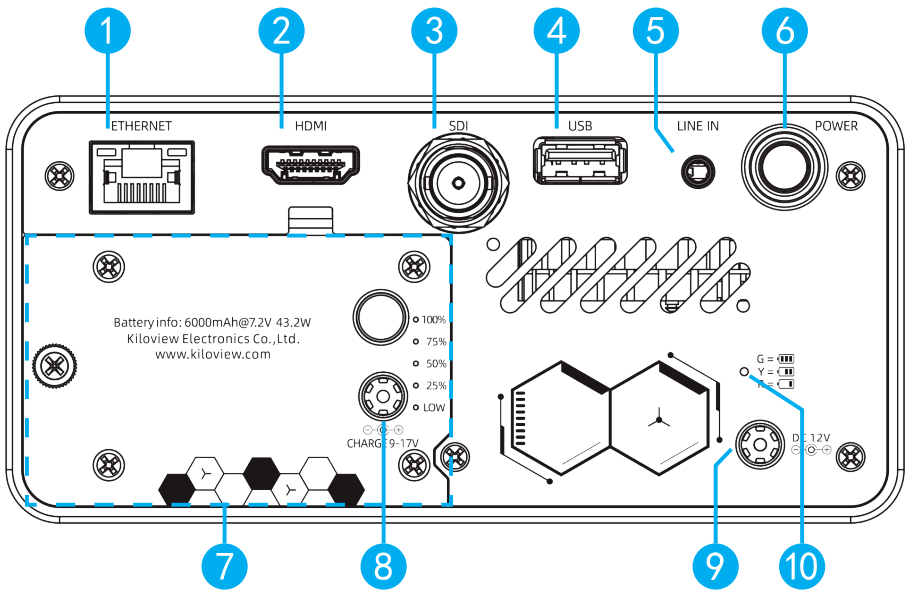
	Remove the battery and install the HDMI cable strap as shown in the diagram.
	Insert the battery into the P3 device as shown in the diagram.
	Tighten the fixing screw on the battery to secure the battery and HDMI cable on the device.
	Insert the HDMI cable and fasten it with the buckle on the HDMI cable strap.

	If it is necessary to remove the bound HDMI cable, unlock the two buckles as shown in the illustration, and then take out the HDMI cable.

Note

- Please use the device's standard power adapter or battery to supply power to the device. The use of other unqualified power sources may damage the device.
- The device does not come with a 4G/5G module. If users require 4G/5G transmission, they can contact the authorized dealer or purchase from the official website.
- The device comes with one battery. If a battery replacement is needed during use, please contact the authorized dealer or purchase from the official website.

3 Device Interface

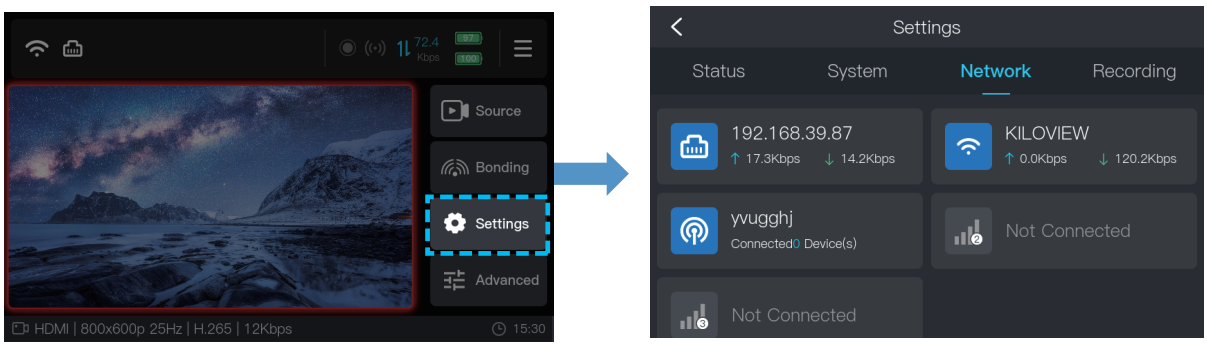


(1) 1000M Ethernet (POE)
(2) HDMI Input
(3) SDI Input
(4) USB TYPE-A
(5) 3.5mm LINE IN
(6) Power Switch
(7) Battery
(8) Battery Charging Port
(9) Power Port
(10) Built-in Battery Indicator Light

4 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.



5 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://device IP address/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.
- This device requires KiloLink Server to provide aggregation service support for P3.

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6 Work with your device

6.1 Video source checking

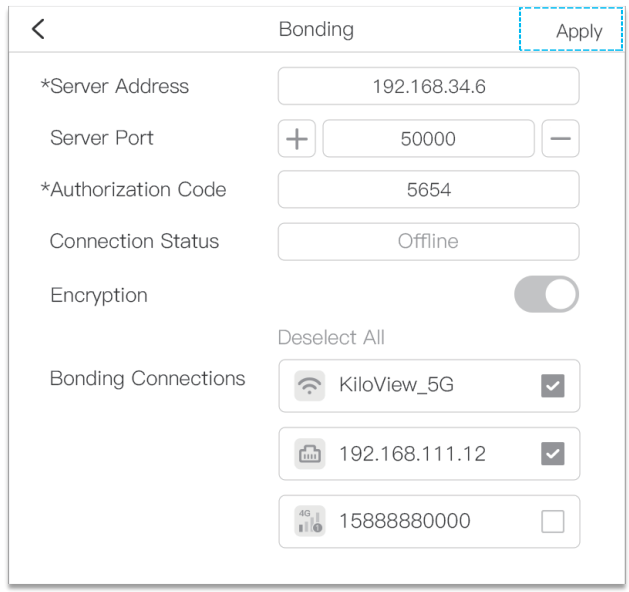
After connecting the video source, you can preview the input video source in real-time on the LCD screen.

6.2 Bonding Service

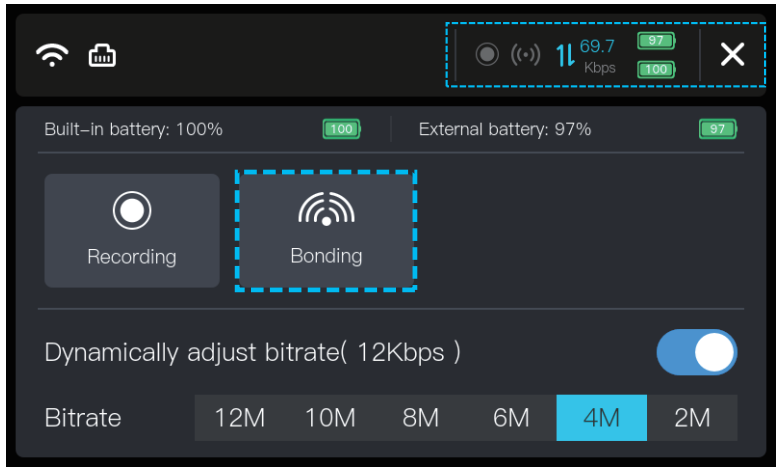
P3 adopts the patented multi-link bonding transmission algorithm of KiloLink, endowing P3 with powerful bonding transmission capabilities. It can realize hybrid operations of 5G and 4G, while also supporting bonding transmission with WiFi and Ethernet.

Before using the bonding service of P3, you only need to deploy a set of KiloLink Server. Then, click on the bonding function on the main interface of the LCD screen, connect to the KiloLink Server, and enable the bonding service.

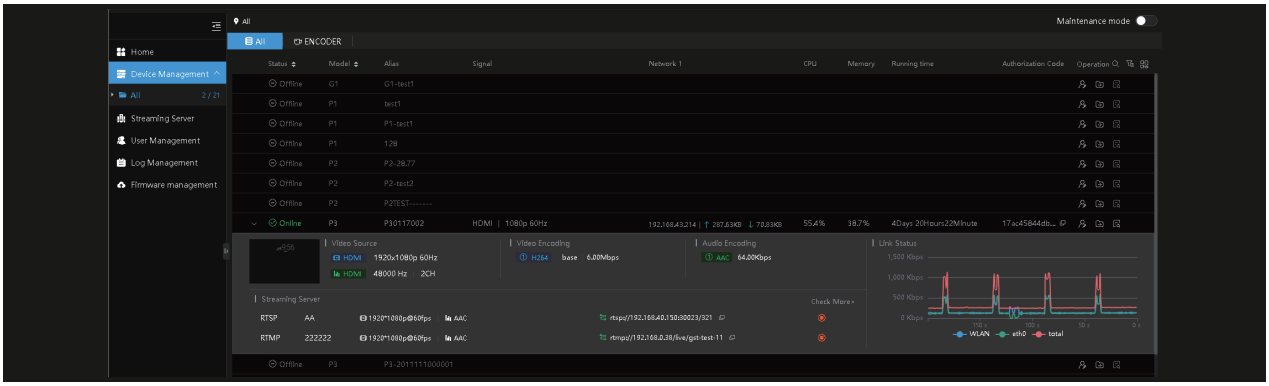
To enable bonding function, simply fill in the Server Address, Server Port, and authorization code generated by KiloLink Server. then click "Apply" to establish a connection. This will enable encoding bonding transmission with KiloLink Server, and perform l;ive streaming to KiloLink Server (as shown in the figure below).



After configuration is complete, when you need to livestream to KiloLink Server, click on the shortcut interface that pops up in the upper right corner of the screen (as shown in the figure below):



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



Note

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

For obtaining and deploying the KiloLink Server Pro version, please refer to:

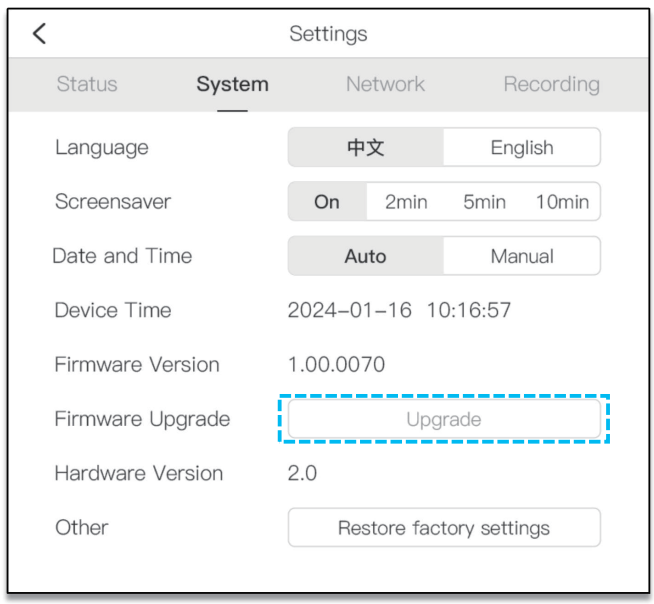
https://www.kiloview.com/en/kilolink-server-pro/

7 Firmware update

Kiloview will continue to provide firmware updates and bug fixes for the P3 device. Visit: https://www.kiloview.com/cn/support/download/

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

To upgrade, you can either log in to the P3 management interface, click on "Settings" > "System Settings" > "Firmware Upgrade", or insert a USB flash drive containing the P3 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.
- In general, the upgrade process takes about 3-5 minutes. If the upgrade does not prompt completion after more than 5 minutes, try refreshing the webpage. If normal access is still not possible, please contact technical support.
- If using U-disk for firmware upgrade, it is recommended to format the U-disk with the FAT32 file system.

8 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 restore factory settings.

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

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9 Others

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

KILOVIEW Electronics CO., LTD.

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AV over IP筑路人

快速入门手册

P3 5G 无线聚合编码器

5G + 4K H.265 无线聚合视频编码器

（V1.1）



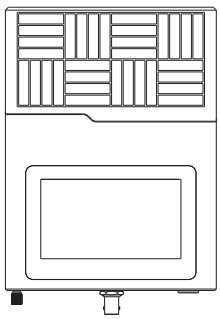
P3 是千视基于 Kilolink 传输技术打造的全新一代 5G 无线聚合编码器。支持同时多路无线聚合连接，4 路 5G（或 4G）蜂窝网络、WiFi（2.4G/5G 双频）、千兆以太网；它的双电池模块设计，可做到不断电更换电池，实现全天候运行。P3 采用 H.265/H.264 编码技术，配备 3G-SDI 与 HDMI 双接口输入，支持 4Kp30 的分辨率。还能完美适配 KiloLink Server 软件实现远程管理和全协议的流媒体转发服务。并支持跨互联网语音对讲，完全满足您的各类应用需求。

通过本手册，您可以了解到

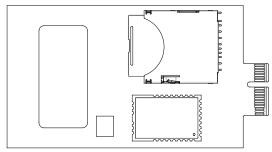
- 设备清单
- 设备安装
- 设备接口和功能
- 设备连接、登录和基本应用
- 设备升级和恢复出厂设置

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。

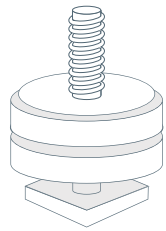
1 设备清单



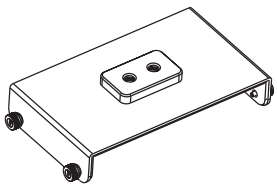
(1) 主机×1



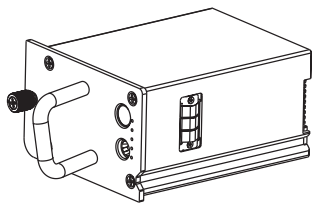
(2) WIFI 模块×1



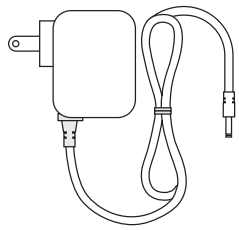
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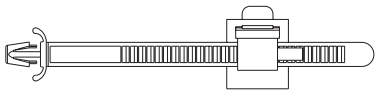
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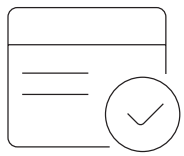
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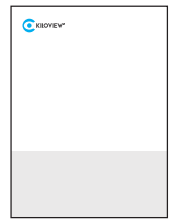
(6) 电源适配器×1



(7) HDMI 线缆扎带×1



(8) 合格证/保修卡×1



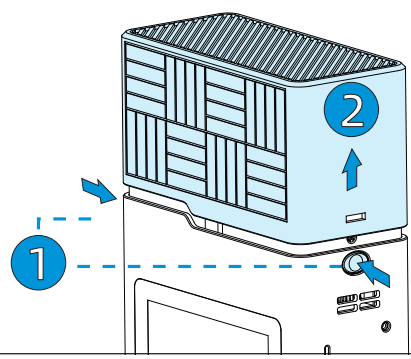
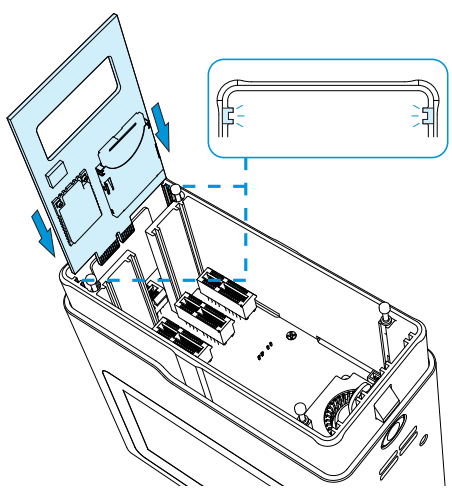
(9) 《快速入门》手册×1

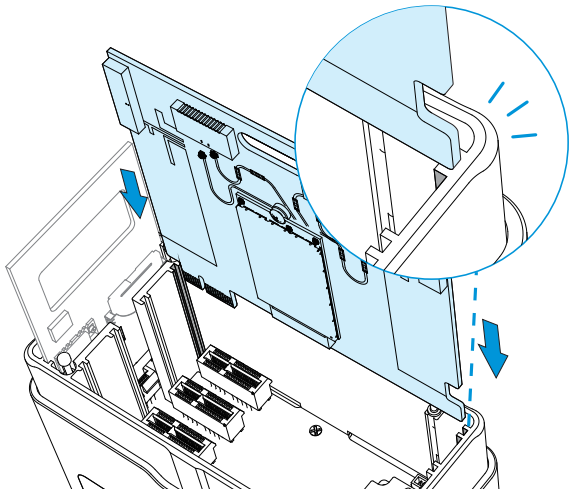
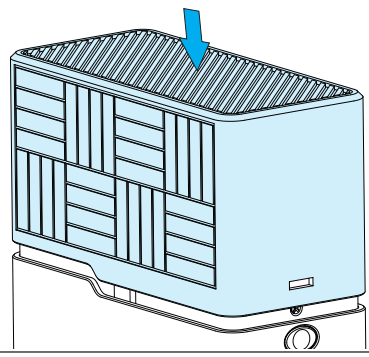
2 设备安装

P3 支持同时多路无线聚合连接，4 路 5G（或 4G）蜂窝网络、WiFi（2.4G/5G 双频）、千兆以太网； 它的双电池模块设计，可做到不断电更换电池，实现全天候运行。

2.1 安装 4G/5G/WIFI 模块

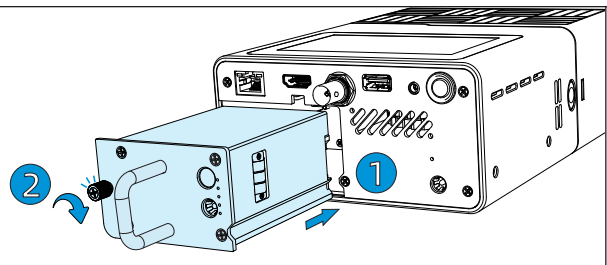
P3 支持一个 WIFI 模块和 4 个 4G/5G 模块自由组合； 用户可按需求灵活配置 在 P3 产品的默认配置中 。P3 的 4G/5G 的天线模块是在机身内部；要安装或扩展无线通信模块，需打开设备的上盖安装 4G/5G/WIFI 通讯模块。安装模块的操作如下：

	打开上盖：如左图① 所示同时按压设备两侧上盖开关， 再如左图②所示向上打开设备上盖。
	安装 WIFI 模块：WIFI 模块通过P3 侧面的 PCI-E 接口与设备连接；如左图所示将 WIFI 模块沿两侧卡槽接缝推到底，让金手指完全嵌入 PCI-E 接口。

	安装 4G/5G 模块：4G/5G 模块通过 P3 内部横向的 PCI-E 接口与设备连接；（P3 最多支持 4 个PCI-E，用户可自由扩展）如左图所示将 4G/5G 模块金手指朝下对准 PCI-E 接口；沿两侧卡槽接缝推到底，让金手指完全嵌入 PCI-E 接口。
	关闭上盖：如左图所示将设备的上盖推到底部，上盖开关会自动弹起扣紧上盖。

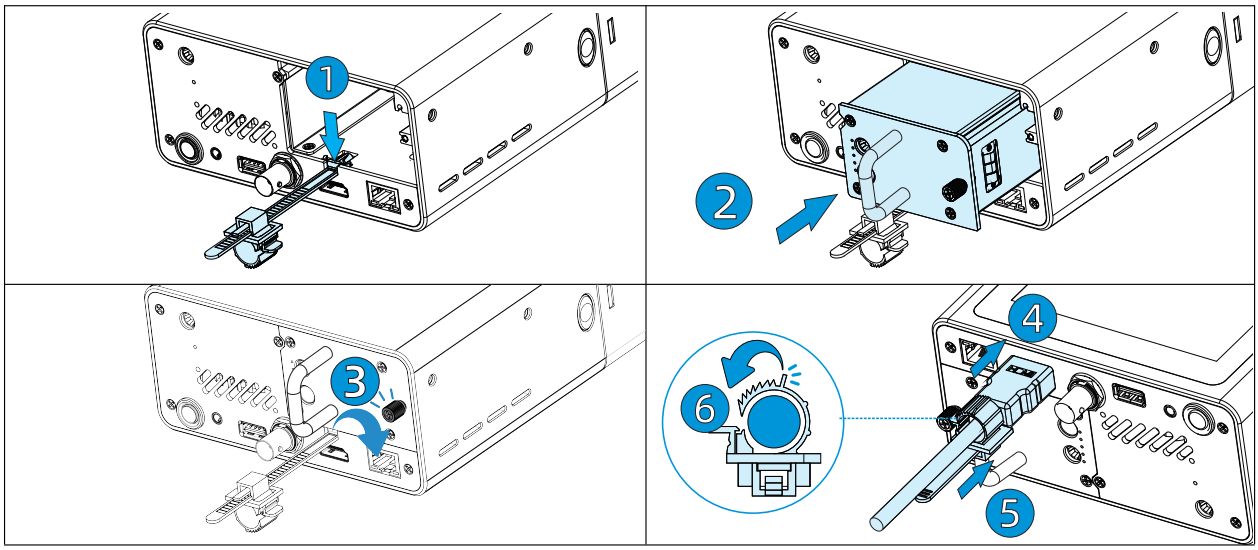
2.2 安装电池

P3 主机除了外置电池以外，在设备内部也内置了电池。内置电池可以在 P3 更换外置电池的过程中，为设备供电；使您的 P3 在工作时不受更换电池影响。安装电池的操作如下：

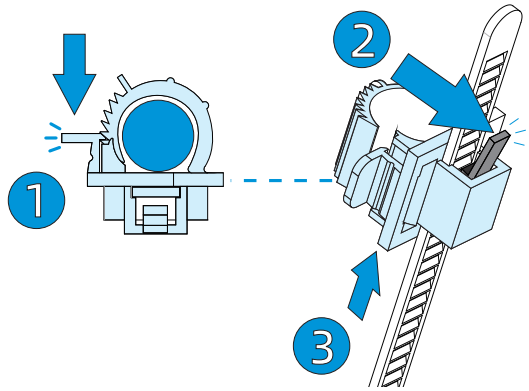
	P3 的外置电池上有一个旋转螺丝，安装电池时，左图① 先将电池对准电池卡槽推到底部，再如左图② 拧紧电池上的螺丝；即可完成电池安装操作。

2.3 安装 HDMI 线缆扎带

HDMI 线缆扎带用于帮助固定 HDMI 线揽，避免线缆松动。HDMI 线缆扎带安装操作如下图所示：



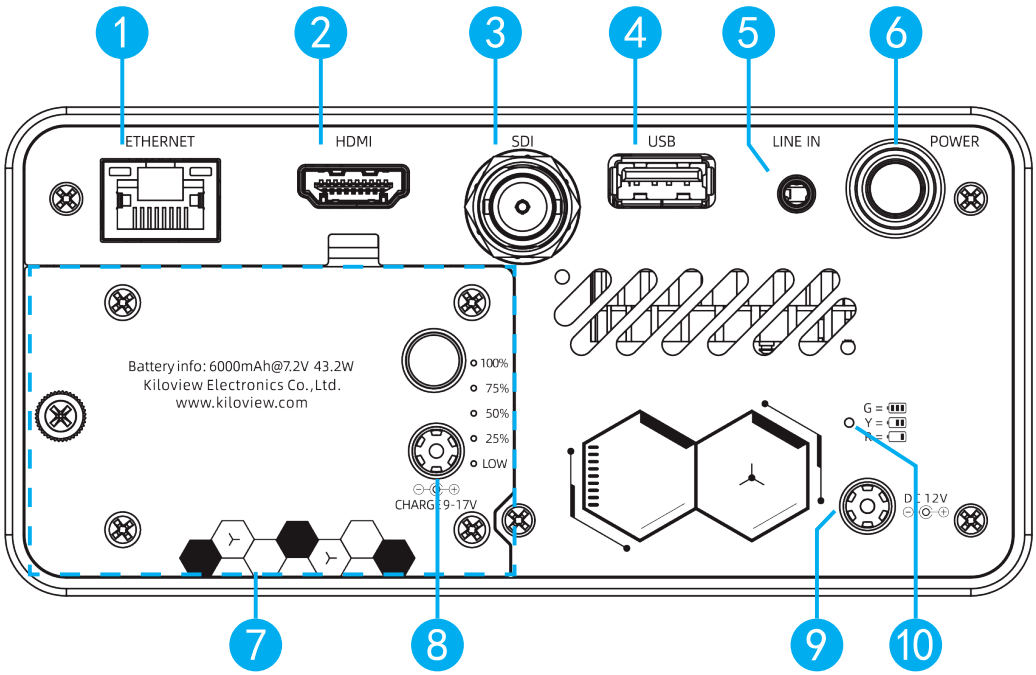
如果需要取出已绑定的 HDMI 线缆，可通过的两个卡扣解锁，然后取出 HDMI 线缆。如下图所示：



注意

- 请使用设备标配电源适配器或电池给设备供电，其它不合格电源可能会损坏设备；
- 设备不标配 4G/5G 模块，用户如需要 4G/5G 传输，可联系代理商或从官方购买；
- 设备标配一块电池，如在使用过程中需要更换电池，可联系代理商或从官方购买；

3 设备接口



(1) 1000M 以太网口

(2) HDMI IN

(3) SDI IN

(4) USB TYPE-A

(5) Line IN(3.5mm)

(6) 电源开关

(7) 电池

(8) 电池充电接口

(9) 电源接口

(10) 内置电池指示灯

4 查看设备的 IP 地址

在 LCD 显示屏上，您可以便捷地查看设备的 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联对应的 IP 地址。





5 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/ 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
- 为保证信息安全，建议您初次登录后、立即修改密码！
- 考虑浏览器的兼容性问题，建议使用 Chrome 或 Edge。
- 本设备需 KiloLink Server 为 P3 提供聚合服务支持。

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6 使用设备进行工作

6.1 视频接入检查

视频源接入后，即可通过 LCD 显示屏实时预览接入的视频源。

6.2 聚合服务

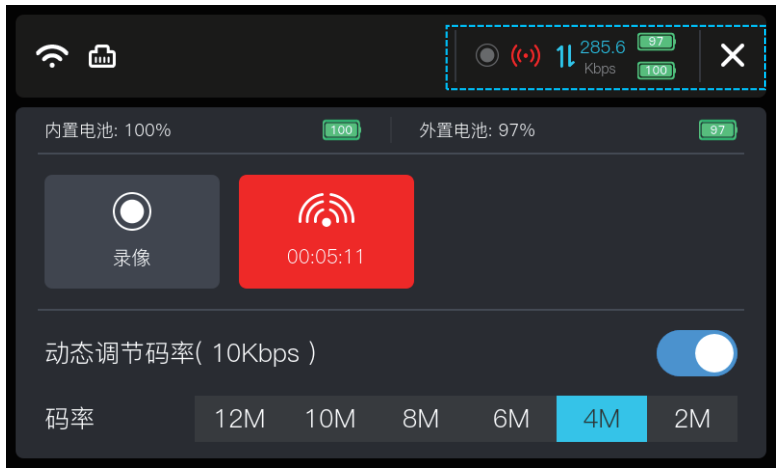
P3 采用千视 KiloLink 专利多链路聚合传输算法，P3 具备超强聚合传输能力，能实现 5G 和 4G 混合工作，同时支持 WiFi 和以太网聚合的传输能力。

在使用 P3 的聚合服务之前，您只需要先布署一套 KiloLink Server，然后点击 LCD 屏幕主界面的聚合功能，连接 KiloLink Server 并启用聚合服务功能。

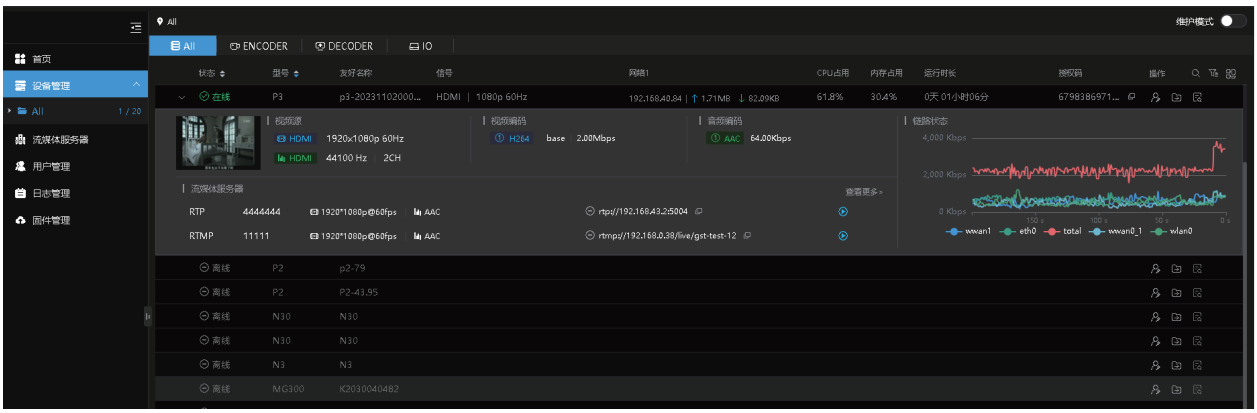
开启聚合功能只需填写KiloLink Server生成的IP,端口，授权码；点击连接，即可实现与KiloLink Server编码聚合传输（如下图）：



配置完成后，需向KiloLink Server 直播推流时，点击屏幕右上角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 的 web 管理界面查看对应的设备推流信息和情况（如下图）：



说明

为保证您的使用效果，请确保您的KiloLink Server已更新至最新的Kilolink Server Pro版本。
获取与部署KiloLink Server Pro版本，可参考：
https://www.kiloview.com/cn/kilolink-server-pro

7 固件升级

Kiloview 将持续为 p3 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 **“视频编码器” > “P3”**，并在 **“程序”** 标签中找到最新的固件下载。

升级通过登录 p3 管理后台，点击“设置”>“系统设置”>“固件升级”；或者插入存有 P3 升级固件的 U 盘，点击 P3 小屏幕上的“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。
- 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。
- 如需使用 U 盘进行固件升级，建议 U 盘的文件系统格式为 FAT32。

8 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：通过 Web 界面的“设置”>“系统设置”>“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;
- 所有视频编码参数、音频参数等将恢复到出厂的默认值。

9 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 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

Kiloview 官方技术支持网站，请访问

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