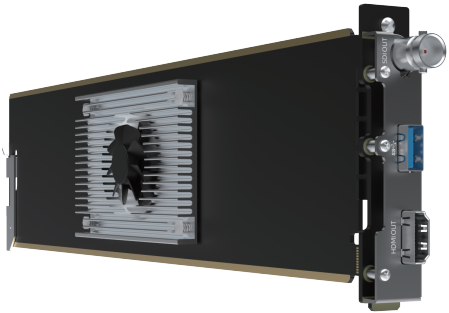
KILOVIEW®

AV over IP筑路人

快速入门手册

FD-360 4K IP 视频处理器板卡

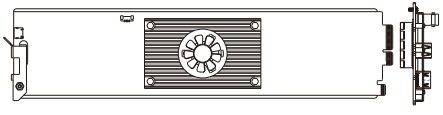
(V1.0)



- 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 装箱清单

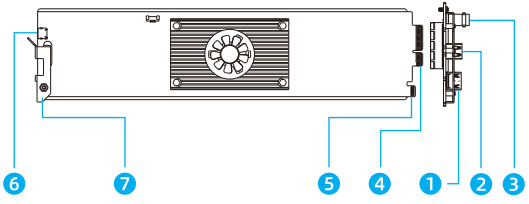


(1) FD-360板卡×1

(3) 合格证/保修卡×1

(4)《快速入门》手册×1

2 设备接口



（1）HDMI 输出

（2）USB 3.0 Type-A 拓展接口

（3）3G-SDI输出

（4）64pin金手指

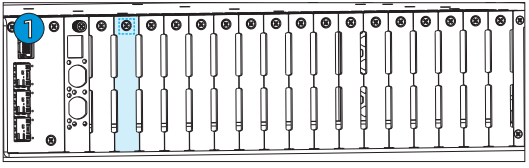
（5）10pin金手指

（6）USB 2.0 Type-C

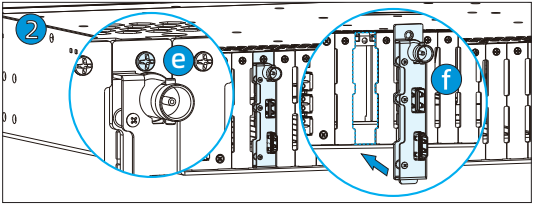
（7）金属卡扣

3 板卡安装

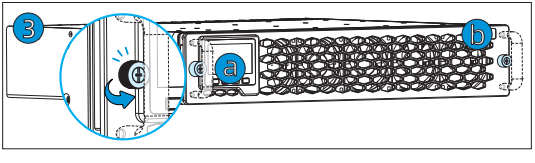
步骤1：在RF02后盖处，选取板卡安装位，记住位置编号（1-18），逆时针旋松螺丝，拆下对应安装位置的挡板。



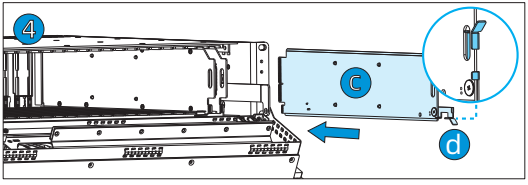
步骤2：插入FD-360尾板（f），拧紧螺丝（e）固定尾板。



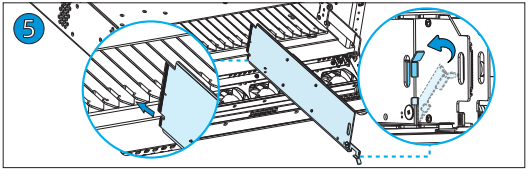
步骤3：将RF02前面板两个手拧螺丝（a和b）逆时针拧开，然后双手持握左右把手，向外抽拉机框前面板，完全拉出后轻轻下放，前面板自然垂落。



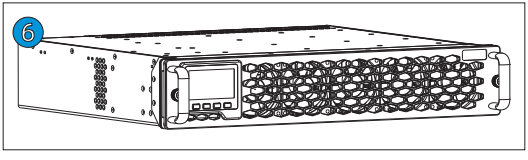
步骤4：将FD-360核心板卡(c)的金属卡扣(d)向右拨动脱离卡扣，再往下旋转90°。



步骤5：对应步骤1中相同位置编号（1-18），将核心板卡(c)对齐卡槽（短pin金手指朝下），平行推入到底直至有明显阻尼感，完成核心板卡与尾板组合，再将金属卡扣向上扶起，往右轻拨后回正使金属卡扣进入卡口。

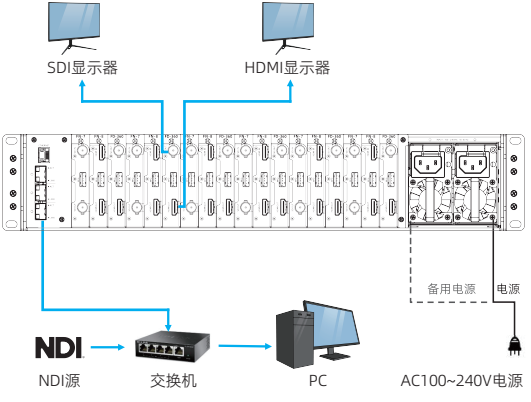


步骤6：逆操作抬起并推入关闭RF02前面板，摁住的同时顺时针旋转拧紧两个手拧螺丝（a和b），组件安装完成。



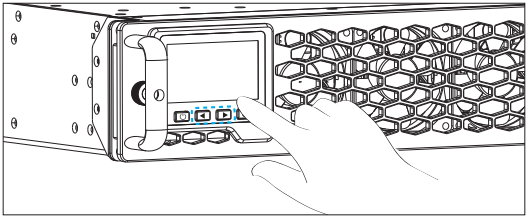
拆卸时，将RF02前面板2颗手拧螺丝逆时针松开，松开金属卡扣(d)后平行抽出核心板卡(c)。

4 应用场景



5 发现设备

初次使用 FD-360 时，FD-360 板卡插入 RF02 机框，启动完成后，FD-360 板卡会通过 DHCP 服务自动获取 IP 地址。 IP 地址可在 RF02 前面板的液晶屏上查看。 通过 RF02 的前面板液晶屏下面的”◀ ” ” ▶ ” 按键切换到设备列表信息界面，可查看 RF02 中接入的所有 FD-360 板卡设备。



KILOVIEW | RF02

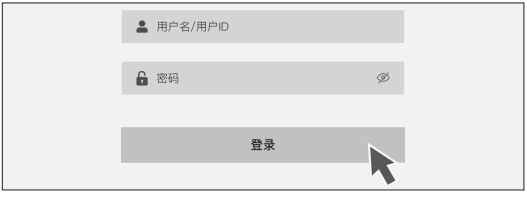
#01	FD-360	192.168.35.1	8.2 ↑ Mbps	6.6 ↓ Mbps	31.℃ 88℉
#02	FMG-400	192.168.35.143	6.2 ↑ Mbps	4.2 ↓ Mbps	33℃ 91℉
#03	FN-50	192.168.35.189	4.2 ↑ Mbps	2.8 ↓ Mbps	36℃ 91℉
#04	FN-60	192.168.35.201	9.0 ↑ Mbps	3.6 ↓ Mbps	31.℃ 88℉
#05	未插卡				
#06	FN-60	192.168.35.202	7.8 ↑ Mbps	1.2 ↓ Mbps	31.℃ 88℉

6 登录设备管理页面

设备支持两种管理方式： 一是通过 RF02 工具执行集中式设备管理操作；二是通过 Web 管理界面实现单块板卡的独立管理。

方法 1、FD-360 正常开机后，浏览器地址栏输入 RF02 机框管理 IP 地址， 登录 RF02 的设备管理平台，点击“管理”，再点击“操作”下方“ ”可免密登录。

方法 2、待设备正常启动，将电脑 IP 设置为与 FD-360 同一网段； 浏览器中输入设备地址，进入 Web 管理登录界面； 输入缺省账号 admin、密码 admin，即可登录管理后台。



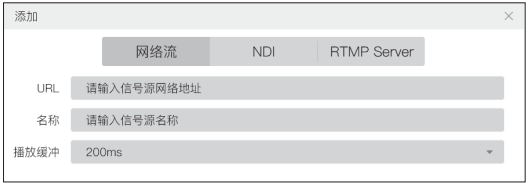
7 使用设备进行工作

7.1 添加源

进入「源」界面： 从顶部导航栏右侧找到并打开。

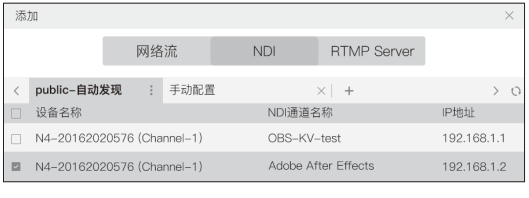
创建组并添加： 点击「源」界面右上方 ＋ 按钮，输入组名称； 选中该组，点击 ＋ 对应按钮打开视频源配置对话框。

选择源类型： 在配置对话框的「添加」窗口中，选定所需源类型（网络源、NDI 源、RTMP Server 等）。

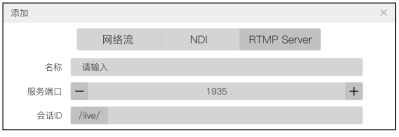


添加网络源：在「URL」输入框按格式填写连接参数。

添加NDI源：点击「NDI」，选“public - 自动发现”（局域网同网段公共组 NDI 源）或“手动配置”(指定 IP 网段 + 组名)，选中目标源。



添加RTMP Serve流媒体服务器：点击RTMP Server填写名称、服务端口、会话 ID 参数。



完成添加：点击对话框中的「确定」按钮，即可将该视频源添加至页面的视频栏中。

说明

RTMP Server 是基于 RTMP 协议的流媒体服务器的功能， 为接收设备推流、 实时分发流数据， 支持多终端拉流访问。

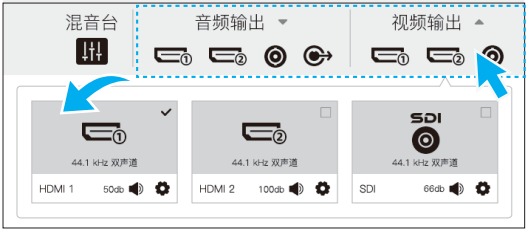
7.2 添加预览

添加的视频源在页面右侧的源列表中，鼠标选择视频源并拖入到上方源预览框。正常连接后，在页面可以预览源画面和源参数。

7.3 解码输出

在顶部导航栏找到输出配置区域（Output1 和 Output2 两个输出）。

接口配置： 点击任一输出的按钮，选择需启用的视频和音频物理接口（HDMI 、SDI 、Line Out，支持单个或多个接口配置），可设置不同接口输出相同或不同内容。



视频输出配置： 在视频源或预览列表中，用鼠标选中视频并拖拽至对应输出窗口，即可完成解码输出。对应这些视频 / 音频接口上将输出选择的视频和音频内容。

8 固件升级

8.1 下载升级固件

在本公司官网会定期发布新的升级固件，用户可根据需要下载最新的固件进行升级，也可以联系支持工程师或支持服务团队来获取产品的最新固件。

8.2 升级设备固件

方法一、进入 RF02 设备管理后台，点击【固件】>选择左侧菜单栏的型号【FD-360】>【固件上传】，进入【选择】及【上传】页面，完成固件上传后；

进入 FD-360【设备】页面，勾选需要升级的 FD-360 板卡，点击页面上方的状态【固件升级】>弹窗中的下拉窗口选择需要升级的固件版本，点击【开始派发】、派发成功后，点击下拉【维护】>【重启】即可完成升级操作。

方法二、进入 FD-360 设备管理后台，点击【设置】>【系统设置】>【固件升级】，进入固件升级页面。【选择文件】上传从 官网下载的固件文件，然后点击【固件升级】。上传固件成功后，系统将提示重启，点击确认后设备将重新启动，请耐心等待，设备重启后，刷新 Web 管理界面，可重新进入后台。

注意

- 升级过程注意事项： 升级期间严禁断开设备电源， 否则可能导致设备无法正常启动。
- 升级时长与异常处理： 升级过程约需 3-5 分钟。 若超时未完成， 请尝试刷新页面；若仍无法访问， 请联系技术支持。

9 恢复出厂设置

当参数配置不当导致设备无法正常工作或者忘记网络 IP 且无法搜索到设备时。Web 界面操作。（设备可正常登录 Web 管理界面），路径： Web 管理界面 → 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。
- 所有视频源、 解码配置等将恢复到出厂的默认值。

10 其他

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 FD-360 编码器的使用帮助请访问 Kiloview 官方网站地址

https://www.kiloview.com/

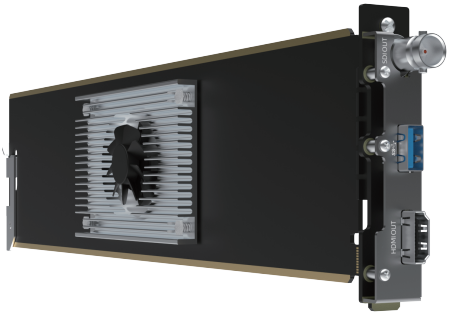
KILOVIEW®

AV over IP Trailblazer

Quick Start Guide

4K HDMI Universal IP Codec Card

(V1.0)

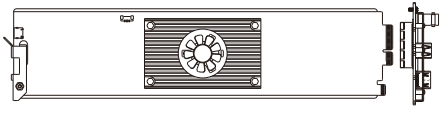


With this manual, you will learn about:

- Packing list
- Device interfaces and functions
- Device connection, login and basic applications
- Device upgrades, and restoring factory setting

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

1 Packing List

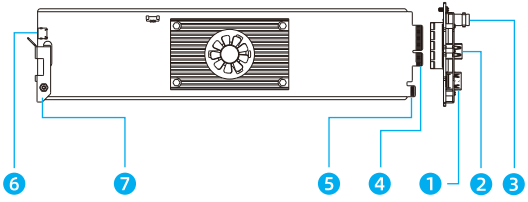


(1) FD-360 Card Board×1

(3) Quality Certificate / Warranty Card ×1

(4) Quick Start Manual x1

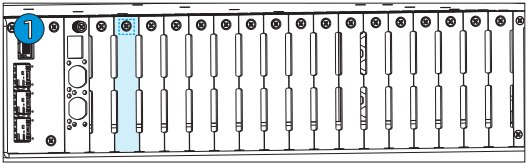
2 Device Interfaces



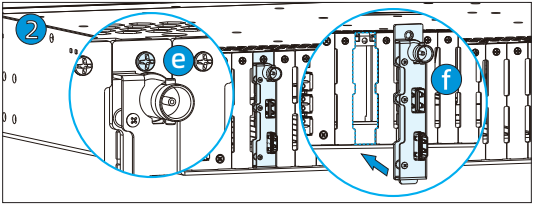
（1）HDMI Output
（2）USB 3.0 Type-A Expansion Interface
（3）3G-SDI Output
（4）64-pin Gold Finger
（5）10-pinGold Finger
（6）USB 2.0 Type-C
（7）Metal Latch

3 Card Installation

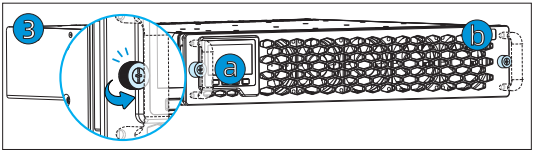
Step 1：At the rear cover of RF02, select a card installation slot, note the position number (1-18), turn the screw counterclockwise to loosen it, and remove the corresponding slot cover.



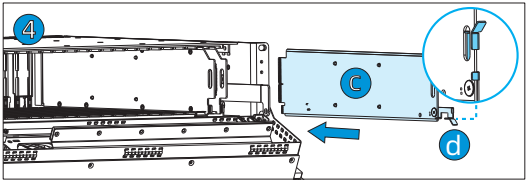
Step 2: Insert the FD-360 rear board (f) and tighten the screw (e) to secure the rear board.



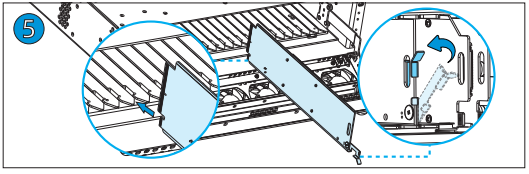
Step 3: Turn the two hand screws (a and b) on the RF02 front panel counterclockwise to loosen them, then hold the left and right handles and pull the chassis front panel outward. After fully pulling it out, gently lower it; the front panel will hang down naturally.



Step 4：Move the metal latch (d) on the FD-360 core card board (c) to the right to release it, then rotate it downward by 90°.

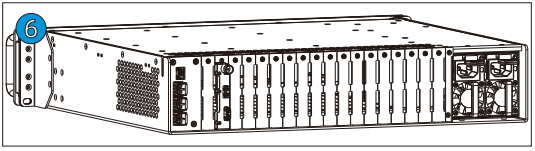


Step 5：Corresponding to the same position number (1-18) from Step 1, align the core card board (c) with the card slot (short-pin gold finger facing down), push it in parallel until you feel noticeable resistance, completing the combination of the core card board and the rear board. Then lift the metal latch upward, gently move it to the right, and return it to the upright position so that the metal latch engages into the catch.



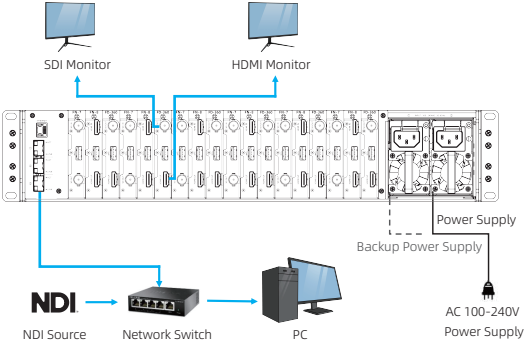
Step 6：Reverse the operation by lifting and pushing to close the RF02 front panel, while pressing it firmly into place, turn the two hand

screws (a and b) clockwise to tighten them. The module installation is now complete.



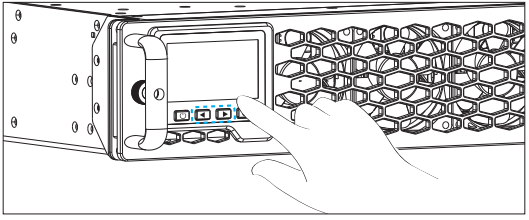
For disassembly, turn the two hand screws on the RF02 front panel counterclockwise to loosen them, release the metal latch (d), and then pull out the core card board (c) in parallel.

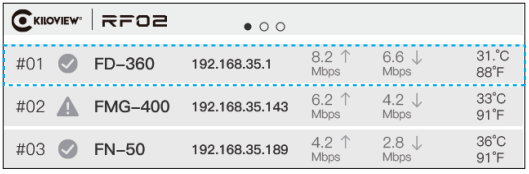
4 Application Scenarios



5 Discovering the Device

When using FD-360 for the first time, after inserting the FD-360 card board into the RF02 chassis and completing startup, the FD-360 card board will automatically obtain an IP address via the DHCP service. The IP address can be viewed on the LCD screen of the RF02 front panel. Use the ◀ and ▶ buttons below the LCD screen of the RF02 front panel to switch to the device list information interface, where you can view all FD-360 card board devices inserted in the RF02.

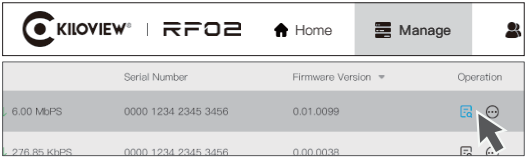




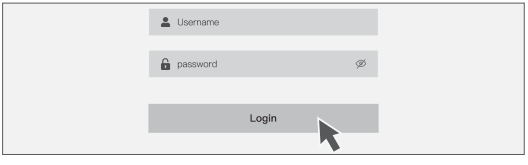
6 Log into Device Management

The device supports two management methods: one is centralized device management via the RF02 tool; the other is independent management of a single card board through the Web management interface.

Method 1: After the FD-360 is powered on normally, enter the RF02 chassis management IP address in the browser address bar, log in to the RF02 device management platform, click "Manage", and then click below "Operation" to log in without a password.



Method 2: After the device starts up normally, set the computer's IP address to the same subnet as the FD-360. Enter the device address in the browser to access the Web management login interface. Enter the default account admin and password admin to log in to the management backend.



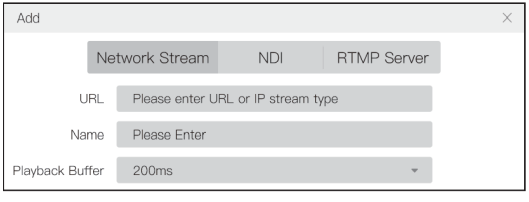
7 Using the Device for Operation

7.1 Adding Sources

Navigate to the "Sources" interface: Find and open it from the right side of the top navigation bar.

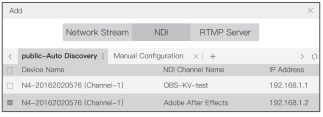
Create a group and add: Click the + button in the upper right corner of the "Sources" interface, enter the group name. Select the group, and click the + button to open the video source configuration dialog.

Select source type: In the "Add" window of the configuration dialog, choose the desired source type (Network Source, NDI Source, RTMP Server, etc.).

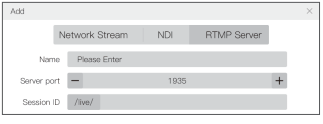


Add Network Source: Enter the connection parameters in the "URL" input box according to the format.

Add NDI Source: Click "NDI", select "public - Auto Discovery" (NDI sources in the public group on the same local network subnet) or "Manual Configuration" (specify IP subnet + group name), then select the target source.



Complete Addition: Click the "OK" button in the dialog to add the video source to the video bar on the page.



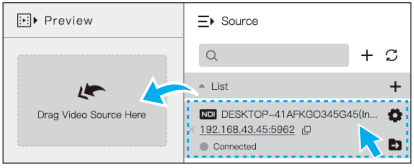
Complete Addition: Click the "OK" button in the dialog to add the video source to the video bar on the page.

Note

RTMP Server is a streaming media server function based on the RTMP protocol, used to receive pushes from devices, distribute stream data in real-time, and support pull access by multiple terminals.

7.2 Adding Preview

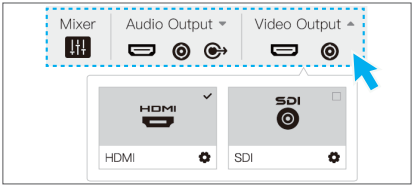
The added video sources are displayed in the source list on the right side of the page. Select a video source with the mouse and drag it into the source preview box above. Once successfully connected, you can preview the source video and its parameters on the page.



7.3 Decoding Output

Find the output configuration area in the top navigation bar (Output 1 and Output 2).

Interface Configuration: Click the button for either output, select the video and audio physical interfaces to be enabled (HDMI, SDI, Line Out, supporting single or multiple interface configurations). Different interfaces can be configured to output the same or different content.



Video Output Configuration: In the video source or preview list, select a video with the mouse and drag it to the corresponding output window to complete the decoding output. The selected video and audio content will be output on these video/audio interfaces.

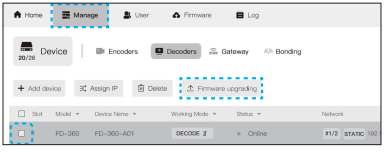
8 Firmware Upgrade

8.1 Download the Upgrade Firmware

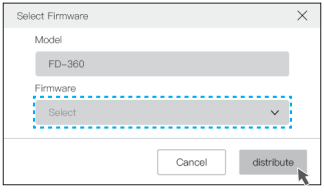
New upgrade firmware will be released periodically on the company's official website. Users can download the latest firmware as needed for upgrades. Alternatively, contact support engineers or the support service team to obtain the latest firmware for the product.

8.2 Upgrade Device Firmware

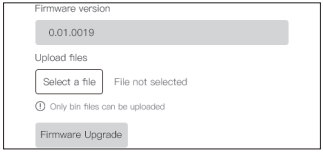
Method 1: Access the RF02 device management backend, click [Firmware] > select the model [FD-360] from the left menu > [Firmware Upload], then proceed to the [Select] and [Upload] page. After the firmware upload is completed:



Navigate to the FD-360 [Device] page, select the FD-360 card board(s) to be upgraded, click the [Firmware Upgrade] status button at the top of the page, select the firmware version to upgrade from the dropdown window in the pop-up, click [Start Dispatch]. After successful dispatch, click the dropdown [Maintenance] > [Restart] to complete the upgrade operation.



Method 2: Access the FD-360 device management backend, click [Settings] > [System Settings] > [Firmware Upgrade] to enter the firmware upgrade page. Click [Select File] to upload the firmware file downloaded from the official website, then click [Firmware Upgrade]. After the firmware upload is successful, the system will prompt for a restart. Click Confirm and the device will restart. Please wait patiently. After the device restarts, refresh the Web management interface to re-access the backend.



Caution

- Precautions During Upgrade: Do not disconnect power to the device during the upgrade; otherwise, the device may fail to start properly.
- Upgrade Duration and Exception Handling: The upgrade process takes approximately 3-5 minutes. If it times out, try refreshing the page; if access is still unavailable, contact technical support.

9 Factory Reset

Perform a factory reset when the device fails to work properly due to incorrect parameter configuration, or when the network IP is forgotten and the device cannot be located.

Web Interface Operation (The device can log in to the Web management interface normally). Path: Web Management Interface → System Settings → Factory Reset.

Caution: After a factory reset, the following parameters will revert to default values:

- The login password for the admin user will revert to admin.
- All video sources, decoding configurations, etc., will revert to factory defaults.

10 Additional Information

If the device is not to be used for an extended period, to extend its service life, please disconnect the power supply and store the device properly.

For more usage support on the FD-360,Visit the Kiloview official website:

https://www.kiloview.com/