KILOVIEW®

AV over IP筑路人

快速入门手册

RMG-300 v2视频网关卡

多路IP协议互转

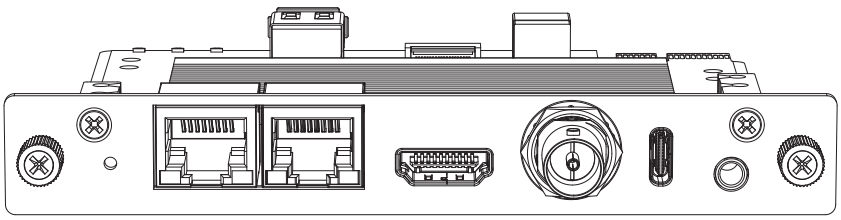
(V2.0)

通过本手册，您可以了解到

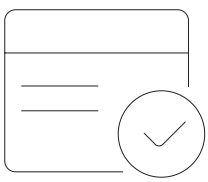
- 设备清单
- 设备接口和功能
- 设备开启、登录和基本应用
- 设备升级和恢复出厂设置

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



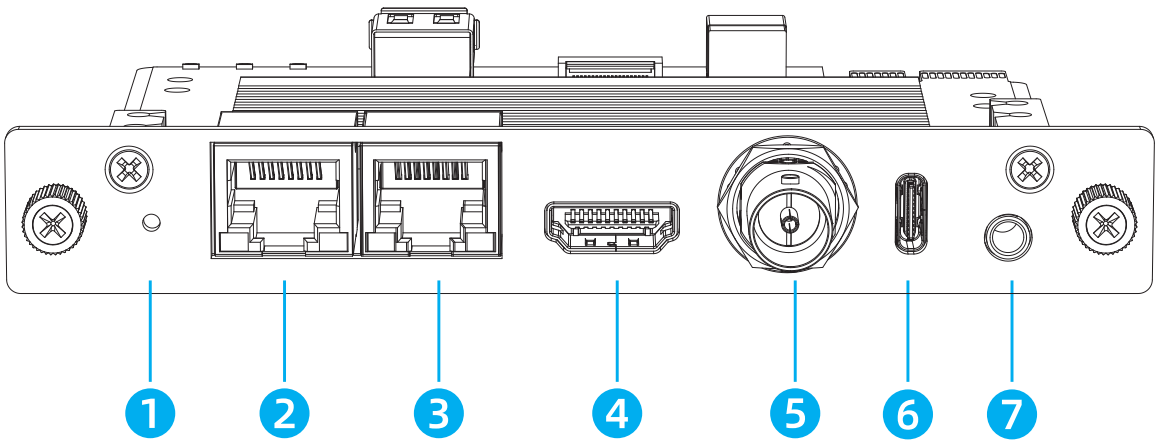
(1) 主机×1



(2) 合格证/保修卡×1

(3)《快速入门》手册×1

2 设备接口



（1）复位按钮

（2）1000M以太网口1

（3）1000M以太网口2

（4）HDMI 输出接口

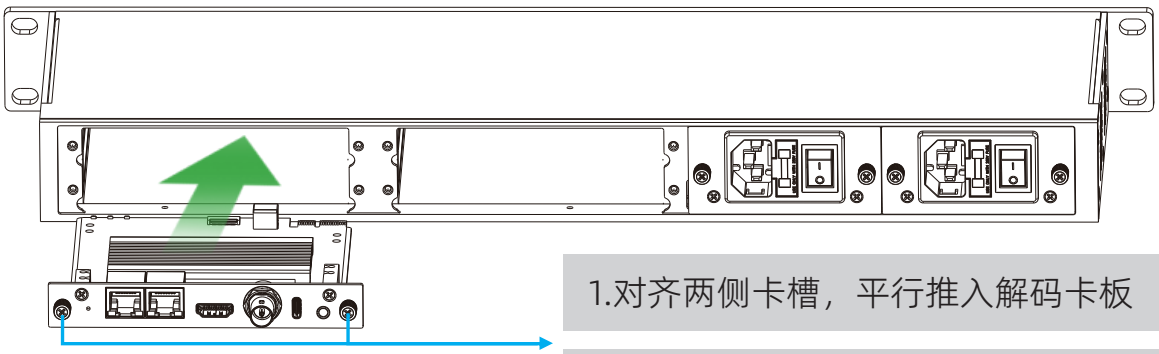
（5）SDI输出接口

（6）USB 3.0 Type-C 拓展接口

（7）LINE OUT 输出

3 卡板安装

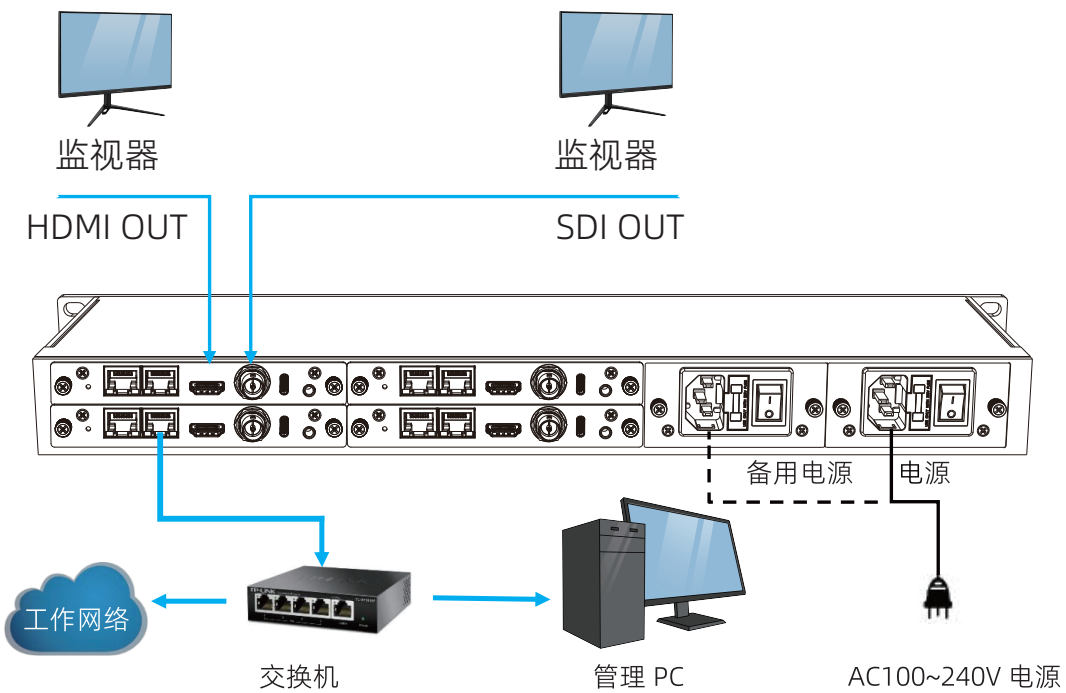
将卡板组件对齐左右卡槽，平行推入后拧紧左右2颗手拧螺丝，组件安装完成。拆卸时，将左右2颗手拧螺丝松开，平行抽出卡板组件。



1.对齐两侧卡槽，平行推入解码卡板

2.推入后拧紧左右两侧手拧螺丝

4 应用场景



注意

RMG-300 v2 最多支持 16 路画面解码， HDMI 和 SDI 可输出相同或者不同画面

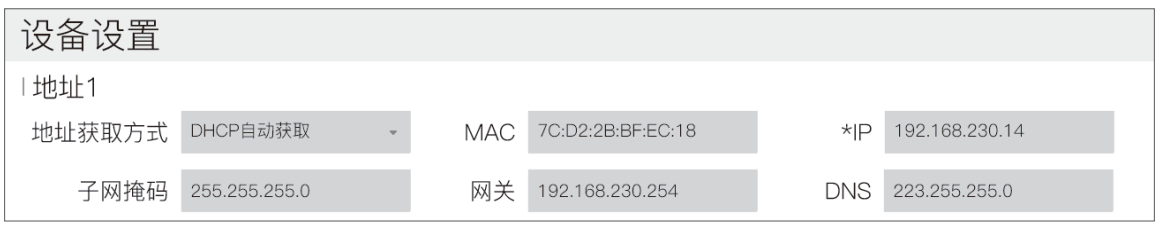
5 登录设备管理界面

设备网口1的默认IP地址为 192.168.1.168。请将电脑与该网口连接，并将电脑IP设为同一网段（如 192.168.1.10），然后在浏览器中输入该地址即可访问Web管理界面。

打开RMG-300 v2 Web管理界面后，缺省登录设备的用户名是：**admin**，密码是：**admin**。

6 网络配置

在管理界面点击“设置”>“网络设置“，配置您当前网络实际业务IP地址、子网掩码 、网关、DNS点击「应用」保存，支持 DHCP自动获取及手动指定两种方式。



说明

● 使用维护地址登录，需确保电脑网络配置同网段地址。（192.168.1/2.*，* 指1-255之间除168以外的其他数字）

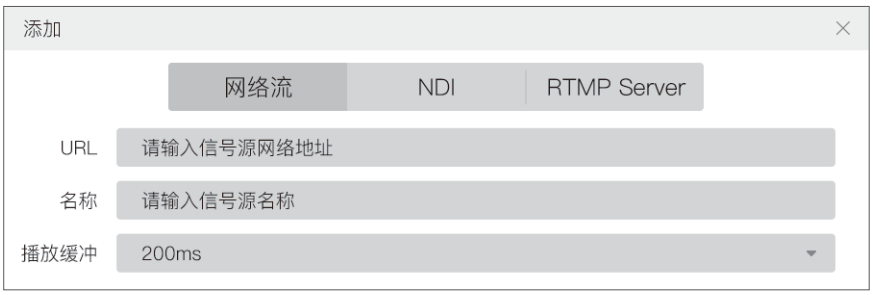
● 维护地址：设备在无法通过动态主机配置协议（DHCP）获取有效 IP 地址时，自动启用的预配置静态IP，保障网络异常时基础连通性，支持设备管理与故障排查。

7 添加视频源

进入「源」界面： 从顶部导航栏右侧找到并打开。

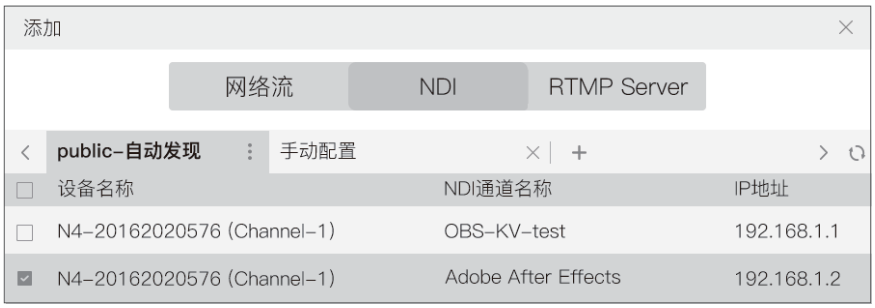
创建组并添加： 点击「源」界面右上方“＋”按钮，输入组名称； 选中该组，点击“＋”对应按钮打开视频源配置对话框。

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）。

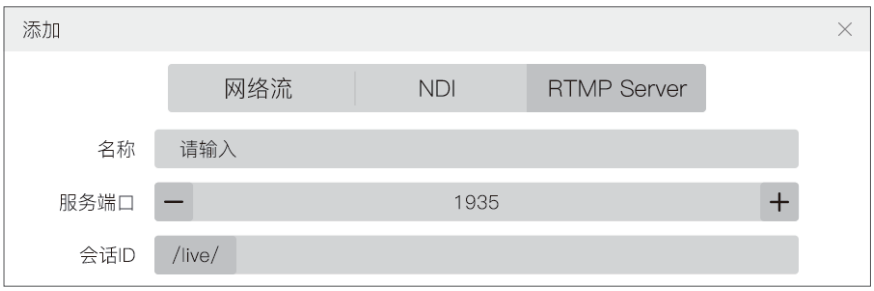


添加网络源：在「URL」输入框按格式填写连接参数。

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 Server 流媒体服务器： 点击 RTMP Server 填写名称、服务断开、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源列表栏中。

说明

RTMP Server 是支持 RTMP 协议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。

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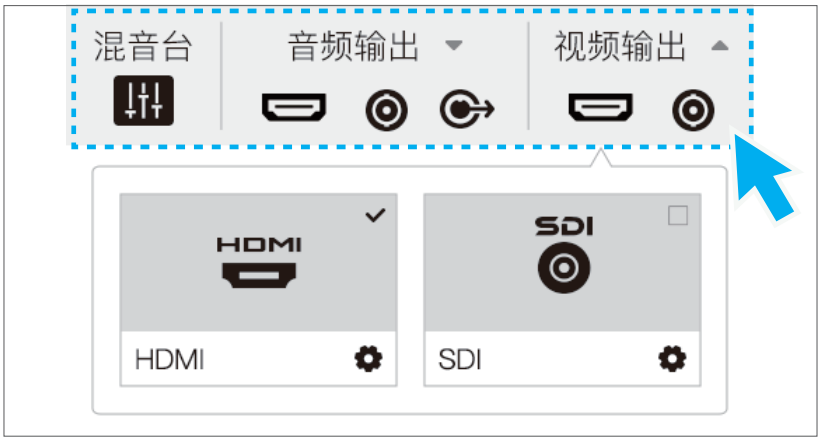
8 解码输出

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：点击输出配置区，选择需启用的视频和音频物理接口（HDMI、SDI 、LINE OUT 音频输出，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。

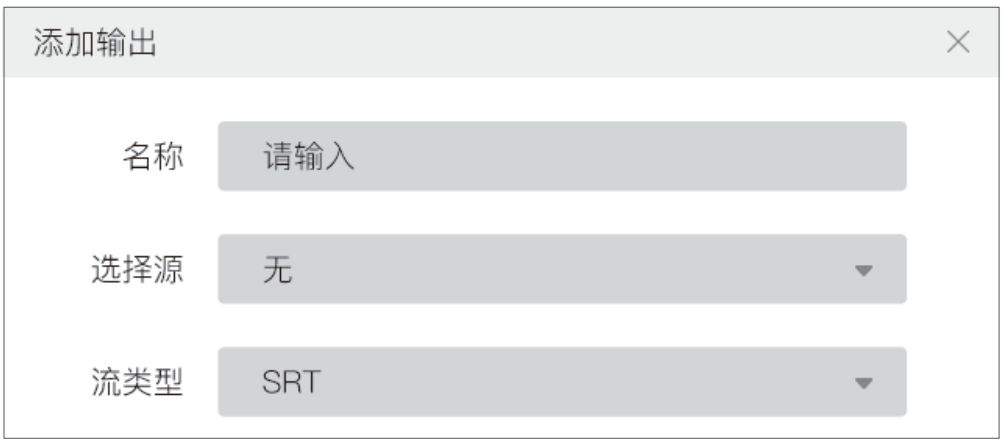


视频输出配置：在视频源或预览列表中，用鼠标选中视频并拖拽至对应输出窗口，即可在这些视频/音频接口上将输出选择的视频和音频内容。

9 流服务

流服务是RMG300-v2视频网关的核心功能模块，是流媒体输出控制与分发系统，负责管理设备的所有流媒体输出任务，支持NDI HX、RTMP/RTMPS、HLS、SRT等多种协议的视频流推送与分发。

在顶部导航栏点击「流服务」，进入流服务转换配置页面。



新增输出流服务：点击“ + 添加输出 ”，在弹窗中输入名称，选择所需的「流类型」（如NDI HX、 RTMP/RTMPS、HLS、SRT 、RTSP等）按格式填写协议参数。

选择视频源：

方法 1： 在「添加输出」弹窗中，点击「绑定源」下拉菜单，从列表中直接选择需转发的视频源。

方法 2： 在页面的源或预览窗口，选中目标视频源，拖动至流服务列表框的高亮区域，即可完成绑定。

批量管理服务： 在流服务列表中，勾选多个需操作的服务，点击列表上方的「启动」或「停止」或「删除」按钮，即可批量控制协议转换服务的运行状态。

10 固件升级

10.1 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。

10.2 升级设备固件

登录 RMG-300 v2 管理后台，依次点击「设置」>「固件升级」，进入升级页面。

版本校验： 对比下载的最新固件版本与设备当前版本。

升级说明： 固件上传成功后，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

● 版本与固件适配： RMG-300 v2、 RMG-300、 MG300 v2 为三个独立版本， 不同版本间固件不可互刷。请先前往官方网站下载 RMG-300 v2 对应的正确固件，再进行升级操作。

● 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。

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11 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。

方法 1： 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。

方法 2： 硬件复位操作。（设备无法正常登录 Web 管理界面）

操作： 长按设备面板复位按钮，持续 5 秒及以上。

⚠ **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**。
- 网口 1 和网口 2 缺省的维护地址 IP 分别将恢复为 192.168.1.168 和 192.168.2.168。
- 所有视频源、 解码配置等将恢复到出厂的默认值。

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12 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 RMG-300 v2 视频网关的使用帮助请访问 Kiloview 官方网站地址

https://www.kiloview.com/

KILOVIEW®

AV over IP Trailblazer

Quick Start Guide

RMG-300 v2 Media Gateway Card

Multi-Channel IP Conversion

(V2.0)

This guide covers:

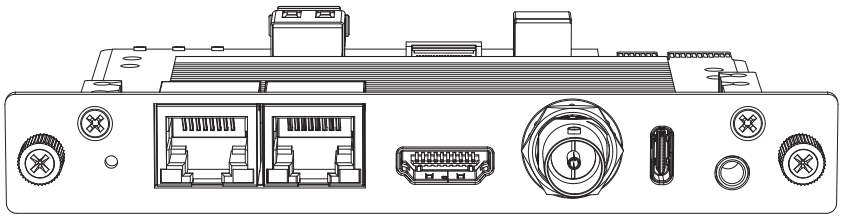
- Packing List
- Interface Overview
- Installation and Basic Usage
- Firmware Upgrade and Factory Reset Instructions

Before using this product, please read this guide carefully.

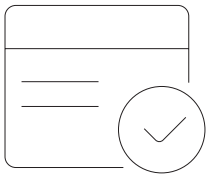
To ensure your safety and prevent physical or electrical damage to the device, please strictly follow the instructions in this manual. Installation and usage should be conducted under the guidance of professionals. Incorrect electrical connections or improper installation may result in permanent device damage or personal injury.

Due to continuous upgrades and updates, the actual product may differ slightly from this manual. Please refer to the physical product in the packaging. Review the license agreement carefully before first-time use.

1 Packing List



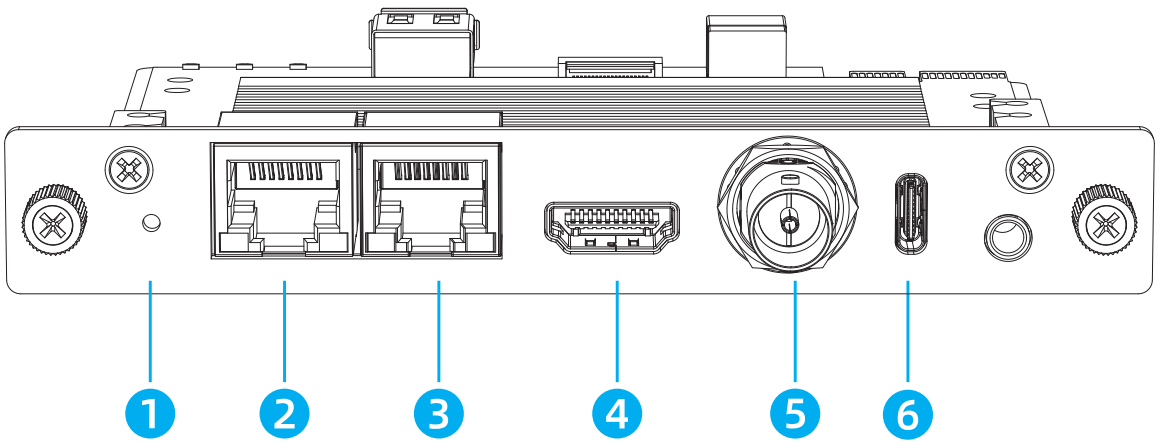
(1) RMG-300 v2×1



(2) Certificate/Warranty Card×1

(3) Quick Start Guide×1

2 Device Interface



（1）Reset Button

（2）1000M Ethernet Port 1

（3）1000M Ethernet Port 2

（4） HDMI Output

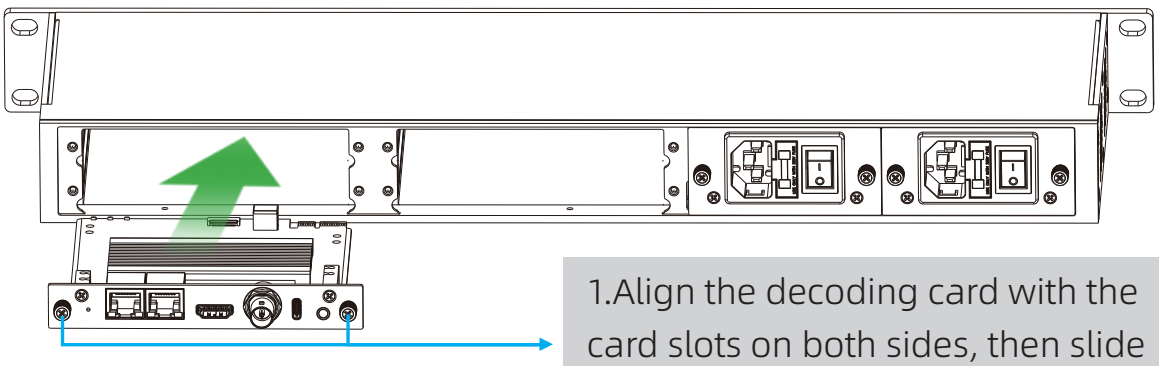
（5）SDI Output

（6）USB 3.0 Type-C Expansion Port

（7）LINE OUT

3 Card Installation

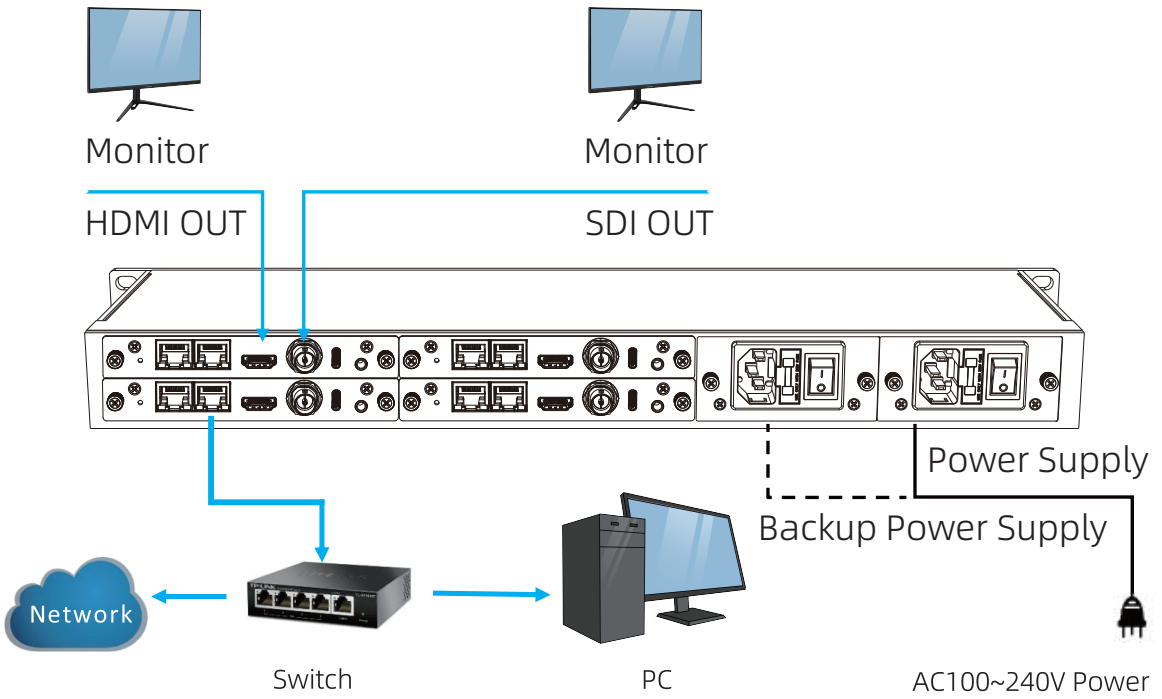
Align the card assembly with the left and right card slots, push it in parallel, and then tighten the two hand-tight screws. To remove, loosen the two hand-tight screws and pull out the card bracket assembly in parallel.



1.Align the decoding card with the card slots on both sides, then slide it in parallel until fully seated.

2.Once inserted, securely tighten thethumb screws on both the left and right sides.

4 Application Scenarios



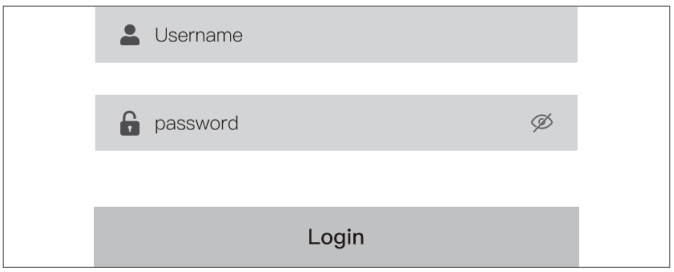
5 Logging into the Device Management Interface

The default IP address for Device Network Port 1 is 192.168.1.168. Connect your computer to this port, set the computer's IP address to the same subnet (e.g., 192.168.1.10), then enter the device's IP address in a browser to access the Web Management Interface.

Notice

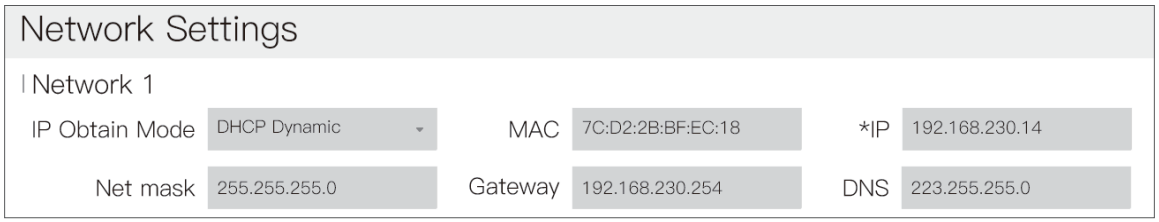
RMG-300 v2 supports up to 16-channel decoding, HDMI and SDI output same or different contents.

After opening the RMG-300 v2 Web management interface, the default username for logging into the device is: **admin**, and the password is: **admin**.



6 Network Configuration

In the management interface, click "Settings" > "Network Settings" to configure the actual business IP address, subnet mask, gateway, and DNS of your current network, and click "Apply" to save. Both DHCP automatic acquisition and manual assignment are supported.



Note

● To log in using the maintenance address, ensure that the computer's network configuration is in the same network segment. (192.168.1/2.*, where * refers to numbers from 1 to 255 except 168)

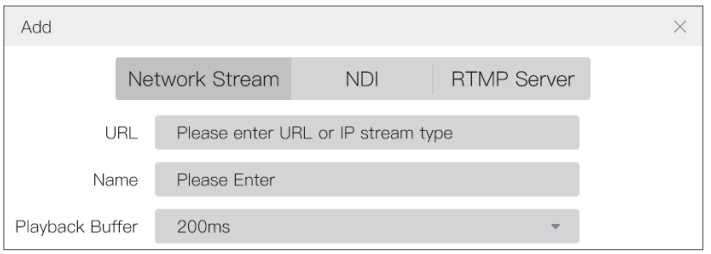
● Maintenance Address: A pre-configured static IP that the device automatically enables when it cannot obtain a valid IP address through Dynamic Host Configuration Protocol (DHCP), ensuring basic connectivity during network abnormalities and supporting device management and troubleshooting.

7 Adding Sources

Access the “Sources” interface: Locate and open it from the top navigation bar on the right.

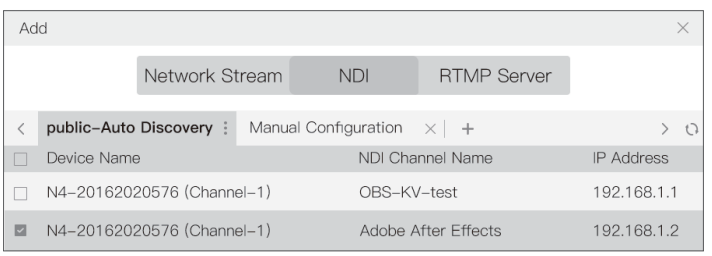
Create a group and add sources: Click the “ + ” button in the upper-right corner of the “Sources” interface, enter a group name; select the group, then click the “ + ” corresponding button to open the video source configuration dialog.

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

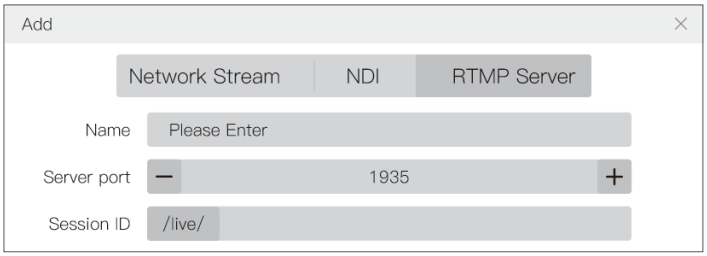


Add Network Stream: Enter the connection parameters in the “URL” input field according to the specified format.

Add NDI Source: Click “NDI”, select either “public - Auto-discovery” (public NDI sources within the same LAN segment) or “Manual Configuration” (specify IP range + group name), then select the target source.



Add an RTMP Server streaming media server: Click RTMP Server and fill in the name, service disconnection, and session ID parameters.



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

Note

RTMP Server is a function that supports RTMP protocol streaming media servers. It is used to receive device push streams, distribute stream data in real time, and support pull-stream access from multiple terminals.

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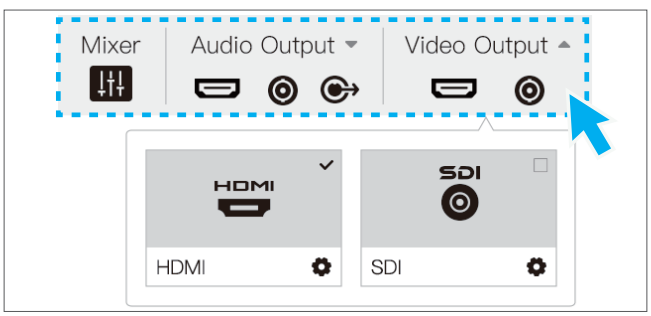
8 Decoding Output

Find the output configuration area (two outputs: Output1 and Output2) in the top navigation bar.

Interface Configuration: Click on output button to select the video and audio physical interfaces to be enabled (HDMI , SDI, LINE OUT audio output; supports single or multiple interfaces configuration), allowing for the output of the same or different content through different interfaces.

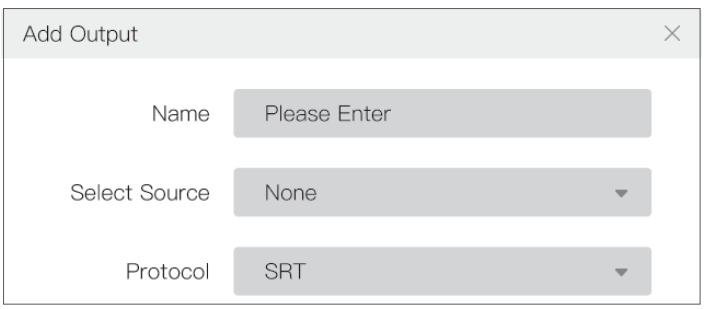


Video Output Configuration: In the video source or preview list, select a video with your mouse and drag it to the corresponding output window. This will route the selected video and audio content to these video/audio interfaces.

9 Stream Service

Stream Service is the core functional module of the RMG-300 v2 Video Gateway, serving as a streaming output control and distribution system. It manages all streaming output tasks for the device and supports video stream delivery and distribution across multiple protocols, including NDI HX, RTMP/RTMPS, HLS, and SRT.

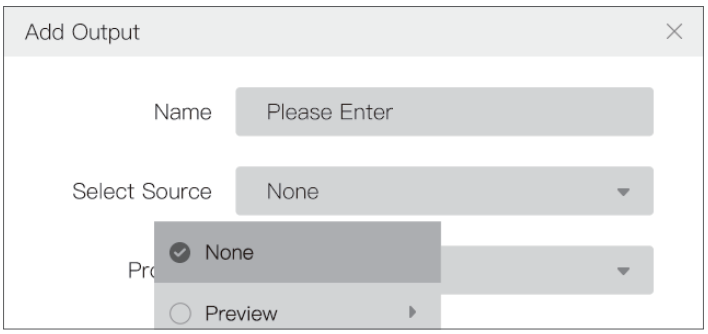
Click “Stream Service” in the top navigation bar to access the Stream Service Conversion Configuration page.



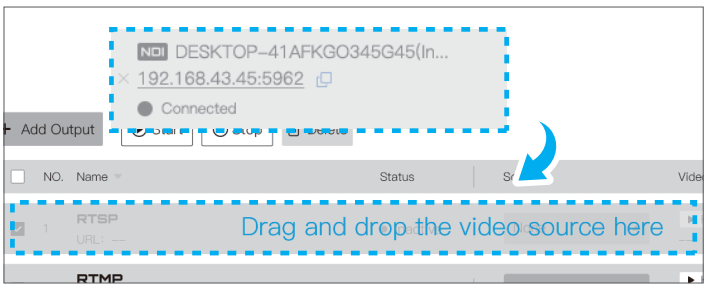
Add a new output stream service: Click "+ Add Output", enter a name in the pop-up window, select the required "Stream Type" (such as NDI HX, RTMP/RTMPS, HLS, SRT, RTSP, etc.), and fill in the protocol parameters in the specified format.

Select Video Source:

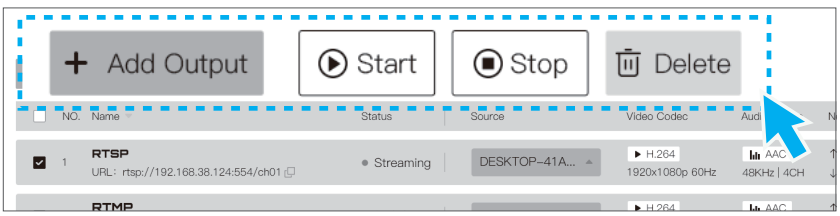
Method 1: In the "Add Output" pop-up window, click the "Bind Source" drop-down menu and directly select the video source to be forwarded from the list.



Method 2: In the source or preview window on the page, select the target video source and drag it to the highlighted area of the stream service list box to complete the selection.



Batch manage services: In the stream service list, check multiple services to be operated and click the "Start", "Stop", or "Delete" button above the list to batch control the running status of the protocol conversion services.



10 Firmware Upgrade

10.1 Downloading the Upgrade Firmware

New upgrade firmware will be regularly released on our company's official website. Users can download the latest

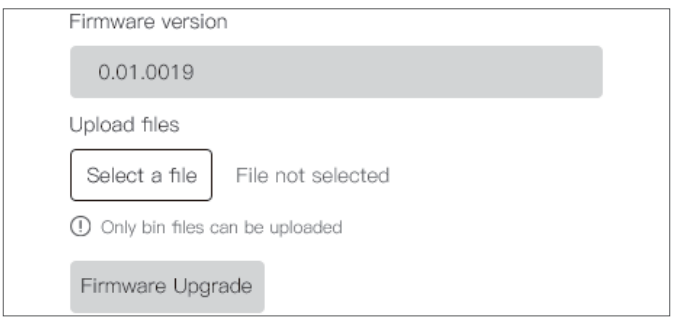
firmware as needed for upgrades, or contact our support engineers or support team to obtain the latest firmware for the product.

10.2 Upgrading Device Firmware

Log in to the RMG-300 v2 management interface, click "Settings" > "Firmware Upgrade" to enter the upgrade page.

Version verification: Compare the downloaded latest firmware version with the current device version.

Upgrade instructions: After the firmware is successfully uploaded, the system will prompt you to restart. After clicking confirm, the device will restart. Please wait patiently. After the device restarts, refresh the web management interface to re-enter the back end.



Notice

- Version and Firmware Compatibility: RMG-300 v2, RMG-300, and MG300 v2 are three distinct versions. Firmware cannot be flashed between different versions. First, download the correct firmware for RMG-300 v2 from the official website before proceeding with the upgrade.
- Upgrade Process Precautions: Never disconnect the device's power supply during the upgrade. Doing so may prevent the device from booting normally.
- Upgrade Duration and Troubleshooting: The upgrade process typically takes 3–5 minutes. If it times out without completing, try refreshing the page. If access remains unavailable, contact technical support.

11 Restore Factory Settings

When improper parameter configuration causes the device to malfunction, or when the network IP is forgotten and the device cannot be located.

Method 1: Web Interface Operation (Device can log into the Web management interface normally)

Path: Web Management Interface > System Settings > Restore Factory Settings.

Method 2: Hardware Reset Operation. (When the device cannot log into the Web management interface normally)

Operation: Press and hold the reset button on the device panel for 5 seconds or longer.

Note: After restoring the factory settings, the following parameters will be changed to the default values

- The password of the logged-in user admin will be restored to admin.
- Your device will be restored to the default DHCP dynamic IP address acquisition mode, and the Ethernet port 1 will also be restored to the maintenance address 192.168.1.168 , and the Ethernet port 1 will also be restored to the maintenance address 192.168.2.168 ;
- All video decoding parameters, audio parameters, etc. will be restored to the factory default values.

12 Others

If the equipment is not in use for an extended period, unplug it and store it properly to extend its service life.

For more usage support on the RMG-300 v2 IP Video Media Gateway,Visit the Kiloview official website:

https://www.kiloview.com/