

快速入门手册

MG300 v2视频网关

多路IP协议互转

(V2.0)

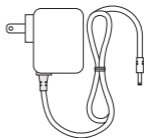


通过本手册，您可以了解到

- 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

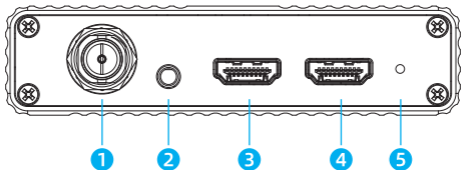
(2) 电源适配器×1

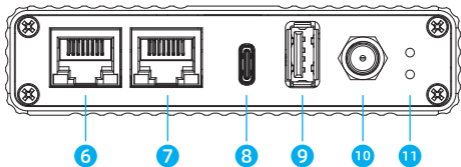


(3) 合格证/保修卡×1

(4) 《快速入门》手册×1

2 设备接口



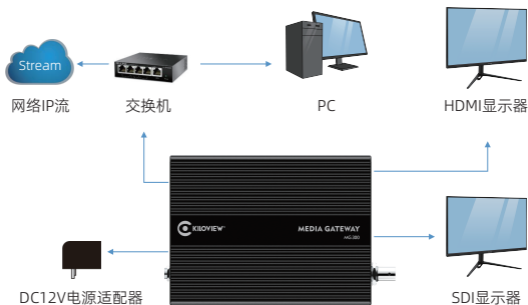


- (1) 3G-SDI输出
- (2) LINE OUT 音频输出
- (3) HDMI 输出1
- (4) HDMI 输出2
- (5) 复位按钮
- (6) 1000M以太网口1
- (7) 1000M以太网口2
- (8) USB 3.0 Type-C 拓展接口
- (9) USB 3.0 Type-A 拓展接口
- (10) DC 12V1A电源接口
- (11) 电源状态/工作状态指示灯

3 设备指示灯

	名称	颜色	状态	说明
LED工作 指示灯	Power	红色	常亮	电源已连接
			熄灭	电源关闭或故障
	Run	绿色	常亮	设备正常运行
			熄灭	设备异常或未启动

4 应用场景



注意

- 请使用设备标配电源适配器给设备供电，其它不合格电源可能会损坏设备。
- MG300 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MG300 v2 Web管理界面后，缺省登录设备的用户名是：**admin**，密码是：**admin**。



<input type="text" value="用户名/用户ID"/>
<input type="password" value="密码"/> 
<input type="button" value="登录"/>

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。

设备设置			
地址1			
地址获取方式	<input type="text" value="DHCP自动获取"/>	MAC	<input type="text" value="7C:D2:2B:BFEC:18"/> *IP <input type="text" value="192.168.230.14"/>
子网掩码	<input type="text" value="255.255.255.0"/>	网关	<input type="text" value="192.168.230.254"/> DNS <input type="text" value="223.255.255.0"/>



说明

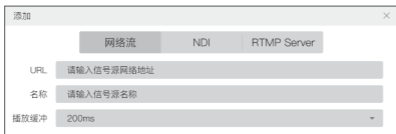
- 使用维护地址登录，需确保电脑网络配置同网段地址。（192.168.1/2.*，*指1-255之间除168以外的其他数字）
- 维护地址：设备在无法通过动态主机配置协议（DHCP）获取有效 IP 地址时，自动启用的预配置静态IP，保障网络异常时基础连通性，支持设备管理与故障排查。

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）。

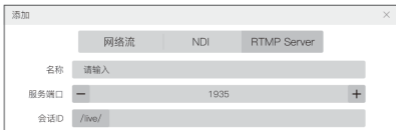


添加网络源：在「URL」输入框按格式填写连接参数。

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。

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 1、HDMI2、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MG300 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。

添加输出 ×

名称

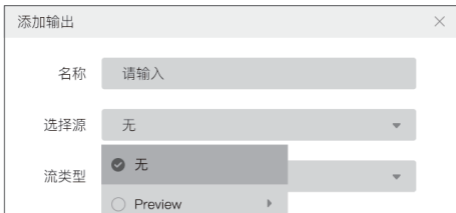
选择源

流类型

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 MG300 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。

固件升级

当前固件版本

0.01.0019

上传文件

未选择文件

① 只能上传bin文件

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 MG300 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。

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。
-

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 MG300 v2 视频网关的使用帮助请访问
Kiloview 官方网站地址

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

Quick Start Guide

MG300 v2 IP Video Media Gateway

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.

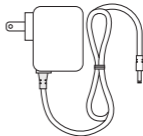
To ensure your safety and prevent physical or electrical damage to the device, please strictly follow the instructions in this manual. Installation and usage should be conducted under the guidance of professionals. Incorrect electrical connections or improper installation may result in permanent device 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) MG300 v2x1



(2) Power Adapterx1

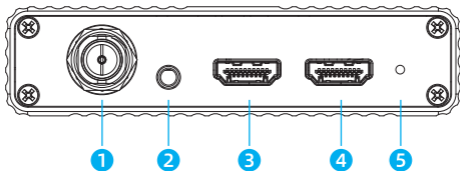


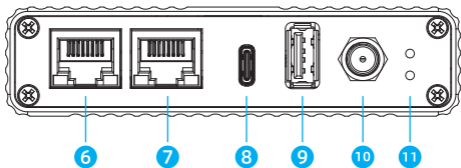
(3) Certificate/Warranty Cardx1



(4) Quick Start Guidex1

2 Device Interface



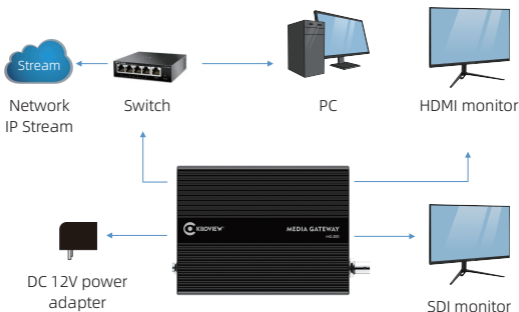


- (1) 3G-SDI Output
- (2) LINE OUT Audio Output
- (3) HDMI Output 1
- (4) HDMI Output 2
- (5) Reset Button
- (6) 1000M Ethernet Port 1
- (7) 1000M Ethernet Port 2
- (8) USB 3.0 Type-C Expansion Port
- (9) USB 3.0 Type-A Expansion Port
- (10) DC 12V1A Power Interface
- (11) Power/Operation Status Indicator Light

3 Device Indicator lights

LED Indicator lights	Indicator Name	Color	Status	Description
	Power	Red	Solid On	Power supply is connected
			Off	Power off or fault detected
	Run	Green	Solid On	Device is operating normally
Off			Device abnormality or failed startup	

4 Application Scenarios



5 Logging into the Device Management Interface

The default IP address of Device Network Port 1 is 192.168.1.168.

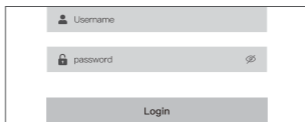
Connect your computer to this port, set the computer's IP to the same network segment (e.g., 192.168.1.10), then enter the address in a browser to access the Web management interface.



Notice

- Please use the power adapter supplied with the device to power it. Using other non-compliant power supplies may damage the device.
- The MG300 v2 supports up to 16 video streams for decoding. HDMI and SDI can output the same or different video streams.

After opening the MG300 v2 Web management interface, the default username for logging into the device is: **admin**, and the password is: **admin**.



A login form with three input fields. The first field is labeled 'Username' with a person icon. The second field is labeled 'password' with a lock icon and a show/hide icon. The third field is a 'Login' button.

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.



Network Settings

Network 1

IP Obtain Mode	DHCP Dynamic	MAC	7C:D2:2B:BF:EC:18	*IP	192.168.230.14
Net mask	255.255.255.0	Gateway	192.168.230.254	DNS	223.255.255.0



Note

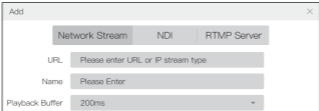
- To log in using the maintenance address, ensure that the computer's network configuration is in the same network segment. (192.168.1/2.*, where * refers to numbers from 1 to 255 except 168)
- Maintenance Address: A pre-configured static IP that the device automatically enables when it cannot obtain 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.).



The screenshot shows a dialog box titled "Add" with a close button (X) in the top right corner. It features three tabs: "Network Stream", "NDI", and "RTMP Server". The "Network Stream" tab is selected. Below the tabs are three input fields: "URL" with the placeholder text "Please enter URL or IP stream type", "Name" with the placeholder text "Please Enter", and "Playback Buffer" with a dropdown menu currently set to "200ms".

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

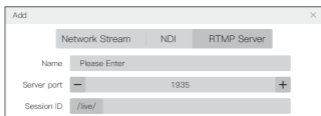
Add NDI Source: Click “NDI”, select either “public - Auto-discovery” (public NDI sources within the same LAN segment) or “Manual Configuration” (specify IP range + group name), then select the target source.



The screenshot shows the "Add" dialog box with the "NDI" tab selected. Below the tabs, there are two sub-tabs: "public-Auto Discovery" (selected) and "Manual Configuration". Below these sub-tabs is a table with three columns: "Device Name", "NDI Channel Name", and "IP Address".

Device Name	NDI Channel Name	IP Address
<input type="checkbox"/> N4-20182020576 (Channel-1)	OBS-KV-test	192.168.1.1
<input checked="" type="checkbox"/> N4-20182020576 (Channel-1)	Adobe After Effects	192.168.1.2

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



The screenshot shows a dialog box titled "Add" with a close button (X) in the top right corner. It has three tabs: "Network Stream", "NDI", and "RTMP Server", with "RTMP Server" selected. Below the tabs are three input fields: "Name" with the placeholder text "Please Enter", "Server port" with a minus sign on the left, the number "1935" in the center, and a plus sign on the right; and "Session ID" with the placeholder text "/live/".

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



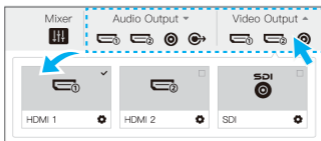
Note

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.

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 1, HDMI 2, 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 MG300 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.



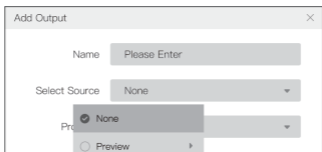
The image shows a pop-up window titled "Add Output" with a close button (X) in the top right corner. The window contains three input fields:

- Name:** A text input field with the placeholder text "Please Enter".
- Select Source:** A dropdown menu currently showing "None".
- Protocol:** A dropdown menu currently showing "SRT".

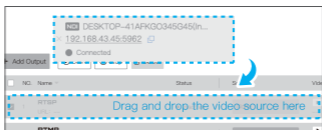
Add a new output stream service: Click "**+ Add Output**"; enter a name in the pop-up window, select the required "Stream Type" (such as NDI HX, RTMP/RTMPS, HLS, SRT, RTSP, etc.), and fill in the protocol parameters in the specified format.

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

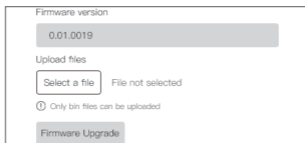
firmware as needed for upgrades, or contact our support engineers or support team to obtain the latest firmware for the product.

10.2 Upgrading Device Firmware

Log in to the MG300 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.



The screenshot shows a web interface for firmware upgrade. At the top, it says "Firmware version" with a grey bar containing "0.01.0019". Below that is the "Upload files" section, which includes a "Select a file" button and the text "File not selected". A small information icon (i) is followed by the text "Only bin files can be uploaded". At the bottom of the form is a "Firmware Upgrade" button.

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 MG300 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 MG300 v2 IP Video Media Gateway, Visit the Kiloview official website:

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