

Leading solution provider of IP-based video transmission

User Manual

Kilolink Bonding Platform

P1/P2 Series

(2021-8 Version)



The P series 4G bonding encoder is a professional video encoder for mobile applications. It adopts Kiloview KiloLink (based on Reliable-UDP) to achieve stable, efficient, and reliable network transmission and multi-link bonding transmission.

1 Login the bonding platform

Enter http://server IP: 60000/ in the browser to login to the bonding platform. The default username is admin, and the password is admin.

| | (ILOVIEW® | |
|----------|-----------|--|
| | Login | |
| Username | | |
| Password | | |
| | Login | |



Note:

- To ensure information security, we recommend you change the password immediately after your first login.
- The port of the bonding server is the one configured during deployment. The default port is 60000.

2 Device connection

Step 1: Add the device to the platform and generate an authorization code.

Click "Device management" - "Add device", configure the parameters and generate an authorization code.

| | Kilolinl | k Bondi | ng Platforr | n | | | | | | Admin 👻 |
|---------------------|----------|-----------|-------------|----------------------|--------------------------|----|----------|-----------|-----------|-----------|
| ① Online Device | Device | Manage | ment | | | | | | | O Refresh |
| B Device Management | + Ad | dd device | | | | | | | | |
| | | | | | Add device | | NET IN | NET OUT | Operation | |
| | | | | * Serial Number | | | | | | |
| | - | Online | | * Name | | | 16.54MB | J 51.69MB | | |
| | • | Online | fil@cor | * Authorization Code | | | 1.42MB | ⊎ 39.45MB | | |
| | • | | | | | | | | | |
| | | | | Owned User | Admin | | | | | |
| | | | | | Private (only visible to | | | | | |
| | | | India-jy | | | | | | | |
| | | Offline | Digbox | Cancel | | ОК | ⑦ 9.76MB | | ; & L | G 💮 |



Introductions:

- Serial Number: Login to the device Web page to get the Serial Number in the lower left corner of " System Information".
- Name: Any combinations of alphabets, numbers and symbols.
- **Authorization Code:** Click "Generate Auth Code", then an authorization code combining with letters and numbers will be generated automatically, which will be used for device registration.
- **Owned User:** The added devices can be visible to a certain user you assigned.

Step 2: Device registration

Login to the device Web page, click "Network & Service Settings" – "Connect Bonding Server", and configure the parameters to start the bonding service.



Introductions:

Please download the latest firmware from our website: https://www.kiloview.com/en/support/download/ Select "Video encoder" in the filter list > "P1/P2", find the latest firmware to download.

• Server address: The IP address of the bonding server.

- **Port:** The port that used to login to the Web page of the bonding server. The default port is 60000.
- Auth Code: Generated when adding the device to the bonding platform.

| Network & Service Settings | Connect Status: Conneted Bonding Links: eth1 mod Send Total: 2.70M 2.62M Recv Total: 2.04M 12.63M | l em1 Byte // Byte | Round-trip Time: 300.0 270.0 ms Loss Rate: 0.0 0.0 % Send Rate: 3K 17K bps Recv Rate: 2K 23K bps | | |
|----------------------------|---|-----------------------------|---|--|--|
| Network Manager | Rending Convice | | | | |
| Easy Management Services | Bonding Service | | | | |
| Web Service | | | | | |
| Onvif Service | Enable Bonding Service | Yes | ~ | | |
| Telnet Service | Server Address: | 43.128.30.176 | | | |
| ARP Resolution Setting | Port: | 60000 | | | |
| Static routing setting | | | · · | | |
| Connect Bonding Server | Auth Code: | FWILYRIL31 | | | |
| Serial Port and PTZ + | Timeout: | 15 | Second | | |
| Vaiaa Intaraam | Interface: | Default Ethernet | | | |
| voice intercom | | Ethernet 1 | | | |
| nil | | 3G/4G Modem 1 | | | |
| Quick Reset | | 3G/4G Modem 2 | | | |
| Logs & Debug | | Default WIFI | | | |
| Report | | [| SAVE | | |



Note:

There are four default options of bonding ports: Default WIFI, 3G/4G Modem 1, 3G/4G Modem 2 and Default Ethernet. When inserting 4G USB modems, there are two modes: one is "MODEM" mode, the other is "ETHERNET CARD" mode. In the MODEM mode, it will be recognized as 3G/4G Modem 3 or 3G/4G Modem 4. In the ETHERNET CARD mode, it will be recognized as USB network connection 1 or USB network connection 2. And the options will be increased in the port.

A few seconds later, it will show "Connected" in the bonding status, which means that the device has successfully registered to the bonding server and you can use the aggregated links for streaming. And you can log into the bonding platform through the QR code in the upper left corner to disable and configure the parameters.

Connect Bonding server Refresh Bonding Status • Connect Status: Conneted • Bonding Links: eth1 | modem1 • Send Total: 2.70M | 2.62M Byte • Recv Total: 2.04M | 12.63M Byte

Introductions:

- Aggregated link: Display all selected aggregated network links
- Sending statistics: Calculate the data transmitted by each network link
- **Round-trip time:** The round-trip time at both ends of each network link. The longer the time, the higher the delay after aggregation.
- **Packet loss rate:** The packet loss of each network link. When the packet loss rate is too high, it may cause abnormalities such as unsmooth video transmission.
- **Transmission rate:** The transmission rate of each network link. The total rate is equal to the actual configured encoding rate.

3 Kilolink platform management

3.1 Online devices

The list shows all the online devices. Online device means that the device connected to the

bonding platform successfully and can use the aggregation link.





Introductions:

Devices that are not in the list are offline devices, which means that the device has not been registered successfully or the device has not been turned on to register to the bonding platform. All the added devices will be displayed in the "Device Management".

3.2 Device Management

The device management list contains all the added devices, including online and offline devices. The online devices can do image preview, port forwarding, and device configuration.

| | Kilolink Bond | ing Platform | | | | | | A | Admin 🔻 |
|---------------------|---------------|----------------|-----------------|--------------------|------------|---------|-----------|-----------|-----------|
| Online Device | Device Manage | ment | | | | | | | O Refresh |
| B Device Management | + Add device | Batch Deletion | | | | | | | Q |
| & Users List | Status \$ | Name 🗢 | Serial Number 🗢 | Authorization Code | Owned User | NET IN | NET OUT | Operation | |
| | Offline | | | 26U6MC3DL3 | | 1.14MB | 14.20MB | | . 💬 |
| | Online | P1_1 | 191110086 | WPADS24NOQ | admin | 17.37MB | ● 53.00MB | ₽ Ľ (| . ··· |

Click the line of the online device, a video preview window will pop up to preview the real-time image of the device.





Note:

The video preview is for the sub-stream of the video, please make sure that the sub-stream is enabled in your device, otherwise the images cannot be previewed.

① Stream Service

Click 🔁 to enter the port forwarding page, and forward the internal network port of the device to the Internet through port forwarding, allowing other users to access the device or for streaming.

Click "Add Port Forwarding" and configure the parameters. Here take RTSP streaming as an example for configuration. The default port is 554 and the server port is 10240. Select the port type and save.

Other users in the network can use rtsp: //server IP: 10240/ch01 to get the RTSP stream transmitted by the bonding device, for example: rtsp://43.128.30.176:10240/ch01

| | Add Port F | orwarding | | × |
|---------------|------------|-----------|----|-----------|
| Device Port | | 554 | | (0~65535) |
| * Server Port | 10241 | | ~ | |
| Port Type | тср | | ~ | |
| Describe | | | | |
| Cancel | | | ок | |

② Bonding Status

Click \succeq to enter the bonding status page to check the real-time bonding status and data statistics status. The statistics data and the bonding status statistics data on the device page correspond to each other.

The real-time status displays the real-time sending/receiving and packet loss rate of each network link, and the statistics status displays the total amount of sending/receiving and packet loss retransmission rate.

③ Device Web page

Click \Box to enter to the device Web page directly, and you can configure the parameters wherever there is a network.



For more information about P series encoder, please visit kiloview's website: https://www.kiloview.com/en/support/docs/p2/

3.3 User List

In the user list, you can add users and delete or modify the added users. There is an admin

account by default.

| | Add User × |
|--------------------|--------------|
| * I Iser Name | Plasse enter |
| User Name | |
| * Alias | Please enter |
| * New Password | Please enter |
| | |
| * Confirm Password | Please enter |
| | |
| Cancel | ОК |

4 Others

When the device is not used for bonding transmission, please disable the bonding service to make the device offline. Otherwise, the bonding server will continue to use the traffic, resulting in a waste of traffic.



Website for Official online document of P series https://www.kiloview.com/en/support/docs/p2



Website for Kiloview official technical support https://www.kiloview.com/en/support/



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