Quick Start Guide

SDI/HDMI
4G-LTE Bonding Video Encoder

+2019

REV. 1

● Thank you for purchasing SDI/HDMI series video encoder. Before installing our product, please read this user manual carefully. Please strictly follow our manual or install and use our encoder, or install and use under guiding by professional person, to protect your body safety and to avoid the encoder damage from physical and electrical. The encoder may be damaged if incorrect electrical connection or the physical installation, even threaten the operator safety.

This product is divided in to SDI or HDMI interface,
Please configure based on what you purchased.

---

01 Packing list

Packing list
1pc P1 video encoder. 2pcs 4G antenna. 1pc DC12V/1A Power adapter.
1pc USB-DC Power wire. 1pc USB-RJ45 network adapter.
1pc hot shoe bracket. 1pc plastic hot shoe bracket. Quick Start Guide.
Warranty card.

About built-in battery:
1. While the device is powered on, connected with the power adapter, the device is powered by the adapter. The battery is not charging.
2. While the device is powered off, connected with the power adapter, the battery will be charging.

About fan :
1. While the device is powered on, the fan will start working when reaches a certain temperature.
2. While the device is powered off, the fan is working while charging.

Note:
Due to products updating,packing lists will be a little difference.

---

02 Device interfaces

❶ SDI/HDMI signal input
❷ Battery/Charging indicator
❸ Power ipput
❹ SDI/HDMI indicator
❺ Streming indicator
❻ Streaming switch
❼ Power indicator
❽ Power switch
❾ SIM 1 indicator
❿ 4G Antenna Interface
⓫ USB Interface
⓬ Reset
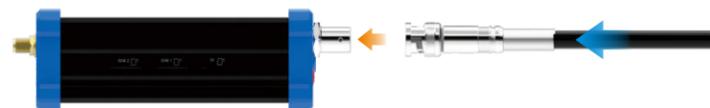⓭ WIFI indicator
⓮ SIM 2 indicator

⓯ SIM 2   ⓰ SIM 1   ⓱ Micro SD/TF Card

---

03 Installation and Connectrion

Connecting video signal
Connect the SDI/HDMI signal from the source (such as a camera) to the SDI/HDMI input port of the device via a cable

Connect Network
Plug the USB transfer network port (RJ45) cable into the USB port, and connect the network port to the switch. You can also connect directly to the computer network.

Connect the Power supply
Use the standard power adapter (DC 12v) connected to the power input. After the power is turned on, the device will charge the built-in battery. Press the power switch on the device for more than 3s, and the device will start working immediately.

---

04 Led indicator light descriptions

Press the switch over 3seconds, the device is turn on, the light flashes, and the battery light is always on. After the device starts up normally, the power light is always on, and the process lasts for 30-40s.

Indicator Status

Name	Color	Status	Description
Power indicator	White	Flashing	Starting
		On	Working
		Off	Not working
SDI/HDMI indicator	White	On	SDI/HDMI signal locked
		Off	SDI/HDMI no signal
Battery indicator	White	Charging（flashing）	Charging
		On	Working
		Off	Not working
Streaming indicator	White	On	Working
		Flashing	Connecting
		Off	Not working
WIFI indicator	Red	On	Working
		Off	Not working
4G indicator	Red	Slow blink（200ms High/1800ms Low）	Finding network
		Slow blink（1800ms High/200ms Low）	Standby
		Fast blink（125ms High/125ms Low）	Data transfering

---

05 Device login and network configuration

Default IP address and web login
The Failsafe IP address is **192.168.1.168** with subnet mask **255.255.255.0.** Normally, you don't need to modify this IP address.
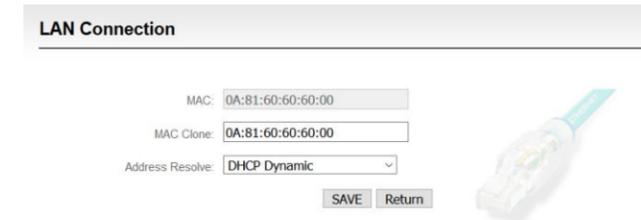
Login the WEB Console
If login for the first time, please use Failsafe IP address
You can access http://192.168.1.168, to login the web console.

Login username **admin**   password **admin**

IP address configuration
After login, you can configure the IP according to the network, the IP will be use for pushing and device management. You can configure it to manually set the IP or DHCP.(Default set is DHCP)

LAN Connection

MAC: 0A:81:60:60:60:00
MAC Clone: 0A:81:60:60:60:00
Address Resolve: DHCP Dynamic
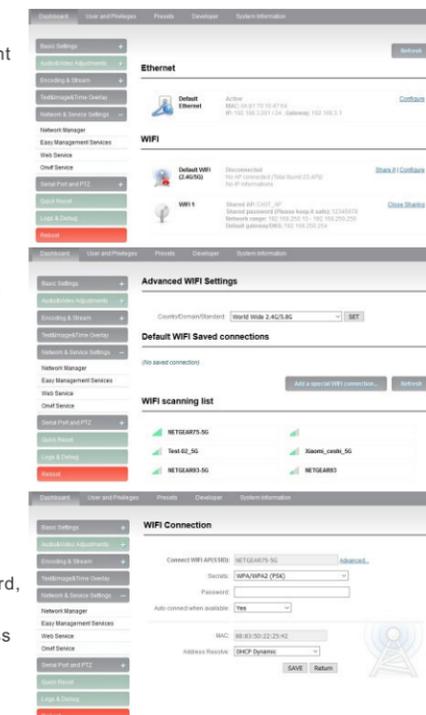
SAVE   Return

---

06 Connect WIFI

①Click web management interface "Network&Service Settings>Network manager"

②Click "Configuration" under wifi for wifi setting interface

③Users could configure according to the related parameters of wifi hotspots. Put in password, after succeed, it could transmit through wireless network.

07 Connect 4G

Connect 4G network. Built in 4G-LTE modules(or USB expandable with two 4G-LTE USB Dongle). Put in SIM cards before starting, then configure 4G network to push streaming.

Wireless WAN

No your devices? Click here

3G/4G Modem 3 — Unavaliable Current mode: No IP informations — Configure
3G/4G Modem 4 — Unavaliable Current mode: No iP informations — Configure

1:Click the"Network and Service Settings"menu on the web interface to enter the "Network Interface Management". The built-in 4G wireless network card or the inserted 4G USB Dongle device willbe listed in "Wireless WAN".

2:Click"Configure" and manually "add a new wireless WAN".

3: Fill in dialing parameters.
"Configuration Name" is used to identify the connection and can be named arbitrarily;
"Network type" selects the standard of 4G network.
"APN" is correctly filled in according to the mobile operator.
"Dialing" varies according to the different mobile operator.

WWan Connection

Connection name:
Network type: GSM/GPRS/EDGE/UMTS/HSDPA/HSUPA/HSPA+
APN:
Diag Number: *#99#
Username (default empty):
Password (default empty):
PIN code for SIM card:
SAVE   Return

Connect expandable 4G-LTE Network.

Put 4G-LTD USB dongle into USB interface, the device will identify the dongle automatically.

---

08 Coding and pushing

Encoder supports H.264 encoding, support a variety of push-flow methods, such as RTP, RTMP, RTMPS, UDP, HLS, etc.
The RTSP services is always enable for the device , all tools which support the standard RTSP protocol and H.264 decoding (such as VLC media player) can be connected to the encoder and get video streams.

The default RTSP accessing URL is:

Main: rtsp://encoder IP address:554/ch01
SUB: rtsp://encoder IP address:554/sub01

Note:"ch01", "sub01" is the RTSP session ID.
You can change the session ID in the Web console.

The following is an example of RTMP to introduce the configuration of push flow. Other push flow methods can be login to the device page for detailed configuration.

---

09 RTMP Live Streaming

Add streaming service

Our device's H.264 main/sub stream supports adding up to 8 same or different streaming media service, to meet your needs of adopting same/different stream media protocols for multi-goal pushing.
On the management interface of "Encoding&Stream-Encoding and Stream Settings", for main/sub stream to choose "add one stream service", users can add the needed service type.

Add RTMP pushing streaming service

Currently main video live streaming platforms require"RTMP" service. After adding RTMP pushing service, click set icon to configure RTMP parameters.

Take YouTube for an example

"Streaming point" is RTMP address given by platform (Take YouTube as an example).
(Other platforms are similar, if questions please contact platform technical support for help).

RTMP push-flow must first get a push-flow URL address from the platform
Login to YouTube, got below address:
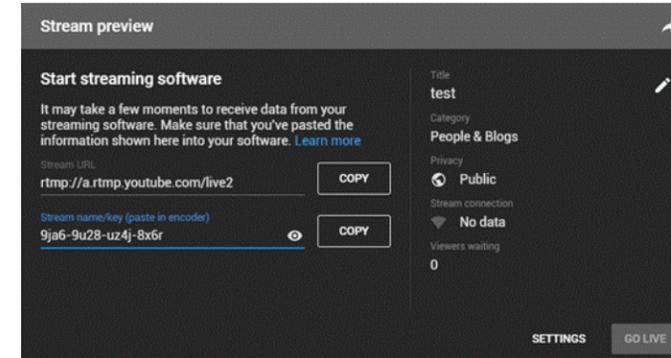
Streaming point should be like Server URL+Stream name/key,
for example: rtmp://a.rtmp.youtube.com/live2/9ja6-9u28-uz4j-8x6r

After you get the RTMP URL address, you need to set it up in the encoder.
If the platform requires user name and password verification, you also need to fill in the corresponding parameters in the encoder.

Note:

In the case of rtmps push mode, fill in rtmps URL at Push point and set Use old RTMP version to yes, so that it can be supported.

---

10 Restore factory settings

Restore factory settings

If users change parameters that lead encoder couldn't work(The typical situation is changed network address, so it couldn't be visited encoder by network), users could restore factory setting to default value.

Two methods for restoring factory settings:

①Choose"Basic Settings>Restore factory settings"on the web console.
②Press "Reset" button.

Hold the 'Reset' button more than 5 seconds, restoring factory setting will lead to the device reboot, and restarting course will last about 20s.

Note:

These parameters will be restored after restoring factory setting:
● Login username and password will be as admin;
● IP address will be restored as 192.168.1.168, subnet mask will be 255.255.255.0;
● All encoding parameters of video and audio will be restored to factory default value;
● Media transmission parameters will be restored as factory default value.

---

11 Firmware upgrading

Firmware upgrading

This device supports online firmware upgrading for upgrading software.
Select"Basic Settings", pull downward and click"Update firmware ".
On the page, click"Browse" to select the upgrading file, and click"Upgrade" to upgrade the device.

Note:

After uploading firmware file successfully, the encoder will automatically restart, this process will take about 30s-60s(the time will be different according to upgrade content), and please be patient.

After the upgrade is complete, via the web interface"system information>version information" to check whether the latest version information in accordance with expected and confirm the upgrade succeeded.

---

12 Quick reset and reboot

Quick reset and Reboot

"Quick Reset" function is to reset encoding service, normally used for making changed parameters to effect immediately.
 The whole process lasts around 3s.
"Reboot" function is used for encoder reboot. Device rebooting lasts around 20s.

Note:

Select"Quick Reset",current encoding will be suspended for a while;
Select"Reboot", the encoder will 'warm' reboot.
Under some circumstances, reboot maybe with the help of 'cold' reboot:power down then power up the device.