# Quick Start Guide

Wireless Video Encoder

Thank you for purchasing Wireless video encoder. Before installing the product, please read this user manual carefully. Please strictly follow our manual to 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.
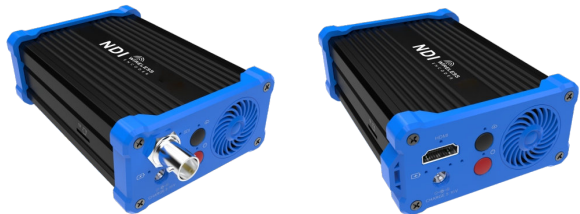
This product is divided in to SDI or HDMI interface, Please configure based on what you purchased.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

RF exposure compliance statement:
This device has been evaluated to meet the general RF exposure requirement

Kindly note: This is only Quick Start Guide, if there any questions, please contact the supplier or visit website for more details.

01 Packing list

Packing list
Encoder*1. WIFI antenna*2. Adaptor*1. USB-DC cable*1. USB-RJ45 adaptor*1. Hot shoe rack*1. Hot shoe bracket *1. Manual*1. Warranty card*1.

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:
the nearest distance between human and the EUT is 20cm

There will be some difference because of the updating of the device .

02 Device interfaces

❶ SDI/HDMI input
❷ Battery/Charging indicator
❸ Power input
❹ SDI/HDMI indicator
❺ Streming indicator
❻ Streaming switch
❼ Power indicator
❽ Power switch
❾ Antenna gain light
❿ WIFI antenna interface
⓫ USB external interface
⓬ Reset button
⓭ WIFI status light
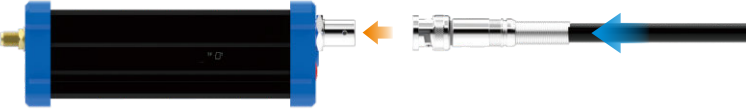
Note: ❺ and ❻ are only for customized functions

⓮ Micro SD/TF card

03 Device installation and connection

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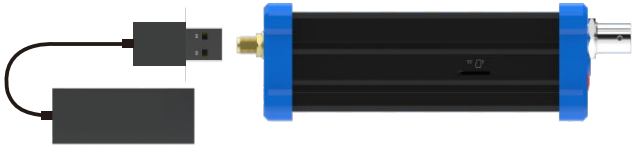
Connect the Power supply
Use the standard power adapter (DC 12v) connected to the power input. After the power is turned on, the device will charge the built-in battery. Press the power switch on the device for more than 3s, and the device will start working immediately.

04 LED indicator

Long press the switch for more than 3s, the device is turned on, the power light flashes, and the power 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	Red	Flicker	Starting
		Always on	OK
		Extinguished	Power off
SDI/HDMI indicator	White	Always on	SDI/HDMI signal locked
		Extinguished	SDI/HDMI no signal
Battery indicator	White	Charging status (flashing)	Charging
		Always on	Normal work
		Extinguished	Shut down
Streaming indicator	White	Always on	Normal work
		Flicker	Connecting
		Extinguished	Stop pushing
WIFI indicator	Red	Always on	Normal work
		Extinguished	WIFI disconnect
Antenna gain light	Red	Always on	Normal work
		Flicker	Connecting
		Extinguished	Disconnect

05 Video/ Audio source

Video/audio source selection

Signal Source	Option	Description
Video Source	Auto Select	SDI/HDMI Input
Audio Source	Auto Select	SDI/HDMI Embedded Digital audio

Note:
Select the sub-functions "Video Source Selection and Adjustment" and "Audio Source and Volume Adjustment" of the "Video/Audio Adjustment" function on the web management interface to configure the video and audio source selection.

06 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)
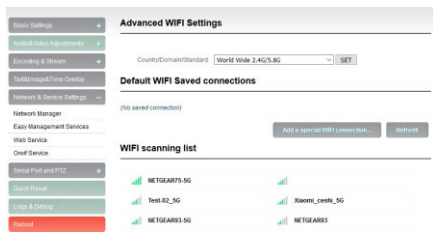
LAN Connection

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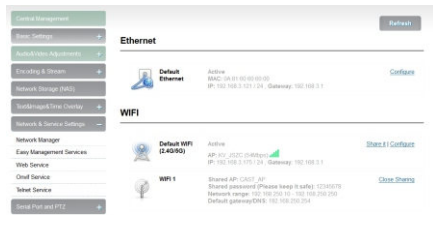Address Resolve: DHCP Dynamic

SAVE Return

07 Connect wifi

1. Click the "Network and Service Settings" menu on the web interface to enter the "Network Interface Management" interface.

2. Select WiFi interface in the WiFi group and click"Configure" button to enter the WIFI parameter configuration interface.

3. Select hotspot to connect from the scanned hotspot list, click "Connect", fill in necessary password option on the interface shown on the right.

08 NDI discovery and connection

It is compatible with NewTek NDI®. When the device is in the same network as the Studio Monitor software（others like OBS, vMix, etc.), the device can be automatically discovered.

Modify NDI channel name

09 Wireless HX driver installation

Currently our encoders adopt compressed NewTek wireless HX technology. Before your using, clients need to download HX driver from https://www.newtek.com/ /tools/#.
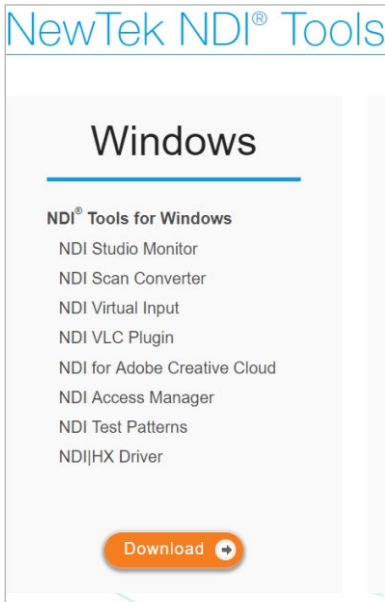
Note:

Encoder temporarily does not support RTSP pull.When wireless is connected, the default RTSP channel of the main stream of the encoder is encrypted, and the direct pull-out will be displayed as a mosaic state.
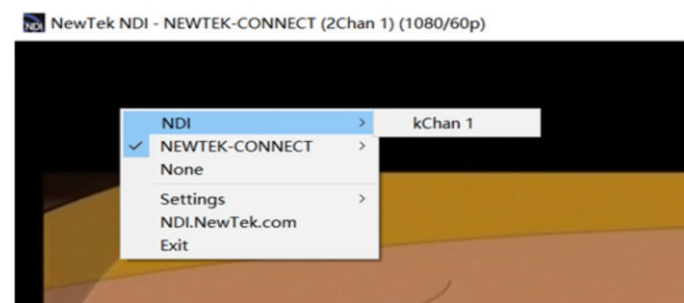
A wireless HX driver is required to install before streaming.

When there are several encoders in the same network, as default Channel is the same, clients needs to set different Channels for different devices.
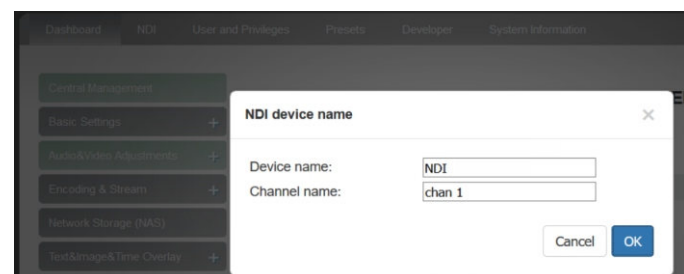
10 RTMP Live Streaming

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.
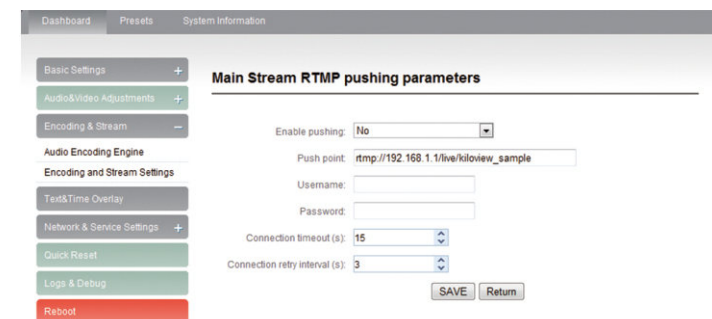

Note:

This 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.

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:
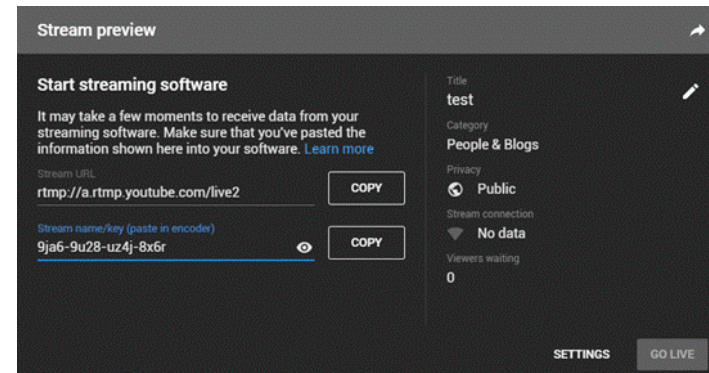
Streaming point should be like Server URL+Stream name/key, for example: rtmp://a.rtmp.youtube.com/live2/9ja6-9u28-uz4j-8x6r

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.

11 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.

12 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.

13 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.