KILOVIEW®

Quick Start Guide

SDI/HDMI
NDI Wired Video Encoder

+2019
REV. 1

NDI is a registered trademark of NewTek, Inc.

- Thank you for purchasing NDI 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.

01 Packing list

Packing list
Encoder*1   DC 12V/1A Adaptor*1   Manual*1   Warranty card*1

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

02 Device interfaces

❶ Power
❷ Mini USB
❸ Audio out
❹ Audio in
❺ SDI IN/ HDMI LOOP
❻ SDI LOOP/HDMI IN
❼ Ethernet
❽ Indicator
❾ USB extend
❿ TF card
⓫ Power Switch
⓬ Reset

## 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

NOTE:
HDMI's input interface is on the right
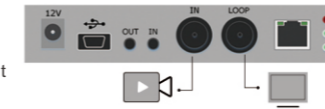
Connect Network
Connect the network cable to the Ethernet port of the device, and connect the other end to the network switch or directly to the network port of the computer.
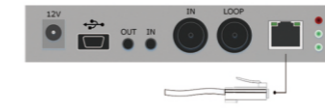
Connect the power supply
Using the power adapter (DC 12v) to connect to the power connector of the device. After connected, turn on the power switch (Interface No.12) on the device. After the device is powered on, it starts working.

04 LED indicator

RUN/SIGNAL/POWER

Name	Color	Status	Description
⚡ POWER	Red	Always on	Power supply is connected
		Off	Power supply is not connected
🔗 SIGNAL	Green	Always on	SDI/HDMI signal is connected
		Flashing	Restore device to factory settings
		Off	SDI/HDMI signal is not connected
🏃 RUN	Green	Flashing	Working
		Off	Working abnormal/not started
		Always on	Device is starting

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

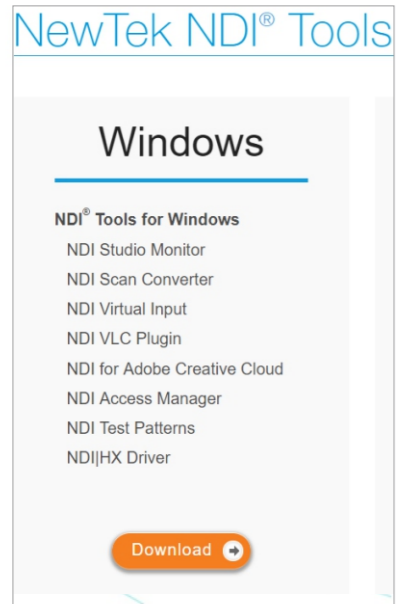MAC: 0A:81:60:60:00:00
MAC Clone: 0A:81:60:60:00:00
Address Resolve: DHCP Dynamic

SAVE   Return

07 NDI|HX driver installation

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

NewTek NDI® Tools

Windows

NDI® Tools for Windows
NDI Studio Monitor
NDI Scan Converter
NDI Virtual Input
NDI VLC Plugin
NDI for Adobe Creative Cloud
NDI Access Manager
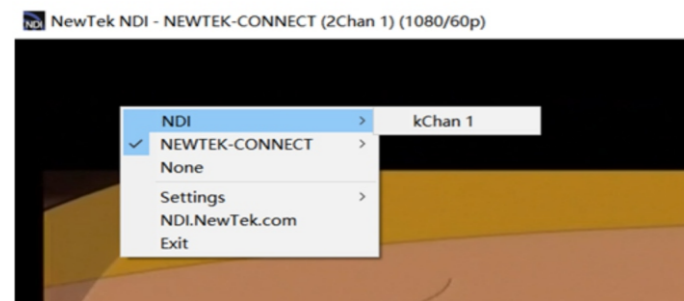NDI Test Patterns
NDI|HX Driver

Download ➜

NOTE:

Encoder temporarily does not support RTSP pull.When NDI 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.

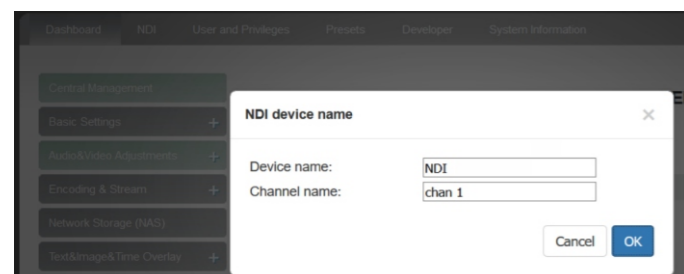A NDI|HX driver is required to install before streaming.

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

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.

NDI — NEWTEK-CONNECT (2Chan 1) (1080/60p)

NDI ▸ kChan 1
✓ NEWTEK-CONNECT ▸
None
Settings ▸
NDI.NewTek.com
Exit

Modify NDI channel name

NDI device name

Device name: NDI
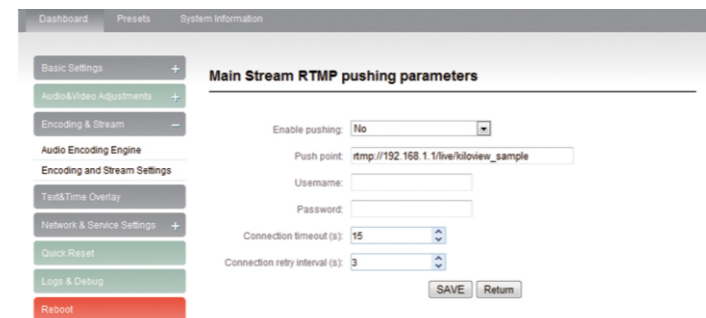Channel name: chan 1

Cancel   OK

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.

Main Stream RTMP pushing parameters

Enable pushing: No
Push point: rtmp://192.168.1.1/live/kiloview_sample
Username:
Password:
Connection timeout (s): 15
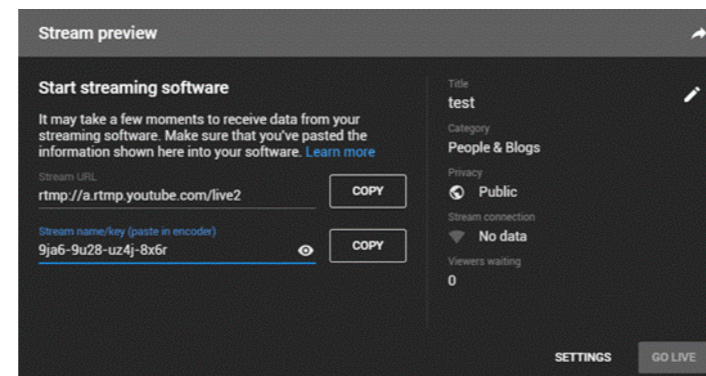Connection retry interval (s): 3

SAVE   Return

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:

Stream preview

Start streaming software
It may take a few moments to receive data from your streaming software. Make sure that you've pasted the information shown here into your software. Learn more

Stream URL
rtmp://a.rtmp.youtube.com/live2   COPY

Stream name/key (paste in encoder)
9ja6-9u28-uz4j-8x6r   COPY

Title
test
Category
People & Blogs
Privacy
Public
Stream connection
No data
Viewers waiting
0

SETTINGS   GO LIVE

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

Two methods for restoring factory settings:

①Via the WEB interface, "Basic Setup > restore factory settings" function;
②Through RESET button:

On the dashboard, there is button of Pressing on RESET button for 5 seconds, device will restore factory settings. Restoring factory setting will lead to the device hard restart, restarting course will last 1 minute.
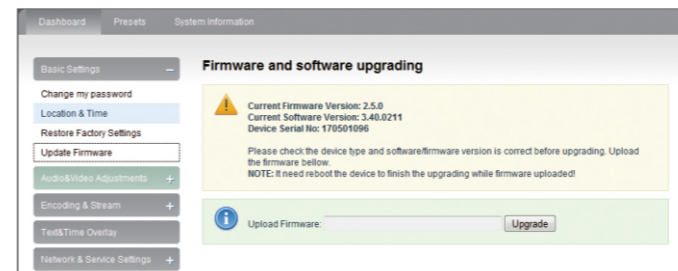
NOTE:

after restoring factory setting, below parameters will be turned to default value:

●Login 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

The encoder supports online firmware upgrading. Through the "Basic Settings-Firmware Upgrade" of the web management interface, you can upload the firmware online.

Upgrading diagram

Firmware and software upgrading

Basic Settings
Change my password
Location & Time
Restore Factory Settings
Update Firmware
Audio&Video Adjustments
Encoding & Stream
Text&Time Overlay
Network & Service Settings

Current Firmware Version: 2.5.0
Current Software Version: 3.40.0211
Device Serial No: 170561096

Please check the device type and software/firmware version is correct before upgrading. Upload the firmware bellow.
NOTE: It need reboot the device to finish the upgrading while firmware uploaded!

Upload Firmware: Upgrade

NOTE:

1: The device will restart automatically after upgraded, and recover to the default settings.User can upgrade the software version of device. Click "Browse" to select the upgrade file, and click   to upgrade the device. The upgrade process is slow, around 30s to 1second, please be patient.

2: After finish upgrading, check whether the version information of the latest firmware is consistent with the expected status through the System Status-Software Version of the web interface.

1 Quick Reset and reboot

Quick reset and reboot

"Quick Reset" is quickly reset the video encoding function of encoder. When the video signal instability or improper parameter setting cause the encoder does not work, try to set the device quickly reset. The quickly reset probably need to wait 3 seconds or so.

"Reboot" is for encoder performs a warm reboot, when the encoder still does not work after quick reset, please try to reboot the device. 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 may be with the help of cold reboot: power down then power up the device.