

1.Introduction

1.1Abstract

HD Network Encoder is a portable network multimedia encoder, for high definition video for real-time streaming applications. It provides flexible streaming for low-bandwidth transmission applications using H.264 video and AAC audio encoding, supporting FLV over RTMP streaming output, thus seamlessly connecting to Flash Media Server for FLASH video applications. The also supports TS streaming output and can achieve low latency HD video transmission over the Internet by combining NVD series products. The is perfectly suitable for E-learning, distance education, video conferencing, marketing and other multimedia streaming applications.

1.2MainFeatures

- HD/SD-SDI, HDMI and CVBS HD and SD video input
- Video resolution rescaling
- High quality video/audio with low bit rate encoding
- H.264 High profile video encoding and AAC audio encoding
- FLV OVER RTMP, TS OVER UDP and TS OVER HTTP, TS over CMP
- Supports a variety of devices including PC/Pad/Smart phones
- Integrate 4-port100M Ethernet Hub
- Support remote control via wireless and smart phones
- Embedded hardware infrastructure
- Aluminum magnesium alloy portable enclosure, smart and convenient to carry

2. Remote Console

2.1Open the Web Browser

Below is the steps you need to follow:

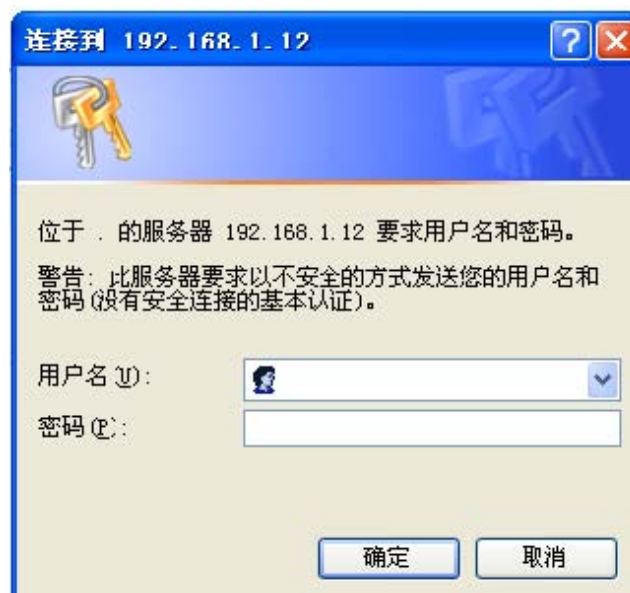
y Prepare a computer with IE browser.

y Connect your PC to the encoder via Ethernet

y The factory default IP address is 192.168.1.12 , input the IP address in IE browser. Need to confirm if the IP address of the encoder and PC are in the same network segment

Notice: Check the computer IP network segment.

Enter the user name and password to the popup window.



y User name : admin

yPassword : admin

2.2 Equipment Status

After the log in, you will enter the interface of web-control.

Status

Source Status			
Video		Audio	
Interface	SDI	Interface	SDI
Active	No	Active	No
Picture Resolution	Unkown	Sample Frequency (Hz)	0

System Status			
Ethernet MAC Address	00:69:6e:32:d1:85	Streaming Protocol	FLV over RTMP
Local IP Address	202.0.0.196	Streaming Target	202.0.0.146
Network Sub Mask	255.255.255.0	Streaming Port	1935
Default Gateway	202.0.0.1	Streaming Connecting	No

2.3 Basic Configuration

Config

Basic Configuration

Video	Audio
Video Input Interface <input type="text" value="CVBS"/>	Audio Input Interface <input type="text" value="Analog"/>
Compress STD AVC	Compressed STD AAC
Compressed Bit Rate (kbps) <input type="text" value="3000"/>	Compressed Bit Rate (kbps) <input type="text" value="50"/>

Equipment	Target Server
IP Address <input type="text" value="192.168.1.12"/>	Protocol <input type="text" value="UDP"/>
Sub Mask <input type="text" value="255.255.255.0"/>	Port <input type="text" value="1234"/>
Default Gateway <input type="text" value="192.168.1.1"/>	Address <input type="text" value="192.168.1.110"/>
DHCP <input type="text" value="Disable"/>	Application <input type="text" value="live/livestream"/>

Video

Video Input Interface

Compress STD AVC

Compressed Bit Rate (kbps)

Video

VideoInputInterface.....SDI/HDSDI,HDMI,CVBSCompressedRate.....100K~15M

Audio

Audio Input Interface

Compressed STD AAC

Compressed Bit Rate (kbps)

Audio

AudiInputInterface.....SDI/HDSI,HDMI,AnalogCompressedRate.....10K~1M

Equipment	
IP Address	192.168.1.12
Sub Mask	255.255.255.0
Default Gateway	192.168.1.1
DHCP	Enable

Equipment

Shows the NVE equipment IP address, subnet mask and gateway

EquipmentIP Address, Sub Mask, Default Gateway DHCP: In a web page above have a choice whether for manual (Disable), or automatic DHCP function keys (Enable)

Target Server	
Protocol	UDP
Port	1935
Address	192.168.1.117
Application	live/livestream

TargetServer

ProtocolUDP,RTMP,TSHTTP,HMP,Preview

Port:Chooseport

AddressTheaddressoftargetserver

Application:live/livestream

.....tosubmitparameters.....Tocancelthechange

2.4Preview



When Protocol select preview in the page of Config, user can click

to preview video.

2.5 Advance

Advance

Video GOP <input type="text" value="IBBP"/>	Video GOP Length <input type="text" value="61"/>
Video Bit Rate Mode <input type="text" value="Var"/>	Video Frame Rate <input type="text" value="1/1"/>
Video Scan Mode <input type="text" value="Progressive"/>	Video DeBlock Filter <input checked="" type="checkbox"/>
Video Compress STD <input type="text" value="AVC"/>	Video Resolution <input type="text" value="custom"/>
Video Hsize(Pixel) <input type="text" value="720"/>	Video Vsize(Pixel) <input type="text" value="576"/>
Audio Compress STD <input type="text" value="AAC"/>	
SDI Audio Channel <input type="text" value="0"/>	HDMI Audio Channel <input type="text" value="0"/>

Video GOP Video Bit Rate Mode Video Scan Mode Video Compress STD Video Hsize(Pixel)
 Video GOP Length (Video Frame Rate Video Frame Filter Audio Compress STD SDI Audio
 Channel HDMI Audio Channel

..... I,IP,IBP,IBBP,IBBBP

..... Var,Fix

..... Custom,Auto

..... AVC 720*576,etc 13,25,37,49,61,73,85 1/1,1/2,1/3,1/4,1/5,dynamic

..... AAC,MP2

..... 0,1,2,3

..... 0,1,2,3

2.6 STATUS

Status			
Source Status			
Video		Audio	
Interface	SDI	Interface	SDI
Active	No	Active	No
Picture Resolution	Unkown	Sample Frequency (Hz)	0
System Status			
Ethernet MAC Address	00:69:6e:32:d1:85	Streaming Protocol	FLV over RTMP
Local IP Address	202.0.0.196	Streaming Target	202.0.0.146
Network Sub Mask	255.255.255.0	Streaming Port	1935
Default Gateway	202.0.0.1	Streaming Connecting	No

Video	
Interface	CVBS
Active	Yes
Picture Resolution	720x576i/50

Interface : Input source Active : whether the source is in active status, yes/no Picture Resolution: Show video output resolution and frame rate

Audio	
Interface	Analog
Active	Yes
Sample Frequency (Hz)	48000

Interface:AudioinputsourceActive:whethersourceisinactivestatus,yes/noSampleFrequency:Showaudiooutputframerate

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Ethernet MAC Address	00:1A:BA:24:00:27
Local IP Address	192.168.1.12
Network Sub Mask	255.255.255.0
Default Gateway	192.168.1.1

Display subnet mask and gateway, streaming port.

Streaming Protocol	TS over UDP
Streaming Target	192.168.1.121
Streaming Port	1935
Streaming Connecting	Yes

2.7 SysInfo

2.7.1 SystemInfo

System Information	
Device Model	NVE901
Device Version	vxsc01
Serial Number	e46ae06e

Click Sys info to check the information of system.

3. Specifications

environment	
Room temperature range	10oC ~40oC
operating temperature	0oC~50oC
Storage Temperature	-20oC~70oC
Power supply (rated)	220V
consumption	8W

video	
Encoding format	H.264/AVC High Profile Level 4.1
video format	NTSC/PAL
Input Interface	SDI/HDMI/CVBS
Bitrate	100Kbps~20Mbps
Video Resolution	1920×1080P/i, 1280×720P, 720×480P/i , 720×576P/i 480x320P/i, 320x240P/i

Audio	
Encoding format	AAC—LC
PPM	24Bit
Bitrate	30Kb/s~384Kb/s

Ethernet	
Plug-in	RJ—45
interface type	10/100Base-T