

MPEG2 HD/SD Encoding + MPEG4 H.264 HD/SD Encoding

--- Home Version



A device that allows audio and video signal input in TV distributions and video recorded and playback through a USB port, with applications in home entertainment, Digital Signage for hotels, shops, restaurants etc...



H.264
MPEG2

NEW 1



Enhanced USB Function:

- ✦ **Compatibility:** Compatible with **Hard Disks** and **USB Keys** of various brands and types (USB 2.0, 3.0 acceptable; file system FAT32)
- ✦ **Stability:** The USB key/Hard Disk can run continuously 24 hours to play your ts files and run more stably.
- ✦ **Error detection & shooting:** The system can self-detect USB device errors and automatically reboot it to ensure the running uninterrupted.



NEW 2



Web-server Management:

In addition to control the device with LCD and navigation buttons on the front panel, the device can be also easily managed through a friendly User Interface after connected to a PC.

The screenshot displays the web management interface with several configuration sections:

- MODULATOR (DVB_T):** Parameters include RF On (checked), BandWidth (8M), Constellation (64QAM), FFT (2K), Guard Interval (1/32), FEC (7/8), Frequency (650 MHz), and RFLevel (-16 dbm).
- Encoding & Modulator:** Includes a 'USB CONFIG' section with Status (Device Status: Yes, Operation Status: Stop), Record (File Name: record, File Size: 524 MB, Data Mode: Mode1, Operation: single file), and Play (Auto Mode: checked, Operation: play all loop).
- Video:** Parameters include Interface (VPLPr), Status (Unlock), Resolution (unknown), Output Resolution (automatic), BitRate (14 Mbps), Format (H.264 CBR), E_frame Number (2), F_frame Number (4), H.264 Profile (High Profile), H.264 Level (Level 4.1), Low Delay (Normal), Max BitRate (120), Brightness (128), Contrast (128), Saturation (128), Hue (0), and Rom Version (11.70).
- Audio:** Parameters include BitRate (192kbps), Format (MPPEG2), Mode (stereo), channel (Analog), and gain (100).
- Program Info:** Fields for output (checked), program name (TV-101), provider name (TV-Provider), service ID (101), PMT_Pid (100), PCR_Pid (103), Video_Pid (101), Audio_Pid (102), and LCN (1).
- EIT:** A table listing row_date, row_time, row_duration, row_name, next_date, next_time, next_duration, and next_name.



All the specifications are subject to change without any further notice. All rights reserved.

High Lights

- HDMI/YPbPr/AV input for encoding
- MPEG2 and MPEG4 AVC/H264 HD/SD video encoding,
- MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC audio encoding, DD AC3 (2.0) optional
- CC(Closed Caption) optional
- AC3 Passthrough
- Record encoded TS and playback TS files (*.ts) through USB port
- DVB-C, DVB-T RF output optional
- Transmission mode (FFT): 2K, 8K (applied in DVB-T modulation)
- Enhanced USB function: more stable and compatible with Hard Disks and USB Keys of various brand
- USB device error self-detection and removal, ensure USB device running uninterrupted
- Volume adjustable
- Easy operation with LCD + control buttons, and Web-server management

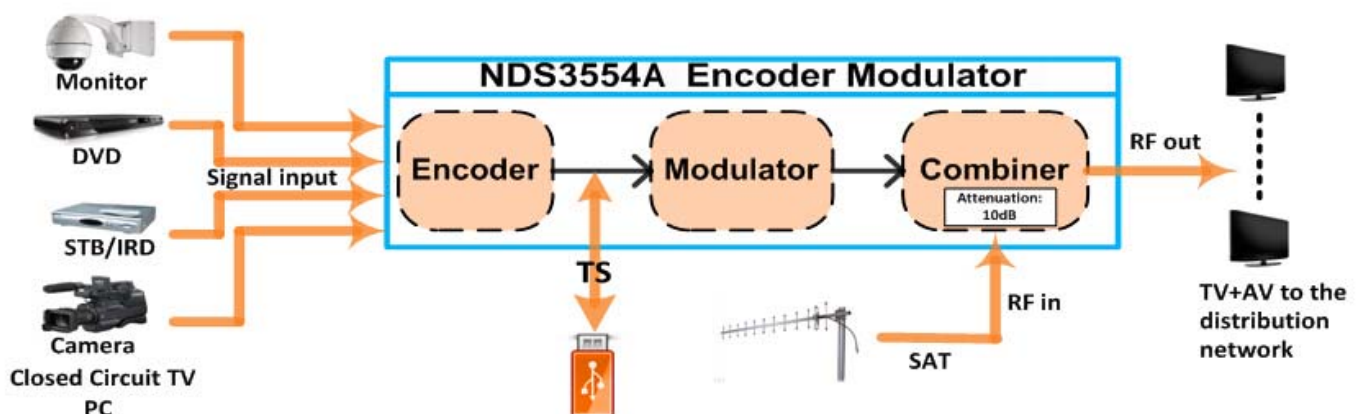
Product Overview

NDS3554A encoder & modulator is DEXIN's consumer electronics which allow audio/video signal input in TV distributions with applications in home entertainment, hotel Digital Signage, shops etc.

It is an all-in-one device integrating MPEG2 HD/SD and MPEG4 AVC H.264 HD/SD encoding and modulating to convert video/audio signals to digital RF out in the frequency range of 30~960MHz.

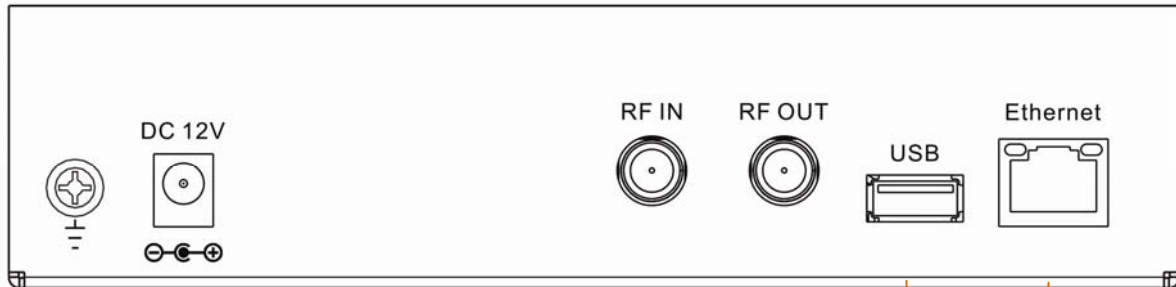
The signals source could be from satellite receivers, closed-circuit television cameras, Blue-ray players, and antenna etc. Its output signal is to be received by TVs or STBs etc.

Principle Chart



Appearance

Front Panel Illustration



DC 12V Power in

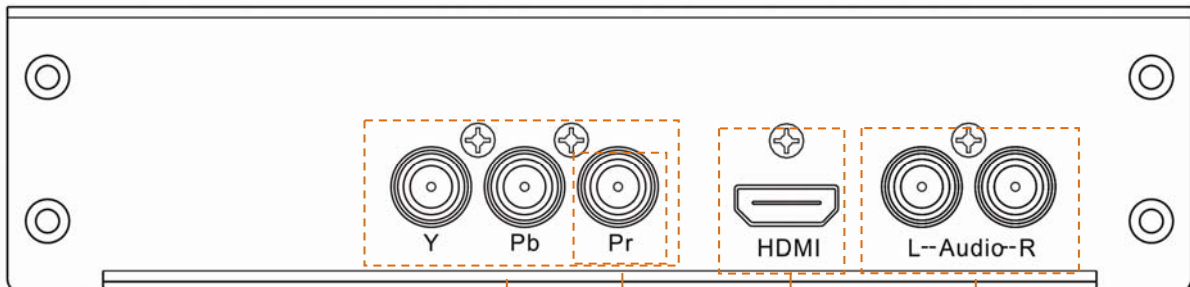
RF in

RF out

NMS (Network management port)

USB Port for Video Record, Save,
Playback and System Upgrade

Rear Panel Illustration



Composite Video Input via RCA (CVBS)

Component Video Input via RCA (YPbPr)

HDMI Input

Left/Right Audio Input

Technical Specifications

Encoding Section			
HDMI	Video	Encoding	MPEG-2, MPEG-4 AVC/H.264
		Interface	HDMI*1
		Resolution	1920*1080_60P,1920*1080_50P → (for MPEG-4 AVC/H.264 only) 1920*1080_60i, 1920*1080_50i; 1280*720_60p, 1280*720_50P
		Bit rate	0.500~19.500 Mbps
		Encoding	MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, Dolby AC3(optional)
	Audio		AC3 Passthrough
		Interface	HDMI
		Sample rate	48KHz
		Bit rate	64, 96,128, 192, 256, 320, 384kbps
		YPbPr/ CVBS	Video
Interface	CVBS *1, YPbPr*1 (RCA)		
Resolution	CVBS: 720x576_50i (PAL); 720x480_60i (NTSC) YPbPr: 1920*1080_60i, 1920*1080_50i; 1280*720_60p, 1280*720_50P		
Bit rate	0.500~19.500 Mbps		
Encoding	MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, DolbyAC3(optional)		
Audio			AC3 Passthrough
	Interface		1 Stereo /2 mono
	Sample rate		48KHz
	Bit rate		64, 96,128, 192, 256, 320, 384kbps

DVB-T Modulator Section	
Standard	DVB-T COFDM
Bandwidth	6M, 7M, 8M

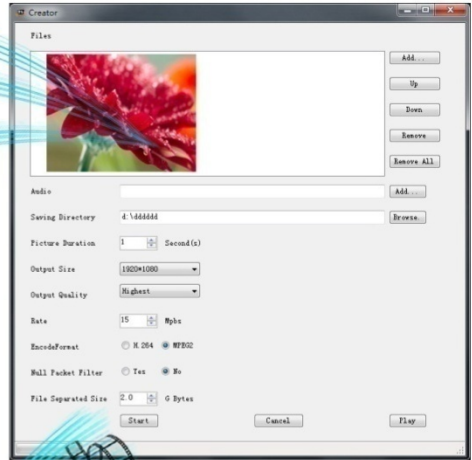
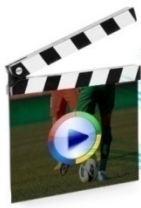
Constellation	QPSK, 16QAM, 64QAM,
Code rate	1/2, 2/3, 3/4, 5/6, 7/8.
Guard Interval	1/32, 1/16, 1/8, 1/4
Transmission	2K, 8K
Mode:	
MER	≥42dB
RF frequency	30~960MHz, 1KHz step
RF output level	-16~ -36 dBm (71~91 dbμV), 0.1db step

DVB-C Modulator Section (Option)			
Standard	J.83A (DVB-C)	J.83B	J.83C
Constellation	16/32/64/128 /256 QAM	64/ 256 QAM	64/ 256 QAM
Bandwidth	8M	6M	6M
MER	≥43dB		
RF frequency	30~960MHz, 1KHz step		
RF output level	-16~ -36dbm(71~91 dbμV), 0.1db step		
Symbol rate	5000-9000 Ksps		

System	
Management	Local control: LCD + control buttons
Language	English
LCN Insertion	yes
General	
Power supply	DC 12V
Dimensions	200*237*49mm
Weight	< 1kg
Operation temperature	0~45℃



USB Recorder & Player



TS Recorder and Save:

NDS3554A can encode the source video to *.ts files and save them through the USB flash drive.

• Connect the signal source to NDS3554A and start encoding process.

• Start the record process and save the TS generated to the USB flash drive.

*.ts Video Creation Software:

Users can also create *.ts videos containing pictures, videos and music with our creator software on a PC and save them into the USB flash drive.

• Drag the files to "Creator" application. Formats supported include:
Image: JPG, PNG, BMP, GIF
Audio: MP3, WAV
Video: WMV, MPG, MP4, TS, AVI...

• Start the conversion process to generate *.ts videos



TS Playback:

• Insert the USB flash drive with *.ts videos in NDS3554A and play back the content in an easy way.

• A single video can be up to 2G in size and multi videos can be played on a loop.



USB Flash Drive Specifications Required:

- Standard: High Speed 2.0
- File System: FAT 32
- Memory: 32G is suggested



All the specifications are subject to change without any further notice. All rights reserved.

Add: No. 10 & No. 12, Wuxing Fourth Road, Wuhou District, Chengdu 610045, Sichuan, P.R. China

www.dsdvb.com/English Tel: +86-028-85558928 Fax: +86-028-85585255 Email: sunyu@dsdvb.com

Typical Applications

...for communities of residents
an information channel on their television



...for restaurants
information about daily menus ,special deals,etc



...for hotels
meeting rooms,exhibitions,message,etc



...for hospitals
training courses, healthy guide, etc



...for Public Spaces
advertising,user information,news,etc



...for shopping centres
new collections,special deals,etc



**Create your own advertising and information
Channel using only your NDS3554A Encoder Modulator**

Technical Compare

Main Features	DEXIN NDS3554/3554A/NDS3556/NDS3558	Competing Products
Encode	<ul style="list-style-type: none"> MPEG2 HD/SD; MPEG4 HD/SD 	<ul style="list-style-type: none"> MPEG2 SD
Record TS to USB memory	<ul style="list-style-type: none"> Yes 	<ul style="list-style-type: none"> No
*.ts files play-mode	<ul style="list-style-type: none"> Both Multi/Single files loop Support HD&SD video play 	<ul style="list-style-type: none"> Single file loop Support only SD video play
TS Creator.exe	<ul style="list-style-type: none"> HD video to HD video transform Null Packet Filter, effect bit rate up to 90% Support output video size, rate, and format control 	<ul style="list-style-type: none"> HD video to SD video downscale No Null Packet Filter, effect bit rate only around 50%
Single video length	<ul style="list-style-type: none"> 2-3 Hours HD/SD 	<ul style="list-style-type: none"> 40 Minutes SD
Management	<ul style="list-style-type: none"> Local: LCD + control buttons Remote: web-server control (3554A/3558) 	<ul style="list-style-type: none"> Local: LCD + control buttons



All the specifications are subject to change without any further notice.All rights reserved.

Add:No.10&No.12,Wuxing Fourth Road,Wuhou District,Chengdu 610045,Sichuan,PR China
www.dsdvb.com/English Tel:+86-028-85558928 Fax:+86-028-85585255 Email:sunyu@dsvb.com