NetUP Streamer HDMI 1x

User manual

20 March 2019





1/7, Ulofa Palme str., Moscow, Russia +7 (495)510-1025 | info@netup.tv | http://netup.tv

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Chapter 1 Introduction

NetUP Streamer HDMI 1x – is an encoding device for IP broadcasting. It can receive signal from an STB, PC, TV, etc., and broadcast a live stream through the Internet or LAN. The live stream then can be received on a PC, phone, tablet, etc. NetUP Streamer HDMI 1x lets one access an IP STB, PC or TV anywhere, whether in the same building or across the globe. You will never miss a game or a favorite show.

The device accepts signal from HDMI sources and encodes it to MPEG 4 AVC/H.264, it broadcasts the output signal over UDP (unicast/multicast), RTMP or HLS. NetUP Streamer HDMI 1x is also capable of writing output stream to a USB drive as TS files and broadcasting from those files later.

Input	1 HDMI			
	Resolution	1920x1080_60p, 1920x1080_60i		
		1920x1080_50p,1920x1080_50i		
		1280x720_60p ,1280x720_50p		
VIGEO		720x576_60i ,720x576_50i		
	Bitrate	1~15 Mbps		
	Format	MPEG-4 AVC/H.264		
Audio	Bitrate	48, 64, 96, 128 kbps		
	Format	MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC		
	Sample rate	48 KHz, 44.1 KHz (RTMP)		
Output	UDP (unicast/multicast), RTMP, HLS (100/1000 Mbps)			
System	Web-based management			
System	USB update			
	Dimension (W×L×H)	183 mm × 110 mm × 45 mm		
Other	Approx. weight	1 kg		
parameters	Temperature	0~45°C (work)		
	Power requirements	DC12V		

Specifications



Chapter 2 Installation guide



Device's installation flow chart

Before installing and connecting the device, carefully read the grounding requirements, as well as safety instructions for the sake of your safety and for the safety of the device

Packing list check

Check items according to packing list. Normally it should include the following items:

- NetUP Streamer HDMI 1x
- Power Cord
- HDMI cable
- Network cable

Safety instructions



NetUP Streamer HDMI 1x power supply voltage should be DC12V

- Before installing and connecting the device make sure that the device was not damaged during delivery.
- Install the device in an appropriate place. The device is designed to work in a clean and dry room. It must be operated and maintained free of dust.
- Before switching on the device make sure that it is adjusted to the mains voltage you intend to use. Make sure that you keep within the specifications AC 100V-220V±10%, 50/60Hz.
- Check that all the cables are connected properly. Connect cables only to a device that is turned off.



Grounding requirement

• Connect the ground wire to the grounding hardware on the device. Ground resistance should be no more than 1 Ω .



Grounding is essential for device's functionality, surge and electronic interference protection

- Keep proper contact with the metal housing of the device
- Grounding wire must be made out of copper and as thick and short as possible
- Make sure the two ends of grounding wire conduct electricity and are not rusty
- It is prohibited to use any other devices as a part of grounding electric circuit
- All racks should be connected with a protective copper strip. Ground loops should be avoided
- Grounding wire's contact area with the rack should be no less than 25mm²



Chapter 3 WEB NMS Operation

Use the Web interface to control NetUP Streamer HDMI 1x.

Login

Connect a personal computer and the device with net cable, and use ping command to confirm they are on the same network segment.



Make sure that the computer's IP address is different from the device's IP address; otherwise, it would cause an IP conflict

The default IP address of NetUP Streamer HDMI 1x is **192.168.200.64**. Thus, set the computer's IP address to 192.168.200.X, where X can be from 0 to 255, except 64. Open a web browser, enter the device's IP address in the browser address bar and press **Enter**. If the network is configured correctly, you will see the login interface (Figure 1).

Enter username and password and click **LOGIN** to enter the web interface. Default username is "admin", default password is "admin".



Figure-1



Status information

After login, you will get the Status page which displays the current system status (Figure-2).

s Parameter Save Backup System - Tools -	Use this menu to naviga between the interface p	te ages		CP0:5.000009
STATUS INFOMATION				Status area.
	CHI	CH2	CH3	Green light
Work Status				indicates normal
Alarma	none	none	none	status, grey
Work Time	0days-00:17:40	0days-00:17:26	0days-00:00:	indicates error
Input Resolution	1280x720F050Hz	1280x720P050Hz	1280x720P050	indicates error
Output Resolution	1920x108013AUTO	720x57610AUTO	1280x720P@AUT	0
Output BitRate	3000kbps	2000kbps	3000kbps	To The second
Output Url	http://192.168.200.69:8080/output0.m3u8	http://192.168.200.69:8080/output1.m3u8	udp://224.2.2	.2:8882
System information		Software 1.0 Hardware 1.0	ersion info	ormation



Param setting

NetUP Streamer HDMI 1x supports up to three output streams simultaneously (different bitrate, resolution, protocol, etc.). Use the **Param setting** page to access the encoding and broadcasting settings of each of the three available output streams (Figure-3).

MB NET:0/0KB/= StartAll StopAll Cl
M
4

Figure-3



Save/Restore config

Use the **Save/Restore config** page to save current settings or restore from saved ones or from factory settings. The encoder applies saved settings after each reboot, therefore discarding any unsaved changes (Figure-4).

NetworkEncoder	
Status Farameter Save Backup System - Tools - CP	
SAVE/RESTORE CONFIG	
Save When you change the parameter,you shoud save configuration ,otherwise the new configuration will lost after reboot.	
Restore Load latest saved configuration, after click the "Load" then please click the "Save" button, otherwise the "Restore" parameter will lost after reboot	
Factory Set all configuration back to default, after click the "Factory Set" then please click the "Save config" button, otherwise the default parameter will lost af	ter reboot.
Save Restore Factory	
Save Restore Factory	

Figure-4

Backup/Load config

Use the **Backup/Load config** page to download current configuration and save it on a local storage device. It also allows you to restore settings from a local file (Figure-5).

NetworkEncoder		
Status Parameter Save Backup System -		MEM:170/216MB
BACKUP/LOAD CONFIG		
Backup		
Backup current configuration to the local file, we suggest do this before set the configuration or update firmwas	æ.	
Load Configuration		
Load the backup file to restore your configuration. Warning: 1. New configuration will replace the old one,please backup current configuration before load file.If you use a 2. Please do not turn off the power while file loading, otherwise the device will not work.	wrong file,the device m	ay not work.
Choose File Nosen	Backup	

Figure-5



System → Upgrade

Use the Upgrade page to upgrade device's firmware (Figure-6).



Figure-6

System → Usrinfo

Use the Usrinfo page to change current password and username (Figure-7).

NetworkEncoder		
Status Parameter Save Backup System - Tools -		
USRINFO Intro Modify the login name and passwor	d to make the device safely.	
Setting	Current User Name Current Password New User Name New Password Confirm New Password	Confirm changes

Figure-7

System → Setting

Use the **Setting** page to setup port and channel name for http output (CH1, CH2, CH3).



System → Network

Use the Network page to setup device's network adapter (Figure-8).

NetworkEncoder	
Status Parameter Save Backup System -	CRU:2.985077W MEM:170/210MB NET:0/0KD/S Start≪ Stop≪ Cles
NETWORK	
IP Address	
The manage address, use this address to visit the manage web.	The format is xxx.xxx.xxx(like 192.168.200.64). After set the new IP address,you must reboot the divice .
Subnet Mask	
It must be the same in a local area network(like 255.255.255.	.0,1,
Gateway	
If the device is in different net segment, you must set the ga	ateway.The format 18 жжж.жжж.жжж.кжж (like 192.168.200.1).
Broadcast	
If the device is in different net segment, you must set the br	roadcast.The format is xxx.xxx.xxx.xxx(like 192.168.200.255).
Mac Address	
If you need, you can modify the mac address. The format is xx:: mac address.	xx:xx:xx:xx(like 00:80:45:76:E0:F5).And The second bit must be even. If you are not sure,please donot modify the
- Fing IF Address	
Ping target ip address function,	
Setting	
IP Address	10.1.2.200
Netmask	255.255.0.0
Gateway	10.1.2.5
Broadcast	10.1.2.255
Mac Address	62:08:25:64:00:40
Dris	10.1.2.5
Ping IP Address	
	Apply Ping

Figure-8

System → RTMP Flash Player

Use the **RTMP Flash Player** page to open the built-in RTMP player (Figure-9).



Figure-9



Chapter 4 Usage examples

To record TS files on USB

- 1. Connect a USB storage device to NetUP Streamer HDMI 1x.
- 2. Open the web interface and go to the **Param setting page.** Select 'USB' on the **Output → Protocol** panel.



The device continues to record until the file reaches the specified size (the Time slice parameter is the file length in minutes), and then creates a new file and continues recording until the USB storage device runs out of free space. When the free space runs out, the device deletes the oldest of the TS files, and continues recording

To play from recorded TS files

- 1. Connect a USB storage device to NetUP Streamer HDMI 1x.
- 2. Open the web interface and go to the Param setting page. Select 'USB' on the Input Src panel.



Before you start playing from USB, you must first stop all output streams

Connect device over LAN



- 1. Connect the device to a signal source (STB, DVD, etc.) with a signal cable or insert a USB storage device with TS files to use as a signal source.
- 2. Make sure the source resolution is in the list of supported resolutions (see <u>Specifications</u>).
- 3. Connect NetUP Streamer HDMI 1x to a Wi-Fi router (make sure that the device's IP address and router's IP address are in the same network segment).
- 4. Connect your mobile device to the same Wi-Fi.



Set up to receive video and audio on phones, tablets or computers

Drotocol	Mobile devices				1 – web browser
Protocol	iOS	Android	IPSIB	PC	2 - 3rd Party Media Player like VLC, Buzz
UDP	2	2	4	2	3 – browser with in HLS plug-in
RTMP	2	2	4	1 or 2	4 - depends on what protocols are supported
HLS	1 or 2	2 or 3	4	2	by the STB

What software is required to receive a video stream from NetUP Stream HD 1x:

To play HLS on Apple devices use Safari browser. Enter in the browser bar an address similar to this http://IP_address:port/channel_name.m3u8, for example, http://192.168.0.136:12003/prog1.m3u8





Android devices need an "HLS plug-in" for HLS playback

To play video and audio on mobile devices or PC use VLC. Run the player, open the settings and go to the Open Network Stream tab. Enter here an address similar to one of these:

HLS	http://IP_address:port/channel_name.m3u8
	for example, http://192.168.200.66:8080/output0.m3u8
RTMP	rtmp://IP_address:port/channel_name, for example, rtmp://192.168.200.55/live/output0
UDP	udp://@IP_address:port, for example , udp://@192.168.0.137:12002



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Troubleshooting

Check the following before troubleshooting:

- Whether the server room is well ventilated and hot air from the back panel of the device is effectively removed?
- Does the supply voltage meet the power requirements of the device?
- Are all cables connected correctly?

Turn off the device and unplug the power cord in the following cases:

- The power cord or socket is damaged.
- A liquid is splashed on the device.
- A short circuit has occurred.
- The device is in damp environment.
- The device suffered from physical damage.
- Longtime idle.
- After switching on and restoring to factory setting, device still cannot work properly.
- Maintenance needed.



Frequent on and off switching is prohibited; the interval between switching the device on and off must be more than 10 seconds

