

NDI CORE MAX

Quick Start Guide V1.0



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Before using this product, it is recommended that you read the guide carefully. To ensure your personal safety and avoid physical or electrical damage to the device, please strictly follow the instructions of this guide to install and use it under the guidance of professionals. Incorrect electrical connections or physical installation may cause permanent damage to the device and even threaten personal safety.

1 Packing List



2 Device Interface





- 1. Power ON/OFF
- 3. Power Port
- 5. 2.5G Ethernet

- 2. 5.5 Inch Touch Screen
- 4. HDMI/DP Port
- 6. 2*40G optical port SFP+

3 Applications





Introduction

NDI Core mainly solves the issue that the NDI encoder cannot be pulled by multiple back-ends at the same time. The video source is virtualized into multiple NDI channels for output by NDI Core, and more functions such as video source switching and video play list are integrated.

By creating a play list, users can freely set the program source, dynamically adjust the playback sequence, playback time to achieve the sequence, loop, and switch playback of video sources.

- NDI video sources support NDI and NDI|HX input compatible with any other software/hardware output NDI to the NDI Core system.
- When the Switcher receives NDI|HX, the virtual output is also NDI|HX. If the video source is NDI, the output is also NDI.
- Due to compatibility, it is recommended that the optical module used for the optical port of the device and the switch be of the same brand and type. If the actual transmission distance is less than 500 meters, you can choose a multi-mode optical module. For the transmission distance greater than 500 meters, it is recommended to choose a single-mode optical module.
- The device comes with two redundant power supplies. If only one power supply is connected, it will beep all the time, and hot-swap replacement is supported.
- The device comes with two 40G optical ports, which can be connected to the network for NDI input and output.

4 5.5-Inch Touch Screen Configurations

4.1 Network Settings

Click "System Setting"-"Network Setting" on the screen to configure the service IP address, subnet mask and gateway. After saving, the IP address is used for WEB management and video preview, and also supports DHCP automatic acquisition.

Overview		Settings		IE₩°	NDI CORE		00	A
ବ୍	Pass	sword	<u>Net0(1000Mb)</u>					
			NIC name:	enp4	4s0			
	Network		IP address:	192.	168.20.1			
	SSH	Config.	Gateway:					
- -		5	Subnet mask:	255.	255.255.0			
HTTP://	HTT	P Port	DNS1:	8.8.8	3.8			
~	Restore Factory		DNS2:					
গ্যে			DHCP:			no		>
	Scre	en Timeout						ОК

4.2 Login to the NDI CORE

Click the "QR code" icon in the upper right corner to login to the webpage with two methods.

- Method 1: Enter the <u>http://IP</u> in the browser to visit the webpage
- Method 2: Scan the QR code to visit the webpage







http://192.168.20.1:81

Screen Timeout •



Note:

Due to the compatibility, it is recommended to use the Chrome or Edge to enter the webpage.

- To ensure information security, please change your initial password first time you login.
- The NDI CORE login port is 81 by default.

4.3 System Settings

When the device is connected to the network, you can enable or disable SSH control, and

change the HTTP port and restore factory settings.

Overview	Settings		A				
ි Pas	sword						
Metv	work	SSH Configurations: Disable Disable Disername: admut					
SSH	l Config.	SSH port: <mark>- 22 +</mark>					
HTTP# HTT	P Port	Change the default SSH password 1234567 Please remember this password. To ensure	18 e				
() Res	Restore Factory future						
Co Scre	en Timeout						



- **Password settings:** The password setting is not a public module. The user needs to enter password to check it. The initial password is: 123456, please change your initial password first time you login.
- SSH configurations: When SSH control is enabled, the default username is admin and the port is 22. Clicks [Reset SSH Password], and the system will automatically generate a password. And then a warning text will be displayed: "Please remember this password, for security, the SSH password will not be displayed in the future",
- HTTP port settings: Support to change the port

5 Login to NDI CORE MAX

Enter http://server IP: 81/ in the browser and log in to the NDI CORE webpage. The username

and the password both are *admin* by default.

KILOVIEW®	
NDI Core (Pro Version)	
admin	
•••••	
Login	



Note

- To ensure information security, please change your initial password first time you login.
- The NDI CORE login port is 81 by default.

6 Dashboard

Click "Dashboard" on the WEB page to check the system information includes network status,

system status, resources and logs.

	NDI Core (Pro Version)	💄 Admin 👻 🐻 👔
🖬 Dashboard	Network Status	
H Panel Control	veth06f9053 70.06M / 1.59M eno1 114.00G / 301.75G	
N Resource Managemént	⊕ 10G ⑧ 0.00bps ⊕ 1000M ⑧ 352.47Kbps ◎ 20.87Kbps	
Metwork Status		
온 User Management		1- 15 C
E Logs	25.4% 2.4%	vin, 15 Sec. Start Time 2022-03-29 01:53:10
	Memory Usage CPU	
	Resources Logs	
	My Panel 1 > admin Users Login Successfully	
	NDI Resource	
	Admin Source 1 Users Login Successfully	
	1 Users Login Successfully	
	admin Users Login Successfully	

Network status:

- eno1: NIC name on the NDI CORE server
- 49.12G/1.37T: Total upstream traffic/downstream traffic of the current device
 - The maximum bandwidth of the current network 📀 Real-time traffic output of the network
 - U Real-time traffic input of the current network

Resources: displays the input sources, outputs and number of panels.

- NDI Source: All user-added NDI video sources, not including those discovered but not added
- NDI Output: All user-created NDI output sources
- My Panel: The number of panels created under the user

7 NDI CORE MAX Configurations

Click "Resource Management" to add and manage the NDI input, NDI output and play list.

NDI Ir	iput (4)					Ø Refresh
						+ Add Input
	Number	NDI Source	NDI Group	Device IP	Status	Operation
	1	N3-20072620127 (Channel-1)	public	192.168.28.92	Official Device	
	2	N1-211110408 (Chan 1)	public	192.168.28.19	⊘ Available	
		N30-30 (Channel-1)	public	192.168.28.93	Ø Official Device	
	4	E2_NDI-210220503 (Chan 1)	public	192.168.28.26	⊘ Available	

Step 1: Add NDI input sources

Click "Add Input" to add the NDI sources to "NDI Input". The source can be added with the following ways

Click "public-auto discovery", all NDI sources under the same network segment of the LAN and in the "public" group can be automatically discovered. And then select the NDI sources to be added.

	NDI Core (Pro Version)						💄 Admin 👻 🗊 👔
Dashboard	NDI Input 1						O Refresh
🛯 Panel Control							+ Add Input
N Resource Management	🗌 No. NDI Sou	rce	NDI Group		Device IP	Status	Operation
NDLInput		Add NDI Source (0)				°, → ilable	Ū
		Manual Discovery NDI Source	public-Auto Discovery	NDI Group	Device IP	0	
NDI Output		DESKTOP-T273N	IB2 (Intel(R) UHD Graphics 630 1)	public	192.168.35.108		
Play List		□ N4-ENCODER-5.	0.11 (Channel-1)	public	192.168.35.195		
Hetwork Status							
윤 User Management							
🗐 Logs							
			Cancel				
			Cancer				

Step 2: Add NDI output

Create NDI virtual output, realize NDI output by controlling NDI input source or play list, and one single NDI source input with multiple NDI channels output.

Click "NDI Output" to enter the NDI output management page. Click "Add Output" to create an NDI output channel.

Add ou	tput				×
No.	* Channel Name	NDI Group	Smooth Parameter	Discovery Server	Operation
1	Output1		Hard ~		Ū
2	Output2		Hard ~		Ō
3	Output3		Hard ~		Ó
4	Output4		Hard 🗸		Ū
		Cancel			



- NDI Channel Name: output NDI channel name. Please use different names for multiple NDI outputs. The combination of text, numbers and symbols are supported. When there are multiple control panels, the panels can use the same output channel, and if the output is not locked to any one panel, it can be switched to.
- For more details, please refer to the user manual.

Step 3: Add panel

Click "Panel Control" to create a control panel, configure the NDI input and output with cross

point and IO panel, and unicast and loop.

< Contr	ol1 🖉								Authority
	l	General	Crosspoint	IO Panel					
NDI Inpu	t(3) Play List(0)	nage NDI Ou	utput(4)					(Manage
Order	NDI Source	Order	NDI Channel Name	Status			Connected	Play List	Operatio
1	N40-20162410027-92A (Channel-1)	1	Output1	☑ 1920x1080@59.94 (128.75M	@ 2.98M		Stopp ~	
2	DESKTOP-T273MB2 (Intel(R) UHD Graphics 630 1)		Output2	🖾 1920x1080@59.94 (M00.0 😒	@ 0.00M			
3	S2_00000000 (Chan1)	3	Output3	💷 1920x1080@59.94 (0.00M	@ 0.00M	0	Stopp ~	
		4	Output4	☐ 1920x1080@59.94 (D.00M	@ 0.00M		Stopp ~	£
10000									
NDI Inp									
N40-20	162410027-92A (Channel-1)								
S 192	0x1080@60 🕑 128.75M 🖉 2.98M								



- General: add the NDI source and NDI output channels by click "Manage" on the right side of NDI input and NDI output.
- NDI source status: the resolution and frame rate of the NDI sources, and the video and audio real-time encoding bit rate
 of the inputted sources.
- NDI output: the NDI output channel created when the panel is added. When there is a device at the back end to create a certain output, the output status displays the decoded resolution, frame rate, video and audio bitrate.
- Play list: when the NDI output channel selects "Loop", all the NDI input video sources in the list will be displayed. A circle of time progress status will appear on the right side of the video source.
- Crosspoinnt/IO Panel: configure the NDI input and output by the crosspoint. The green square indicates that the NDI input sources will output from the NDI output channels.
- For details, please refer to the user manual.

Step 4: Crosspoint and IO panel

Configure the NDI input and output by the crosspoint. The green square indicates that the NDI

input sources will output from the NDI output channels.



In the "IO Panel", except the display, all the other operations is exactly the same as "Cross Point". Click the OUT1, you can see that the first NDI source is displayed in green, indicating that the NDI video source is output from OUT1, when click the second video source, and it turns green, it means that the second one is output from OUT1.



8 Output and Play



Download Kiloview Multiview for free

Visit the website https://www.kiloview.com/cn/ndi/multiview, click "Get it now" to download Multiview, and install the software step by step.

Kiloview Multiview is a free NDI video discovery, management and multi-screen monitoring software.

Enter the management page of Kiloview Multiview, find the NDI channel output in the

"Discovery".





Introduction

The rules for the name of the output NDI streams from NDI CORE: NDI (dst-channel name), the channel name is the name of "Add Output"



Website for Kiloview official technical support

https://www.kiloview.com/cn/support/



Changsha KILOVIEW Electronics Co., Ltd https://www.kiloview.com/ Address: B4-106/109 B4-106/109, Jiahua Intelligence Valley Industrial Park, 877 Huijin Road, Yuhua District, Changsha,China Email: support@kiloview.com Tel: 18573192787