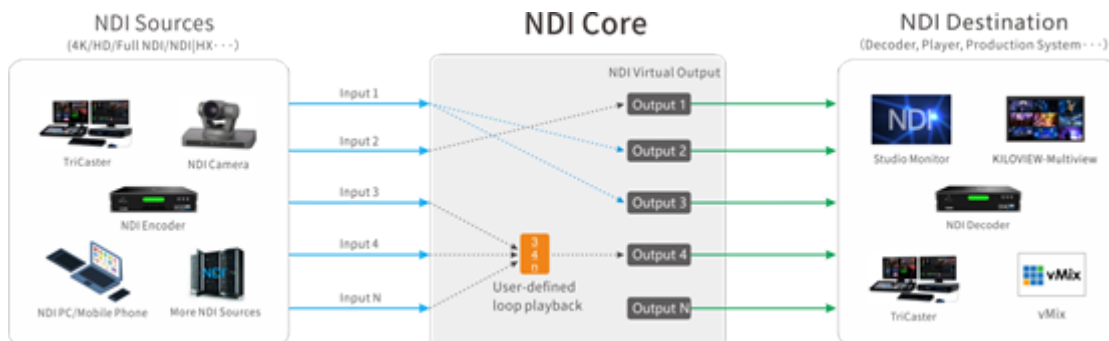


NDI Core User Manual(Pro)

1. NDI Core Introduction



Introduction:

NDI Core mainly solves the issue that the NDI encoder cannot be pulled by multiple back-ends at the same time. NDI Core virtualizes the video source into multiple NDI channels for output, and integrates more functions such as video source switching and video playback.

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 FULL NDI and NDI|HX input compatible with any other software/hardware output NDI to the NDI Core system.

When NDI Core receives NDI|HX, the virtual output is also NDI|HX. If the video source is FULL NDI, the output is also FULL NDI.

It is recommended to use a 10 Gigabit port at least for NDI Core. If you need more NDI streams, you can choose a high network port or multiple network cards.

2. Login to NDI Core

Enter <http://server IP: 81/> in the browser and log in to the NDI Core system. The user name and the password both are **admin** by default.



NDI Core (Premium Version)

Note:

To ensure information security, please change your password immediately after logging in for the first time!

NDI Core login port is 81 by default.

3. Dashboard

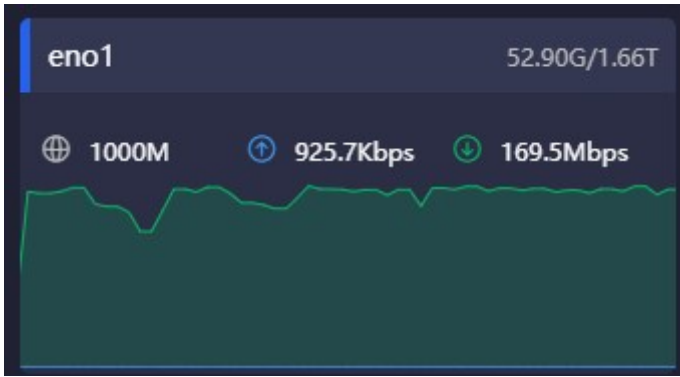
Click "Dashboard" on the WEB page to check the system information includes network status, system status, resources and logs.

Network status

Shows all network device information and traffic statistics on the NDI server.

Introduction:

eno1: Switcher The name of the network card on the Switcher server. **59.90G/1.66T**: Total upstream traffic/downstream traffic of the current device The maximum bandwidth of the current device



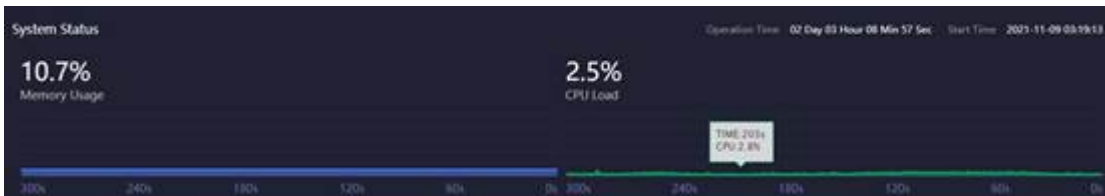
: Real-time traffic output of the current device



: Real-time traffic input of the current device



System status



Introduction:

When the system memory and CPU are too high, please confirm whether the performance of the NDI Switcher device is insufficient due to a large number of transmissions. You may need to update your hardware system.

The time line below shows the memory and CPU usage in the past time, and the current time is 0s.

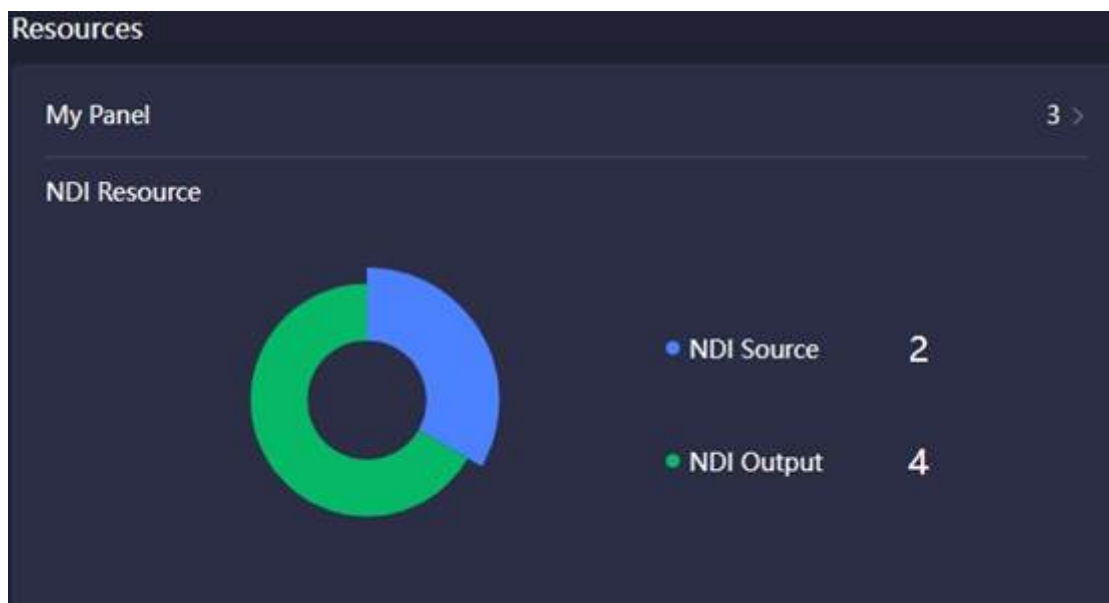
Memory Usage:** Current memory usage

CPU Load: Current CPU Load

Operation Time: Total running time of NDI Switcher system

Start Time: NDI Switcher start time

Resources



Introduction:
Total NDI input: All NDI video sources added by users, but excludes NDI video sources that are not added.
Total NDI output: All NDI output sources created by users.
My Panel: The numbers of control panels created under the current user.

Log

Statistics of all operations on the NDI Switcher system include the time and the account of the operation, which is conducive to troubleshooting.

User	Operation	Timestamp
admin	NDIInput Add Success	2021-11-11 14:10:24
admin	Panels Remove Success	2021-11-11 14:10:17
admin	Users Manage Login Success	2021-11-11 13:47:01
test	NDIInput Add Success	2021-11-11 13:46:36
test	Users Manage Login Success	2021-11-11 13:46:26

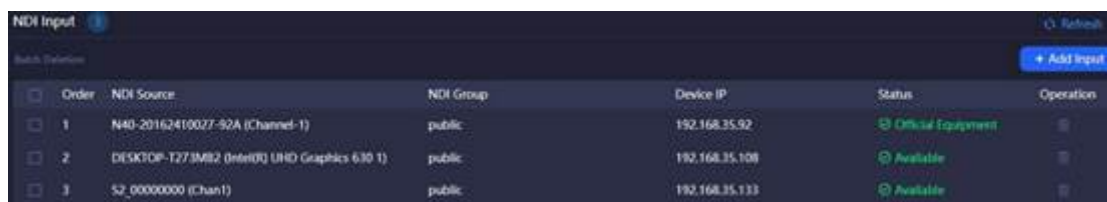
4. Source Management

Click "Source Management" to enter to the NDI input or output to add and manage video sources.

NDI Input

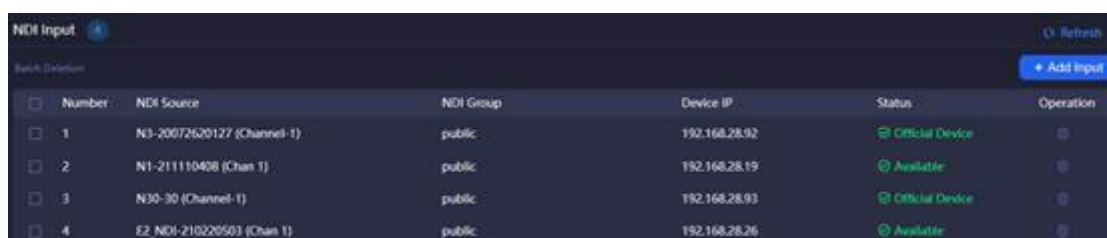
Click "NDI Input" to enter the NDI input source management page. Click "Add Source", all NDI sources under the same network segment will be automatically discovered and displayed. Select the NDI video source that needs to be added and saved.

Note Not all discoverable NDI sources will be transmitted through the NDI Core. Only by adding to the NDI input resource and being added and used in the control panel, can the NDI Core be used to switch and copy the output. 1 All NDI sources under the same network segment will be automatically discovered and displayed through "Public auto discovery". Select the NDI video source that needs to be added and saved.

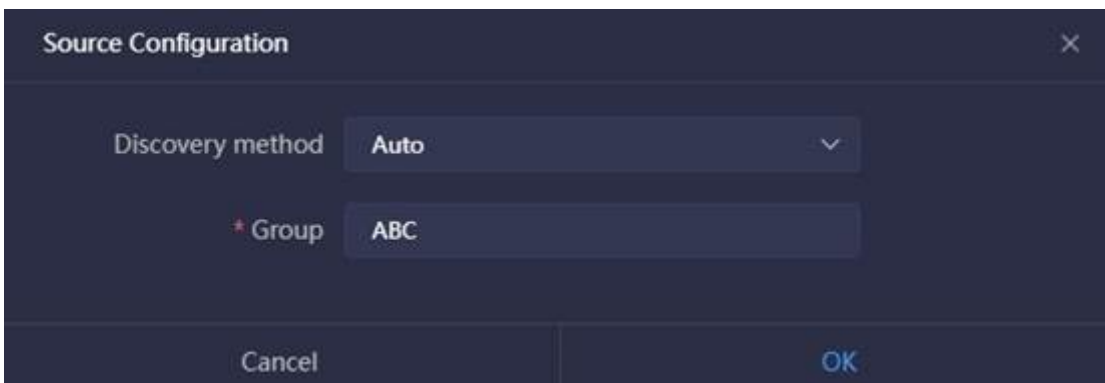
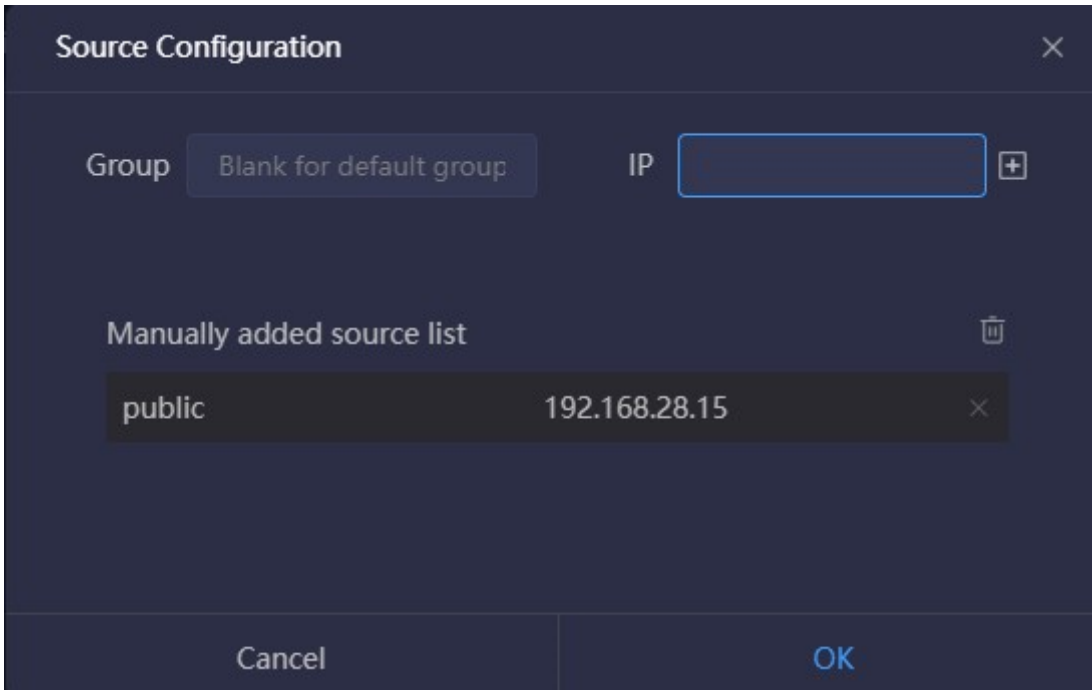


Order	NDI Source	NDI Group	Device IP	Status	Operation
1	N40-20162410027-92A (Channel-1)	public	192.168.35.92	Official Equipment	
2	DESKTOP-T273MB2 (Intel® UHD Graphics 630 1)	public	192.168.35.108	Available	
3	S2_00000000 (Chan1)	public	192.168.35.133	Available	

2 When the NDI source is in a different NDI group but under the same network segment, click to enter the source configuration, and select "Auto". It will automatically discover all the NDI sources of the current group after entering the name of the group. 3 The sources automatically discovered by the above method are the sources under the same subnet in the LAN, and the sources are in the public group. If the sources are not in the same subnet or not in the public group, please add to the list manually. 4 When the NDI source cannot be auto discovered, such as the NDI source is in the same LAN but across network segments, the NDI source can be added manually. Note: Group: The group name of the NDI video source. Default is public. IP: Fill in the IP address of the NDI source, click "enter" or in the right to add the IP address to the list. Discovery Server When the NDI source is registered to the discovery server which leads the auto discovery is replaced, it is required to register the sources to the discovery server. Enter the source configuration by the button, select "Discover Server", and fill in the same discovery server address and group as the NDI source. IP: The IP address of the discovery server registered by NDI. Group: The group name of the NDI video source. Default is public group. The NDI input source added and saved by the above method will be displayed on the NDI input box, and the associated NDI output can be used in the cross panel.



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	
3	N30-30 (Channel-1)	public	192.168.28.93	Official Device	
4	E2_NDI-210220503 (Chan 1)	public	192.168.28.26	Available	

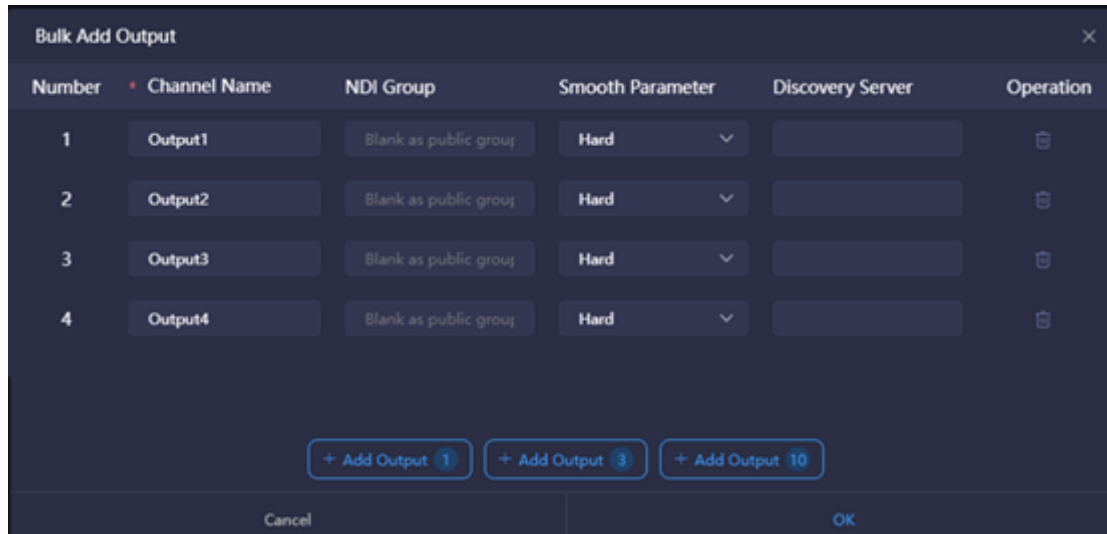


NoteStatus: "Official Device" means that the NDI video source comes fromKiloview NDI devices or software; "Available" means unofficial equipment, which can be used to connect to NDI output; "Beyondauthority" means unofficial equipment that exceeds the output of themaximum video sources.

NDI Output

To create NDI virtual output, realize NDIoutput actual NDI video source by controlling input NDI source or play list,and support single NDI input source to multiple NDI channels output.Click "NDI

Output" on the left to enter the NDI output management page. Click "Add Output" on the right side of the management page to create an NDI output channel.

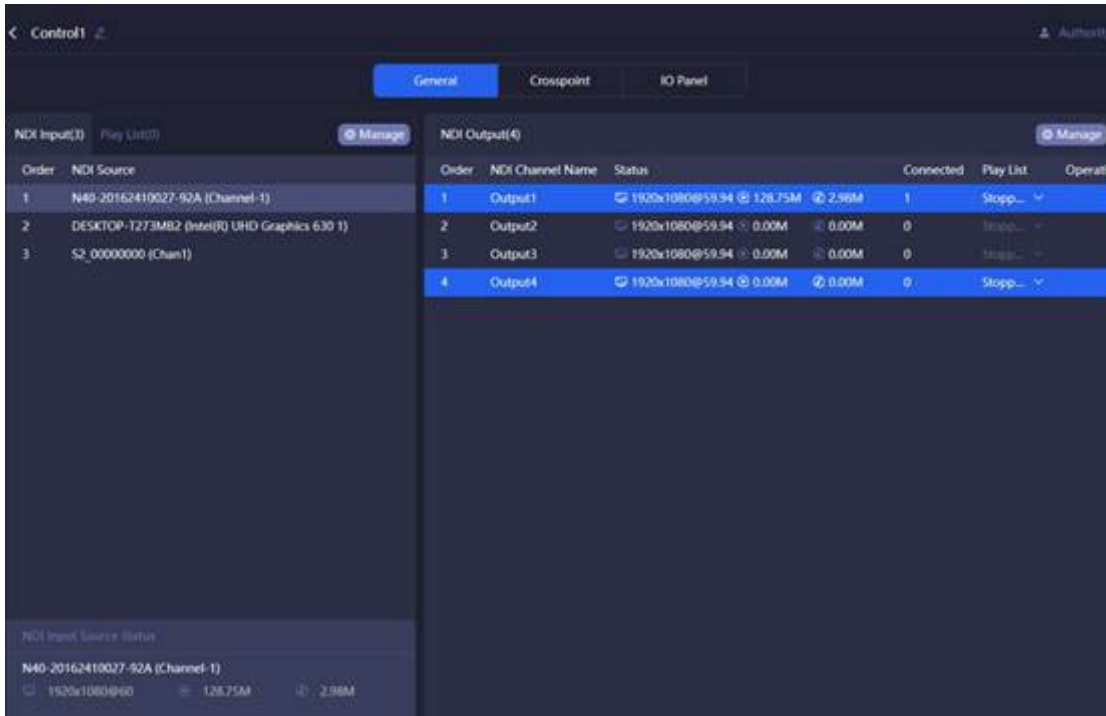


Introduction: Note NDI Channel Name: Output NDI channel name. Please use different names to create multiple NDI outputs. The combination of text, numbers and symbols are supported. When there are multiple control panels, panels can share the same output channel, if the output is not locked on any panel, you can switch and do other operations. **NDI Group**: Assign NDI output to the specific name's group. Default is public group. The group name can be a combination of English letters, numbers, and special symbols. It supports sending data to multiple groups, and please use commas to separate groups. **Smooth Switching**: When switching between different sources, to ensure a smoother stream output, it is recommended to set a switching delay. If the resolution and frame rate of the switched NDI video sources remain the same, the switching output can be smoother as well. **Discovery server**: Fill in the IP address of the discovery server, and register the NDI output to the corresponding discovery server. The receiving end also needs to register to the same discovery server to discover the stream. **Add output 1**: Click "Add output" according to the corresponding number, if you click "Add output 10", then 10 NDI output channels will be automatically added.

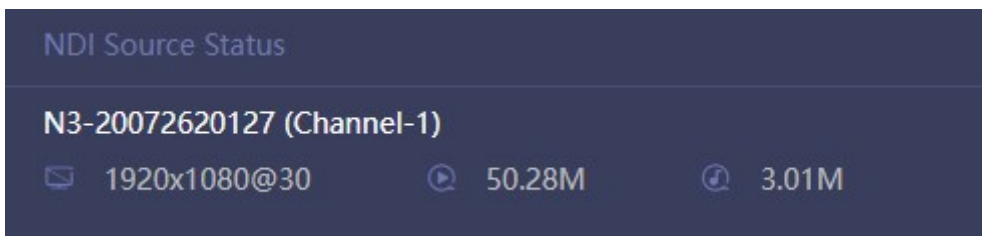
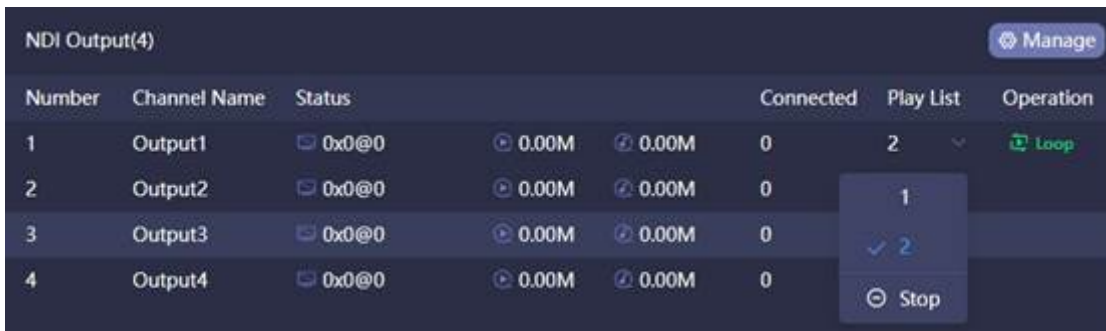
5. Panel Management

5.1 General

To add the NDI source and NDI output channel required by the current panel through the "Manage" button corresponding to NDI input and NDI output.



Introduction: Note The resources that can be used for NDI input and output are the NDI videosource and NDI output channel added in "Chapter 4 Resource Management" .Status of NDI input source Select the NDI source, the information status of the NDI input source is displayed at the bottom. Note The resolution and frame rate of the source. The real-time bitrate of the video encoding. The real-time bitrate of the audio encoding. NDI Output The NDI output channel created when the panel is added. When there is a device at the back end to get stream from a certain output, the output status displays the decoded resolution, frame rate, video and audio bitrate. Connected: The number of the back-end streams is decoded by the NDI output channel. Play list: Click the down button to select play list. When you want to change, please stop the current one first. Please refer to the "PlayList" chapter for more details. Operation: Set the mode of the play list to "Loop" or "Single" play. After the end of a single play list, the loop playback will continue to play the last NDI source by default; after the loop is played to the end of the last NDI source, it will return to the first NDI source to continue the loop play.



Play List

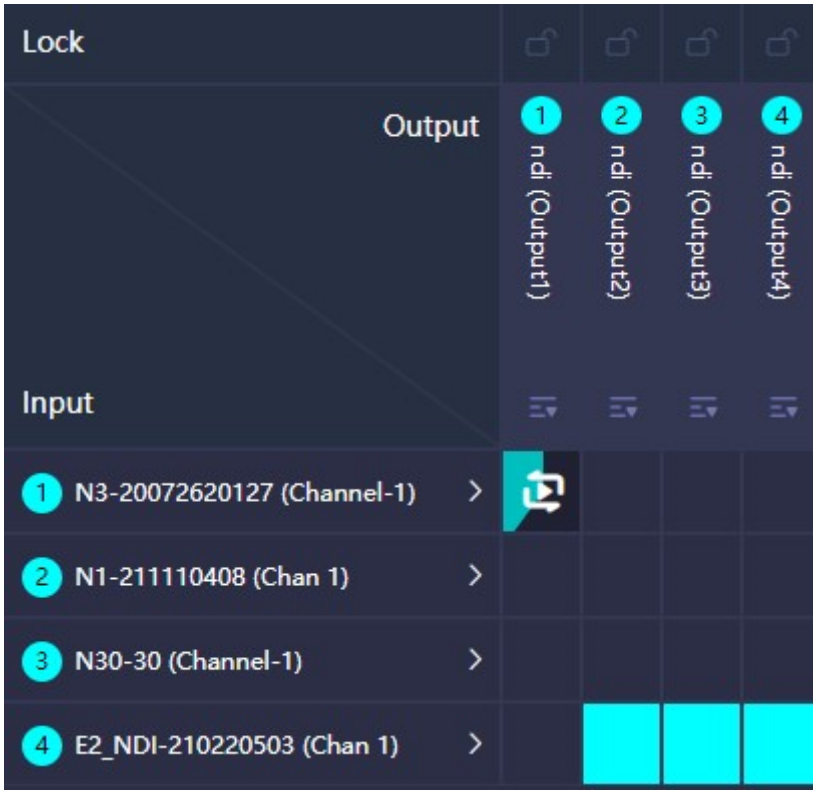
When the NDI output channel selects the loop, all the NDI input video sources in the list will be displayed. A circle of time progress status will appear on the right side of the video source. Note The play list is used to establish an automatic switching relationship between input and output. According to the set time, the output channel automatically switches to different NDI sources. The play list consists of multiple NDI sources and playing time. NDI sources can be added repeatedly, and the playback time is specified to second.

Number	NDI Source
1	N3-20072620127 (Channel-1)
2	N1-211110408 (Chan 1)
3	N30-30 (Channel-1)
4	E2_NDI-210220503 (Chan 1)

Crosspoint/IO Panel

Configure the NDI input and output through the cross-point panel. The cyan square indicates that the NDI input sources will output from the NDI output channels. In the "IO Panel", only the display method is different, and the effect of all operations is exactly the same as the "Crosspoint". Click the OUT1 output channel, you can see that the first NDI source is displayed in cyan, which means that the NDI video source is output from OUT1, click the second video source, when it becomes blue highlight, it will seamlessly switch to the second video source and output from OUT1. Note You can copy one NDI input source to multiple NDI output channels: Select or stop play list. Under the unlocked state, the NDI video source of multiple outputs can be switched. When in the locked state, the NDI output channel cannot be manually switched. When the output channel is used by multiple control panels, the NDI output can be switched on any panel. To prevent misoperation, you can use the locked state. The play list selected by the NDI output channel, and the NDI video sources played will show the current playing time. The functions of the IO panel are the same as the crosspoint panel.





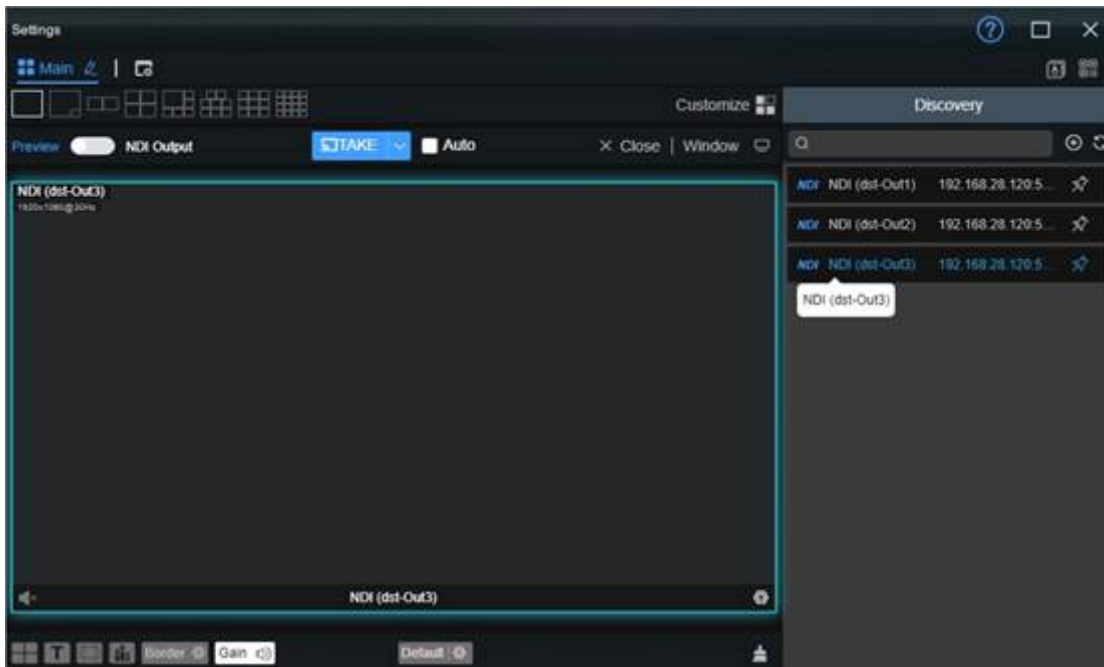
6. NDI Core output play

Download Kiloview Multiview for free Visit the website <https://www.kiloview.com/en/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.

Step 1: Enter the management page of Kiloview Multiview Player



Step 2: Find the NDI channel output by the NDI Switcher in the "Discovery"



Introduction:

The rules for the name of the output NDIstreaming from NDI Core: NDI (dst-channel name) , the channel name was created in chapter 4.2

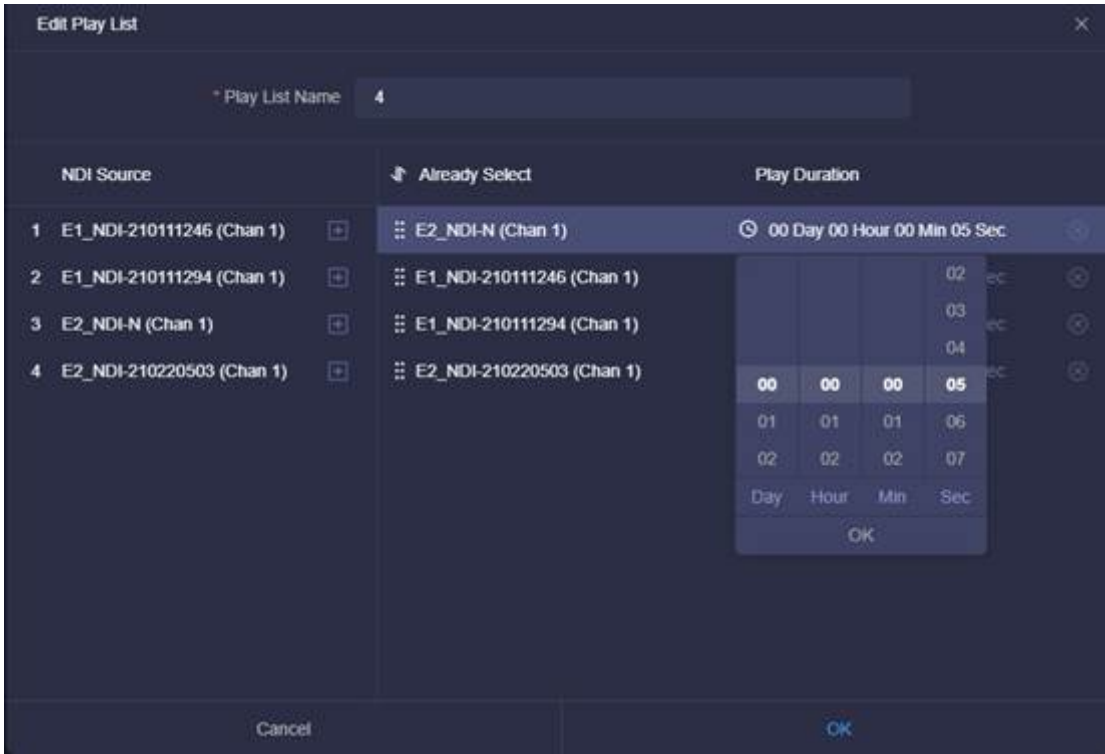
7. Play List

According to actual needs, the inputvideos are played under Loop mode. You can configure the playback time andsequence of each video source.

Click "Play List"- "Add PlayList" to create a play list. Click



to add the NDI source that needsto be played into the play list.



Introduction:

The NDI video source can be added to the play list many times, click \oplus before the NDI source under the "Already Select" to sort the NDI sources.

Play Duration: Configure the playing time of the NDI source, it will automatically skip to the next NDI source if the playing time ends.

If the play list is being used, please stop it first and then modify it.

The same play list can be used by multiple NDI output channels at the same time.

8. Network Status

!

Name	Type	Tx/s	Rx/s	Tx	Rx
ens1	1000M	87.05Kbps	1.93Mbps	260.39Gbps	803.44Gbps

Introduction: Note Please see Chapter 3.1 for details.

9. User Management

In user management, you can add new users and modify and delete existing users. There is an admin account by default.

Add User [Close]

* User name [Please enter]

* Alias [Please enter]

* New password [Please enter]

* Confirm password [Please enter]

Cancel OK

Introduction:

NoteSuper Administrator: The management account is admin, you can modify and delete all accounts by logging in management account. Ordinary users: Ordinary users can only change their own password and all configurations under their account. System administrator or not: If it is configured as "Yes", it is a secondary system administrator who can manage and control all panels and resources. Authority management: If the current account does not select "panel control", the user cannot create a new panel. Under the current account, you cannot see the control panel that is not assigned to the user. You can select the permissions of the panel in Chapter 5.1 "Create Panel Control"; if the current account does not select "Resource Management", the user can only view the current system resources. It is not allowed to edit and add sources.

10. Log

Introduction:

Please see Chapter 3.4 for details.

Log

Dec. 6 2021

admin	Panels Modify Success	10:23:55
admin	Play List Modify Success	10:15:17
admin	Panels Switch Success	10:15:01

11. Download Center

Please check the following link for usermanual file and deploy guide of Kiloview NDI Core.[KiloviewNDI Core Firmware Download](#)