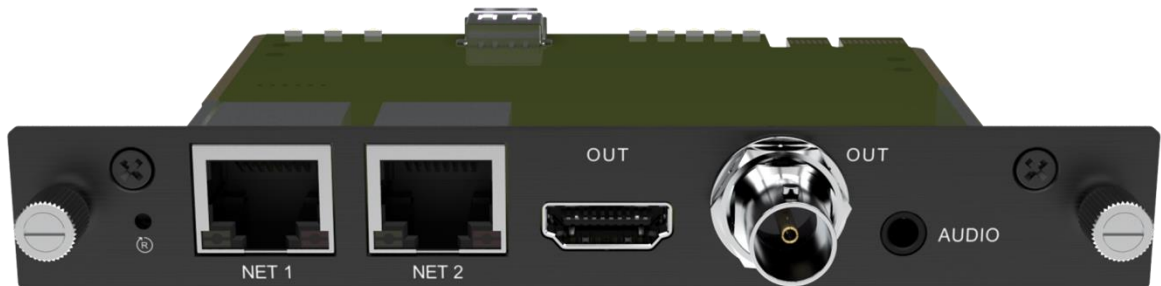


# Rack-mounted Multiple Channels H.265 4K Decoding Card

**RD-300**

## Quick Start Guide



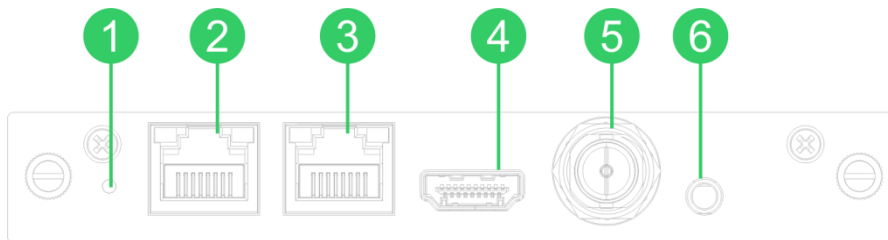
2021

REV. 1

Thanks for your purchasing! 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 or 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. Interface description



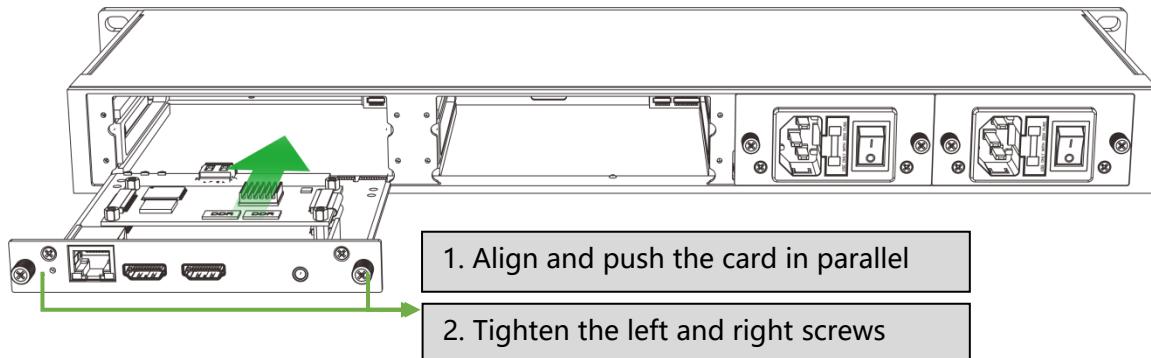
1. Reset Button	Press and hold for 5 seconds to restore the factory settings
2. Ethernet port1	1*RJ-45,100/1000Mbps
3. Ethernet port2	1*RJ-45,100/1000Mbps
4. HDMI output	HDMI output interface
5. SDI output	SDI output interface
6. Audio output	3.5mm audio output interface

## 1. Device installation and Connection

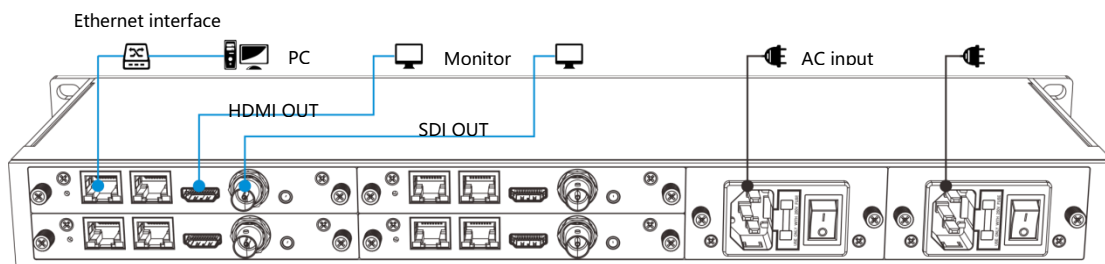
### 1.1. Card installation and device connection

## 1) Card installation

Align the card assembly to the two sides of the card slot, push in parallel and tighten the left and right screws.



## 2) Device connection



### 1.2. Device login

#### 1) Device default management IP address:

The decoder has 2 Ethernet ports, in general only need to configure the address 1 of network 1, which can be used for streaming and device management.

The default IP for gate 1 is 192.168.1.168, the subnet mask is 255.255.255.0, the default IP for gate 2 is 192.168.2.168, and the subnet mask is 255.255.255.0.

#### 2) Network configuration

The computer end clicks in turn: "Network and Internet Settings" - "Network and Sharing Center" - "Ethernet" - "Internet Protocol Version 4" - "Use the IP address below" for IP settings. Manually enter the IP address and subnet mask for 192.168.1.\* (\*Refers to numbers other than 168 between 1-255), Click "OK".

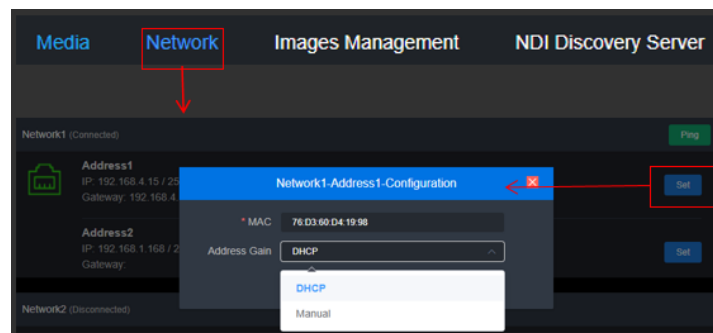
3) Login to the management web page

If you connect NET 1 to your computer, enter 192.168.1.168 or http://192.168.1.168 in the browser. In the pop-up login dialog box, it will require the username and password.

**Default username: *admin*, default password: *admin*.**

4) Device IP address configuration

After you login to your device, you can configure your network as DHCP or Manually Set, which can be used for streaming and device management.

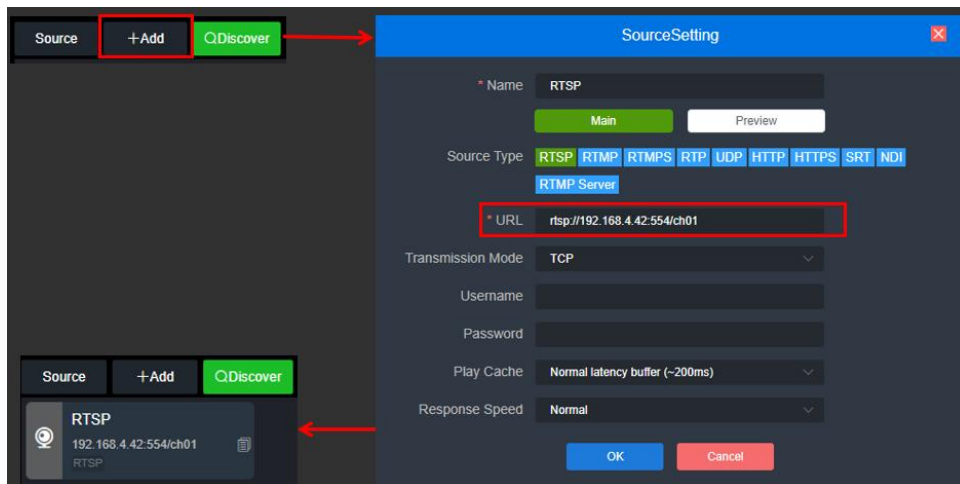


## 2. Add video source

Decoding devices support a variety of decoding protocols such as RTSP, RTMP, RTMPS, SRT, TS over UDP, HTTP, NDI | HX (2.0), etc. First get the correct video source URL address (you can test the video source for availability with the VLC player) and then add it to the decoding device for decoding.

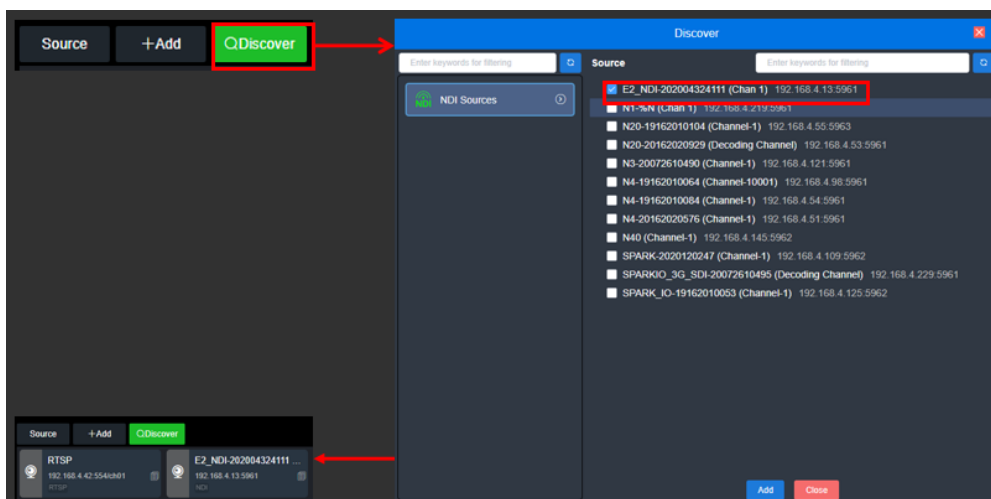
1) Add an RTSP video source:

In the media tab, click "Add", configure the parameters in the pop-up dialog box, and click "OK" to add the video source to the video list.



## 2) Add an NDI | HX video source

On the WEB page "Media" - "Discovery", the NDI video source in the same subnet can be found in the pop-up dialog box NDI Sources. Select the source you want to add, click "Add", and the video source will be added to the video source list.

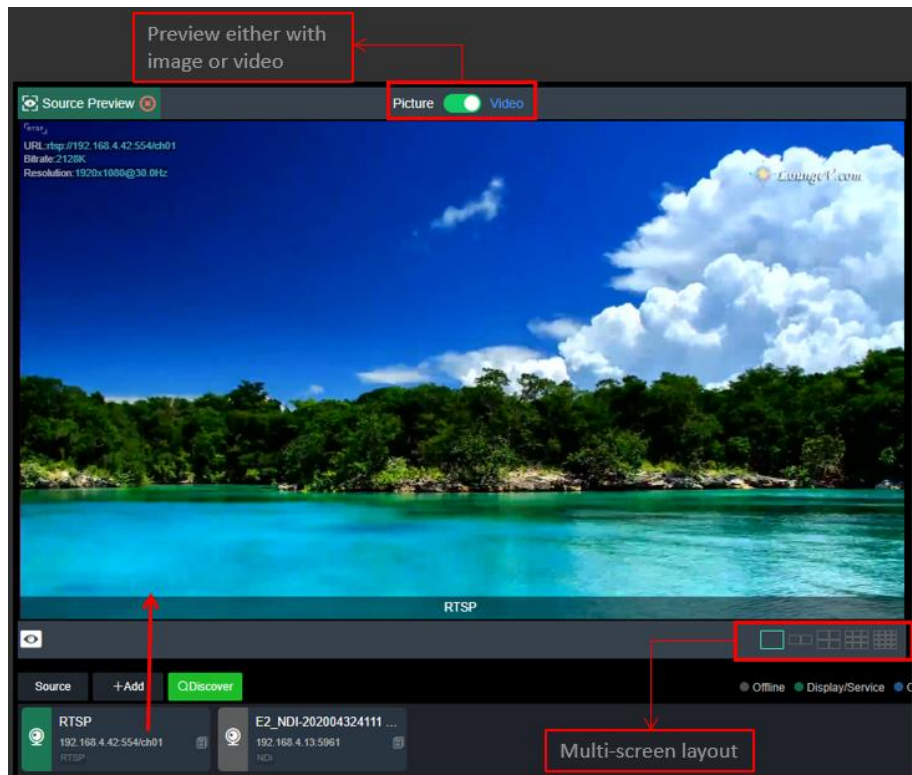


**Note: It only supports to decode NDI|HX Version 2.0 sources.**

All added sources are displayed in the video source list, and when no decoding, the status is gray and offline. To preview or decode the output, manually drag to the upper preview or output area to decode. The video source appears as a green "Display/Service" and the video source is decoding or streaming.

## 3. Web page preview

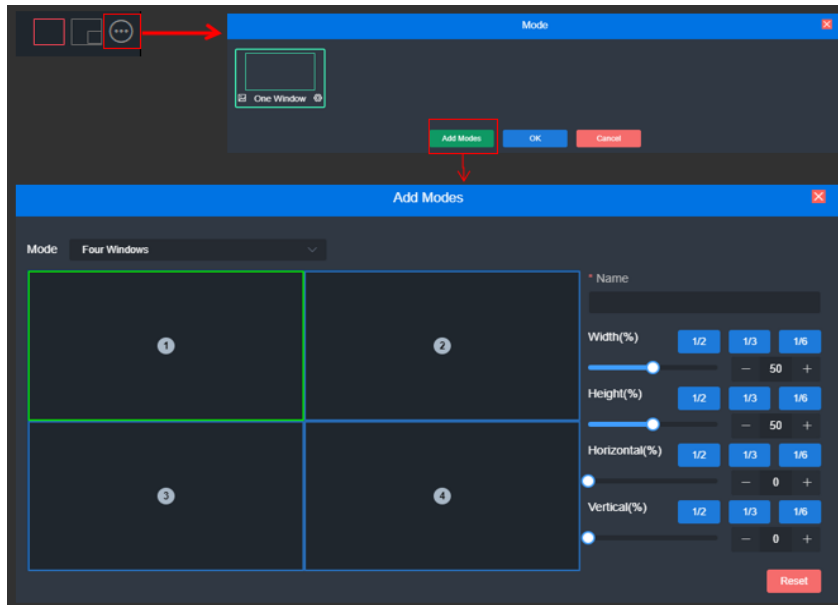
Drag the added source into the source preview list, and after the normal connection starts decoding, you can preview the source screen and decode the source parameters on the WEB page.



**Note:** Preview function should be working the latest version of Google and Edge browser; Browser preview does not support H.265 and video sources with B-frame encoding; when multiple IP addresses are configured, the preview is working by using the actual IP address of the device.

## 4. Multi-split-screen layout settings

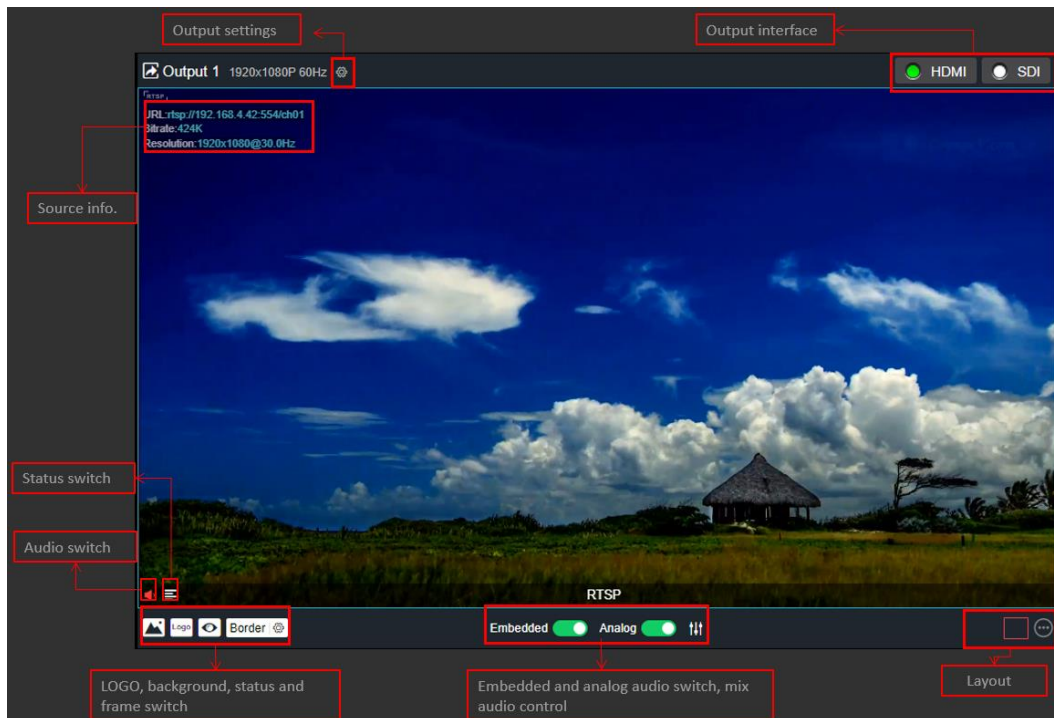
Click Settings, go to the layout page, click "Add layout" and go to the layout editing page. The decoding device can be configured up to 9 split screens, dragging multi-screen window sizes and overlaying picture-in-picture with the mouse. When multi-screen overlays, the smaller the window number, the lowest the overlay will be.



## 5. Decoding output configuration

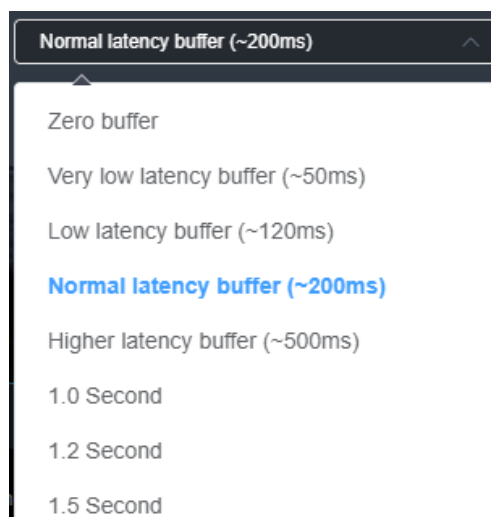
The decoder has two output windows that can decode the same or different content for both SDI and HDMI output simultaneously. All you need to do is drag the video source you've added to the corresponding output window and the decoder starts decoding.

**Note: An interface cannot output the contents of two windows simultaneously, and if both SDI and HDMI are selected in one output window, it will output the same content.**



## 6. Decode the playback buffer

For a variety of different scenarios and networks, for decoding the balance of real-time and smoothness, the device provides a variety of buffering strategies for users to choose from. According to the actual network situation settings, you can choose a lower delay in the good network conditions, while a higher delay in a poor network condition.



## 7. Quick reset and reboot

**Quick reset:** Used to reset the decoding service, typically to make modified parameters take effect immediately or to decode exceptions. The current decoding service is briefly interrupted during a quick reset and requires approximately 3S.

**Reboot:** To decode the device to perform a hot restart, try the device restart if the device is not functioning well and still does not resolve the issue through a quick reset. The device restart takes about 1 minute to restart, and in some cases, a device restart may require a cold restart, i.e. unplugging the decoder first.

## 8. Restore factory settings

If the user modifies the parameters to cause the device to not function properly, the device factory settings can be restored so that the device's configuration is restored to the factory default.

There are two ways to restore factory settings:

1) Manage the "System Settings" - "Recover Factory Settings" function of the WEB interface

2) Device RESET button.

Pressing the RESET button for 5 seconds on the device, and the device will restore to factory settings, it will take about 30s.

When factory settings are restored, the following parameters are restored to the default:

Login username admin, password recovery to admin;

IP address will be restored to default: gate 1 IP 192.168.1.168, mask 255.255.255.0;

Gate 2 IP 192.168.2.168, mask 255.255.255.0;

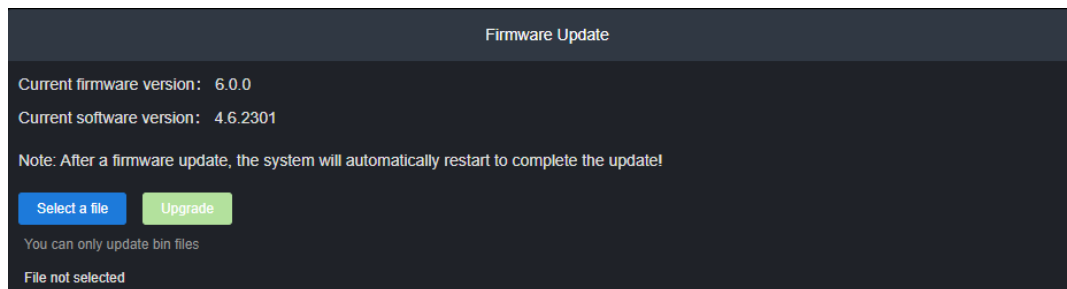
All set decoding parameters and parameter configurations are restored to factory defaults.

## 9. Firmware upgrade

The decoder supports online firmware upgrading. Through the "System Settings" - "Firmware Upgrade" function of the WEB management interface, you can upload the firmware upgrade files provided by the manufacturer for the firmware online upgrade.

After the firmware upgrade file uploaded successfully, the decoder will automatically restart the device for the upgrade, which will take approximately 1 to 3 minutes (depending on the memory of the firmware, the upgrade time varies), please be patient.

After the upgrade is complete, check the current software version information and the upgraded firmware consistently through "System Settings" - "Firmware Upgrade" in the WEB interface to confirm that the upgrade was successful.



**Note: Configurations may change greatly after updating for certain firmware versions, and some functions may be used abnormally. It is recommended to restore the factory settings after the firmware upgrade.**