Quick Start Guide

NDI Converter
3G SDI/NDI Bi-directional converter

+2020 REV. 1

NDI® is a registered trademark of NewTek, Inc.

Before you use this product, we recommend that you read the instruction manual of this product carefully. To ensure your personal safety and to protect your equipment from physical or electrical damage, please follow the instructions in this manual or use the product under the guidance of a professional. Improper electrical connections or physical installations can cause permanent damage to the equipment and even threaten personal safety.

01 Packing list

<table>
<thead>
<tr>
<th>Name</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDI® Converter</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>TYPE-C power cable</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>TYPE-C to Type-A cable</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>Certificate/Warranty card</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>Power adapter</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>Hot shoe</td>
<td>PCS</td>
<td>1</td>
</tr>
<tr>
<td>Quick start guide</td>
<td>PCS</td>
<td>1</td>
</tr>
</tbody>
</table>

The items in the packing list may be different due to product upgrade.

02 Device Interface Description

1) TYPE-C expansion port
2) Tally
3) Working indicator
4) 100M Ethernet (PoE)
5) SDI output
6) SDI input
7) Audio port
8) TYPE-C power port
9) Small Tally light

03 Device Installation and Connection

1) Installation

Connect video signal
Connect the SDI signal from a source (such as a camera) to the SDI input port of the device through a cable. The SDI output is connected to the display device via a SDI cable.

Connect network
Connect the network cable to the Ethernet port of the device. The other end of the network cable is connected to the network port of the computer. You can also connect directly to the network port of the computer.

Connect audio
Using a 3.5mm interface headset with a microphone to connect to the device for voice intercom.

Connect power supply
After connected with the power adapter DC 5V, the power light will be on and the device starts working. It is packed with one USB charging cable, which can power the device by a DC 5-18V power supply.

Note: When network switch provides PoE, there is no need to connect to the power supply.

2) Check LED status light

LED indicator:

- **Color**: Power on
  - Always on: Power connected
  - Flashing: Power failure
  - Off: No power supplied or power failure
- **Power**
  - Quick flashing: Network connected
  - Slow flashing: Network connection abnormal or when setting device to factory settings [RUN light will be flashing as well]
  - Off: Network abnormal or disconnected
- **LINK**
  - Flashing: Device works properly
  - Off: The device is abnormal or non-started

If the indicator light is abnormal, please check the corresponding power supply network equipment hardware, etc.

03 Log in to the device management interface

Device default IP address
The default IP of the device is 192.168.1.168 and the subnet mask is 255.255.255.0. The IP address is the Paella address. Normally you don’t need to modify this IP address.

Login the WEB Page
First set your PC’s IP address to 192.168.1.11 and then log in using the default IP address. You can access http://192.168.1.168, to login the web page.

Note: For the first login or after restoring the factory settings, you need to agree to the pop-up “End User License Agreement”. Otherwise, the device cannot work normally.

IP address configuration
After login, you can configure the IP address according to the network. It can be manually set or DHCP Dynamic (Default set is DHCP Dynamic).
4) NDI Encoding

It is a full NDI encoding transmission device. When video resolution is 1080p60, the bitrate of the device can be up to 125Mbps. Therefore, the device and the receiving port should be connected to a Gigabit network.

Status Column

Here it will display the resolution, frame rate, bitrate and audio format parameters of the video source.

Coding quality settings

The encoding resolution is the resolution that output from the video source, which cannot be configured for scalable encoding. Encoding bitrate can be appropriately lowered or increased by adjusting encoding quality. The default encoding quality is 100%.

Encoder channel settings

When there are multi-NDI sources in the same network, channel names need to be modified to identify different devices because the default channel names are the same.

There is no need to save the parameters after modified, since the modification will take effect immediately if click other locations of the page.

Advanced settings

In advanced settings, you can set the connection mode of NDI stream, which can be unicast or multicast. Here you can also set the PTZ control function.

5) NDI Connection

Compatible Softwares:

It is compatible with NewTek NDI. NDI stream service is enabled by default. When the device is in the same subnet with NewTek Studio Monitor software or others like OBS, vMix, etc. that supports NDI protocol, the device can be automatically discovered. Select the corresponding device and channel, then you can play the NDI video stream.

6) NDI Decoding

Discover NDI sources in the network

NDI sources can be detected automatically and will be listed at the same subnet, and you can renew the NDI sources by click .

Add target NDI source

Click to add the source to the decoding preselection.

Switch output NDI source

You can add up to 8 NDI sources in the decoding preset and click the corresponding source to decode. Decoding output can be quickly switched by clicking different NDI sources.

Decoding Parameter Settings

Some information such as resolution, audio parameters, IP address and left rate of the decoding source will be displayed in "Current Decoding" zone. Please enter into Web page and set the decoding resolution & frame rate by clicking .

Note

This NDI Converter cannot conduct encoding and decoding at the same time, encoding will stop if you enable the decoding function.

05 Firmware Upgrading

Firmware upgrading

This device supports online firmware upgrading to upgrade software. Click "System Settings" > "Firmware Upgrade" on Web management interface for upgrading. Click "Select a file" to upload the firmware file to upgrade the device.

Note:

After uploading firmware file successfully, the device will automatically reset, this process will take about 30s-60s (the time will be different according to upgrade content), and please be patient. After the upgrade is complete, please click to check whether the latest version information is expected to confirm if the upgrade is succeeded.

04 Restore Factory Settings

Restore Factory Settings

If the parameters are changed that lead the converter couldn’t work. (The typical situation is that the network address was changed, so it couldn’t visit the device by network), users could restore factory setting to default value.

Two methods for restoring factory settings:

1. Click "System Settings" > "Factory settings" on the web console.
2. Press "Reset" button at the bottom of the device.

There is a reset button at the bottom of the device, hold the button for more than 5 seconds, the device will restore to factory settings. Restoring factory settings will lead to the restarting of the device. The restarting process takes about 30s.

Note:

These parameters will be restored to default value after restoring factory setting:
- Login username and password will be "admin"
- IP address will be restored as 192.168.1.68, subnet mask will be 255.255.255.0.
- All encoding and decoding parameters of video and audio will be restored to default value.
- Media transmission parameters will be restored as default value.

06 Quick Reset and Reboot

Quick Reset and Reboot

"Quick Reset" function is to reset encoding and decoding service, normally, it's used for changing parameters to affect immediately. "Quick Reset" process lasts around 3s. "Reboot" function is used for encoder reboot. Device rebooting lasts around 30s.

Note:

Select "Quick Reset", current encoding and decoding service will be suspended for a while. Select "Reboot", the encoder will "warm" reboot. Under some circumstances, reboot might be realized with the help of cold reset, that is by turning off/on the power.