Overview

The SVSI NMX-WP-N2410 4x1 Windowing Processor allows you to display multiple real-time UHD streams on a single screen simultaneously. Four window streams (from N2400 Series Encoders) are assigned to the four independent network ports labeled U0-U3. Each window stream can then be cropped, scaled, and positioned according to stored presets (such as quad, picture-in-picture, etc.) or in any user-defined configuration. The combined output AV stream is then routed as a single N2400 stream to one or more displays via a single output network port (any of the ports P0-P2).

NOTE: For proper operation, all four U ports must be connected to active streams.

IMPORTANT: To avoid creating a network loop, never connect more than one P port to the same network switch.

Discovering the N2410 Windowing Processor

Before using your N2410 unit, it must be configured using the free N-Able device management software. However, you will not be able to configure units until they are in the same subnet as the host computer. N-Series devices are shipped in DHCP mode with a default fallback IP address of 169.254.xxx.xxx. The sample steps below show how the required changes (to the host computer’s IP settings) are made in a Windows environment.

Steps for IP address configuration:
1. From the Control Panel > Network and Internet dialog box, select Network and Sharing Center.
2. Select Change adapter settings.
3. Select the wired interface connected to your AV network.
4. Click the Properties button.
5. Scroll down in the list to the Internet Protocol Version 4 (TCP/IPv4) option. Highlight it and click the Properties button.
6. Enable the Use the following IP address option, and enter the static IP address provided to you by your network administrator.

NOTE: If the computer does not need Internet access, you can simply enter a unique 169.254.xxx.xxx IP address with a 255.255.0.0 subnet mask. Please contact your network administrator if you are unsure of how to configure the existing interface. If the computer has a statically-assigned IP address, click on the Advanced button. Then click Add to enter a unique 169.254.xxx.xxx address with a subnet of 255.255.0.0.

Steps for auto discovering devices on the network:
1. Use the host computer to download and install the latest version of N-Able: PC version - http://www.amx.com/products/N-ABLE-PC.asp
2. Attach one of the P ports on your N2410 unit(s) to the layer-3 network switch.
3. Disable the wireless adapter on your computer (it must be hard-wired to the switch).
4. Connect the host computer to the layer-3 network switch.
5. Open the N-Able application.

If all devices do not appear automatically in N-Able, click the Auto Discover button on the Unit Management tab. This issues a broadcast command that will discover all units even if they are not in the same IP subnet.

NOTE: A web server is built into the N2410 and can be accessed directly by typing the unit’s IP address into your web browser (without the need for N-Able). Internet Explorer is not a supported web browser.

Logging in Using N-Able Software

Once the units have been discovered in N-Able, view them on the Unit Management tab. N2410 units have Windowing Processor listed in their Type fields (as shown in FIG. 2).

1. Double-click the device to view its control page. If prompted, enter admin and password as the default username and password.
2. Click the Unit Settings link as shown in FIG. 3.

Click Unit Settings.

3. Make changes on the Unit Settings page as shown in FIG. 4.

Enable Stream Output and assign a unique Output Stream.

Assign unique static IP addresses for each of the U ports. These must be in the same subnet as the rest of the system (i.e., host computer, Windowing Processor, Encoders, etc.).

4. Connect each of the four U ports to your switch.
5. Use the Video Matrix in N-Able to assign Encoder and Decoder streams to Windowing Processor as described in FIG. 5.
In N-Able, select the Video Matrix > N2400 tabs.

Click the common cell to assign the N2410’s output stream to a Decoder.

Click the common cells to assign Encoder streams to each of the N2410’s four U ports.

FIG. 5 ASSIGNING STREAMS IN N-ABLE

Front and Rear Panel Highlights

<table>
<thead>
<tr>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Front Panel</strong></td>
<td></td>
</tr>
<tr>
<td>POWER LED</td>
<td>On solid (green) when operating power is supplied (via local power supply).</td>
</tr>
<tr>
<td>STATUS LED</td>
<td>On flashing (green) when there is software activity.</td>
</tr>
<tr>
<td><strong>Rear Panel</strong></td>
<td></td>
</tr>
<tr>
<td>Power Input</td>
<td>1.0 Amp @ 120 Volts AC; 100-240 Volts AC power supply</td>
</tr>
<tr>
<td>ID button</td>
<td>Recessed pushbutton. Press to send a notification out on the network to identify the unit (the notification causes a pop-up dialog in N-Able and N-Command).</td>
</tr>
<tr>
<td>Reset button</td>
<td>Recessed pushbutton. Press to initiate a “warm restart” which causes the processor to reset, but not lose power. A reset does NOT affect the current settings. Press and hold for 30 seconds to perform a factory restore.</td>
</tr>
</tbody>
</table>
| Diagnostic LEDs | **LEDs 0-3**
Top row: Flashing (green) represents networked video activity on corresponding window.
Bottom row: Flashing (green) represents processing of video on corresponding window.
**LED 4**
Top row: Flashing (green) represents video transmit status.
Bottom row: Flashing (green) represents output video processor status.
**LED 5**
Top row: Flashing (green) represents CPU status/activity.
Bottom row: Solid (green) represents device started. |
| P0-P2 ports | 8-wire RJ45 female.
10/100/1000 Mbps 10/100/1000Base-T auto-sensing gigabit Ethernet switch port. |
| U0-U3 ports | 8-wire RJ45 female.
1000Base-T gigabit Ethernet port. |

Product Specifications

| Power Requirements: | 1.0 Amp @ 120 Volts AC; 100-240 Volts AC power supply |
| Dimensions (HWD): | 1.75” x 17.25” x 12” (4.5cm x 43.8cm x 30.5cm) |
| Weight: | 7.15 lbs (3.24kg) |
| Certifications: | FCC, CE, and UL |
| Environmental: | Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing) |
| Installation | Standalone or rack-mount (mounting ears included) |

Troubleshooting Guidelines

**Problem**

The N2410 is routed to a Decoder, but the Decoder is showing local play content.

**Possible Solution**

- Is Stream Output enabled on the N2410?
- Does the N2410 have a Control IP address?
- Did you verify that no other devices have the same Output Stream number as the N2410?
- Is the Decoder properly assigned to the output of the N2410?
- Is the network configured appropriately for N2400 AV traffic?

The N2410 is routed to a Decoder, but the Decoder only shows four black screens.

- Are the source Encoders enabled?
- Do you have valid sources connected to all four U ports?
- Are the AV sources properly routed to windows of the N2410?
- Is the network configured appropriately for N2400 AV traffic?
- Did you assign unique IP addresses for each of the U ports?

The Decoder is displaying the Video Encrypted screen.

- Verify that the Decoder and the Windowing Processor have matching encryption passwords.

Window appears black even though an active Encoder stream is assigned to it.

- Verify that the encryption passwords match on all devices being used (Encoders, Decoders and Windowing Processors).

Screen displays a portion of the default background image.

- Verify that the Active checkbox is enabled.

You cannot access the unit properties after discovery.

- Verify that the host PC has an IP address in the same range as the N2410. Double-click the name of the unit to access its properties or use a web browser and access the unit via its IP address.

The web page is not loading or displaying correctly.

- Retry using Firefox or Chrome (Internet Explorer not supported).

Please contact technical support at svsisupport@harman.com or 256.461.7143 (x9900) for assistance with any installation issues.