# SVSI NMX-WP-N3510 N-Series Windowing Processor, 9x1

Overview

The SVSI NMX-WP-N3510 Windowing Processor accepts up to nine video streams from N3000 Series Encoders over the network port. The Windowing Processor's web interface allows you to combine and customize the streams into a single windowed HD video stream which can be viewed locally through the HDMI port or (for remote distribution) streamed over the network.

N3510 Windowing Processor Rear View

To network switch

To power source
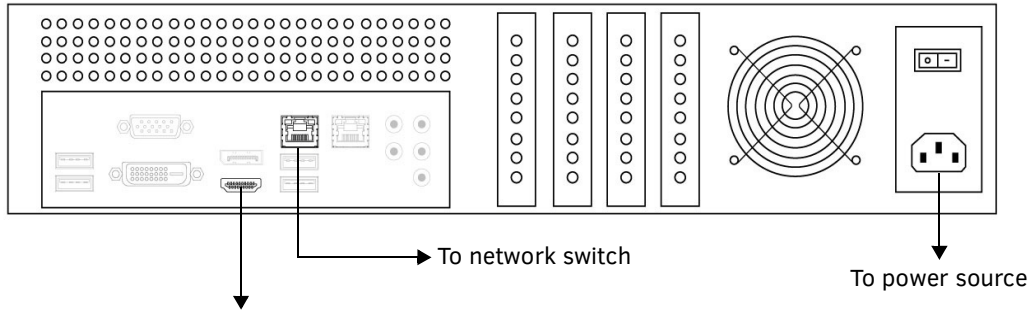
HDMI output must be connected to monitor
or the HDMI adapter (included in shipment)
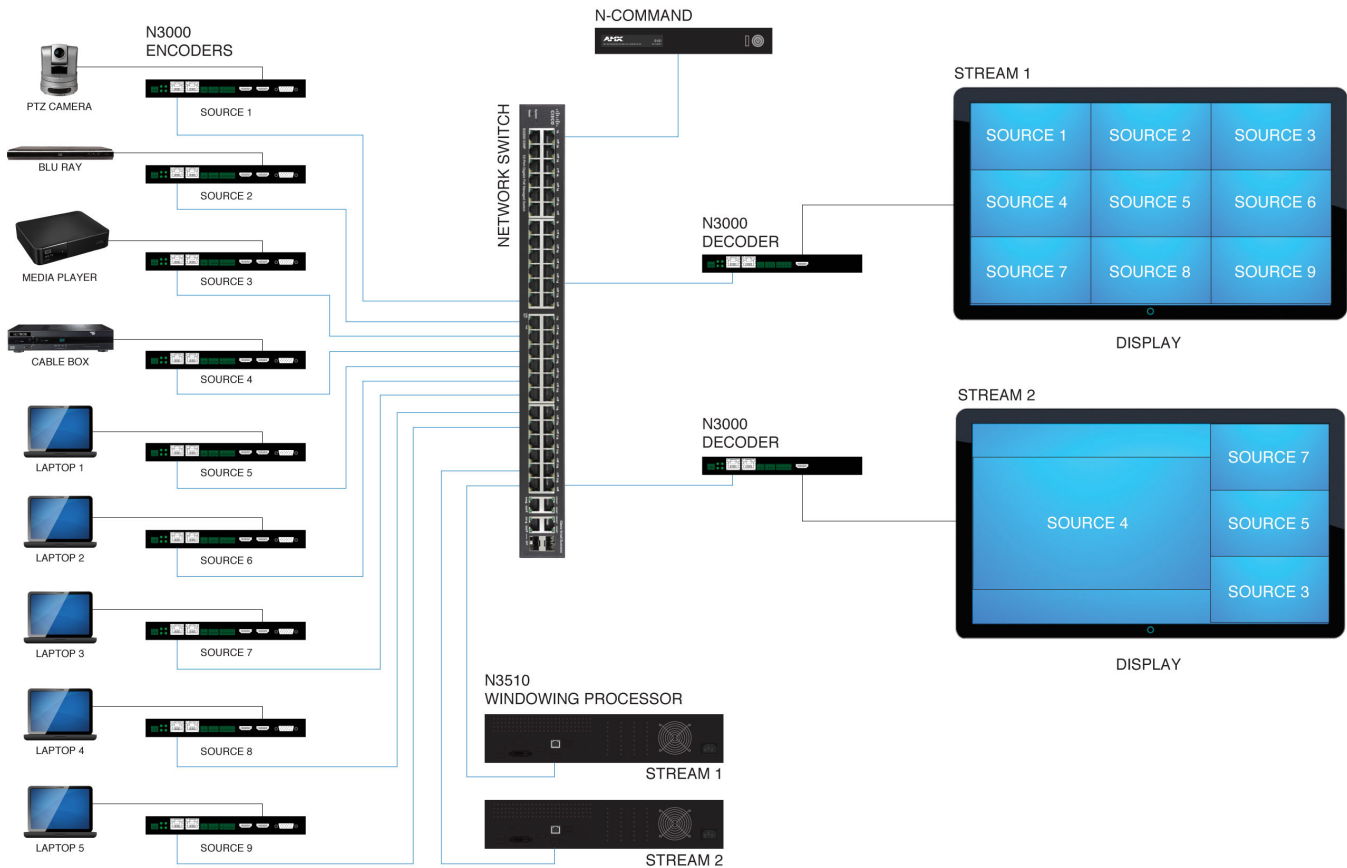
NOTE: The N3510 accepts UDP, RTP, and RTSP stream types. Baseline H.264 is not supported.

Establishing Connection

Before using your N3510 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 **Auto-IP** mode with a default 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_.
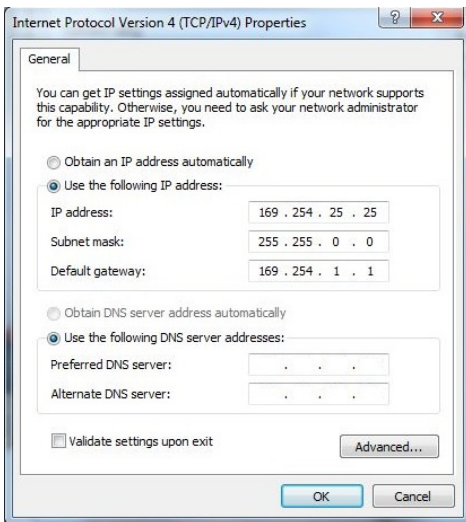

FIG. 1 SETTING A STATIC IP ADDRESS

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 already 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
   Mac version - http://www.amx.com/products/N-ABLE-MAC.asp
2. Attach your N3510 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 N3510 and can be accessed directly by typing the unit's IP address into your web browser (without the need for N-Able). We recommend using Google Chrome or Mozilla Firefox to access SVSI products.

Logging in Using N-Able Software

Once the units have been discovered in N-Able, view them on the **Unit Management** tab. N3510 units have **Windowing Processor** listed in their **Type** fields (as shown in FIG. 2).

FIG. 2 FINDING UNIT ON THE UNIT MANAGEMENT TAB

Double-click any device to view its control page. If prompted, enter **admin** and **password** as the default username and password. This brings up the page shown in FIG. 3.

Click links at top of page to access the other configuration pages.

FIG. 3 ACCESSING CONFIGURATION PAGES

Arrangement Page

The **Arrangement** page (shown in FIG. 4) is the main control area. It is a combination of arrange, stretch, and skew options. The view in the top portion of the page represents the overall screen setup you are creating. From there, position and stretch windows by dragging-and-dropping, resizing, or directly inputing values.

This area is also used to manipulate other settings such as borders, backgrounds, presets, mode, and input streams. Select from any number of default or user-defined presets. Position windows on command for attention-getting displays while switching video streams in and out as needed.
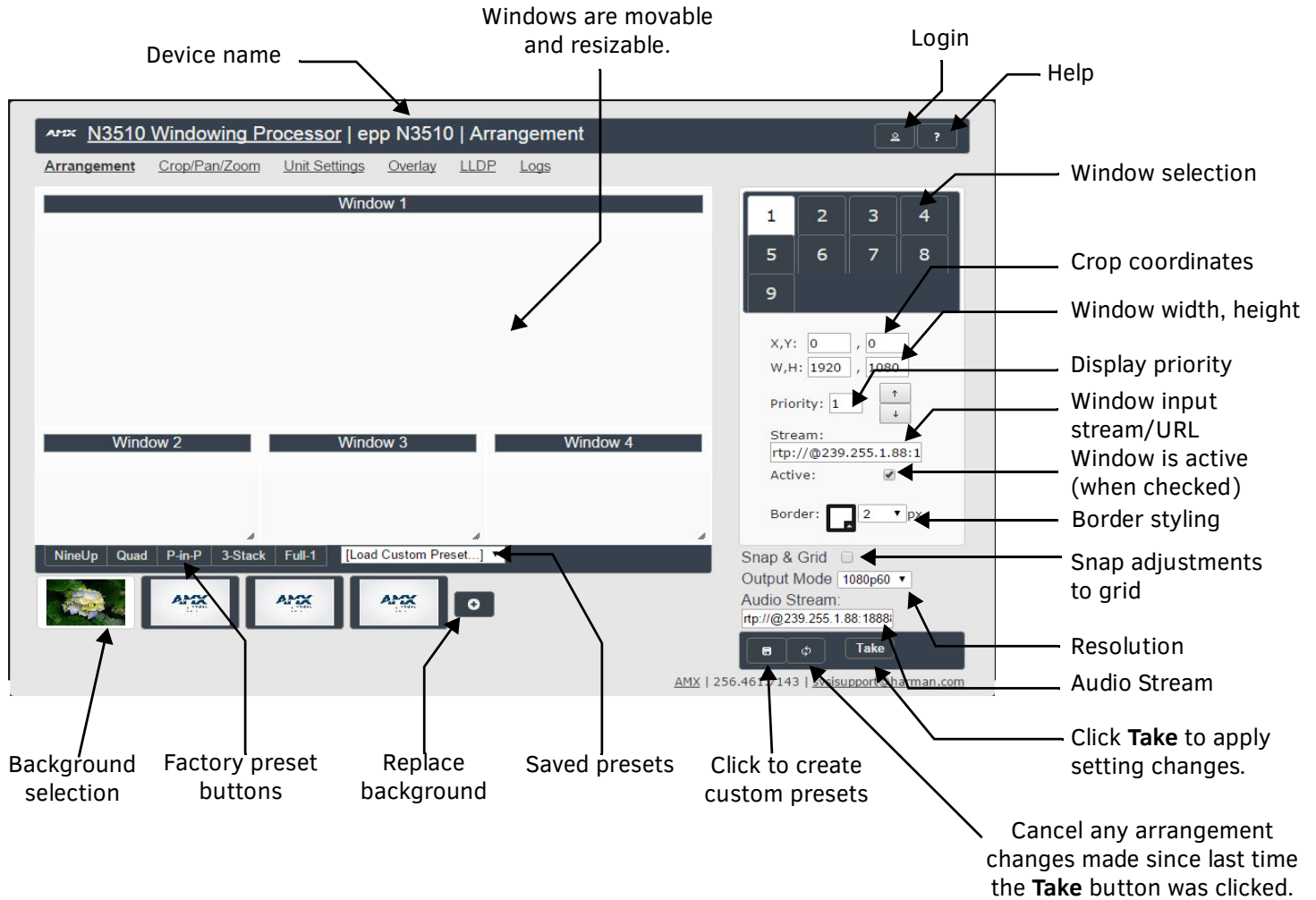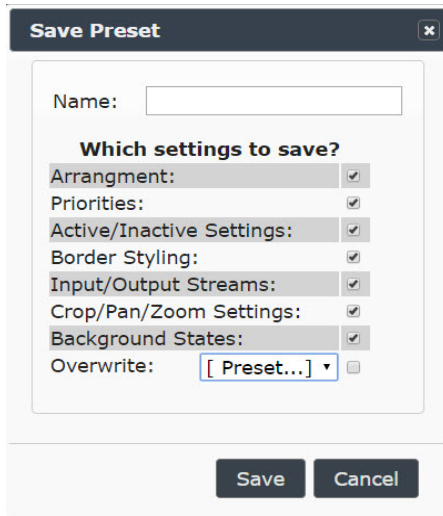

FIG. 4 ARRANGEMENT PAGE

FIG.5 SAVE PRESET DIALOG BOX

Presets

Using either pre-configured (factory) presets or custom presets that you create yourself, quickly manipulate the arrangement/stretch/skew of the windows.

Create your own presets by clicking the [icon] button (pointed out previously in FIG. 4) and making choices in the **Save Preset** dialog box (shown in FIG. 5).
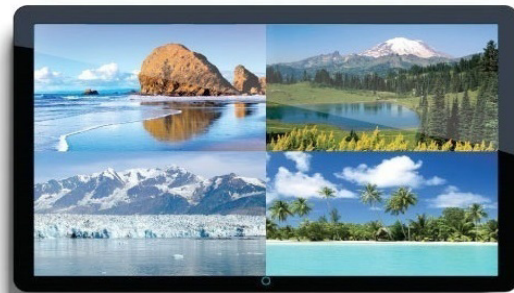
Preset Examples

Two examples of common factory presets are shown in FIG. 6.
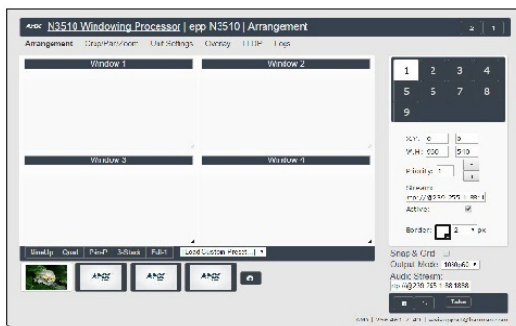
Stored presets Quad example
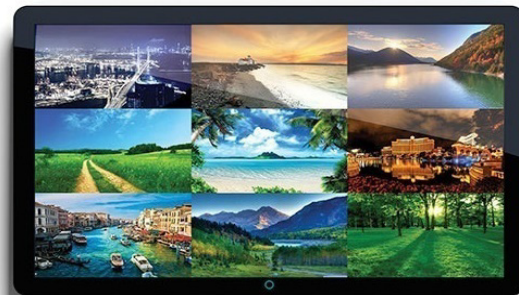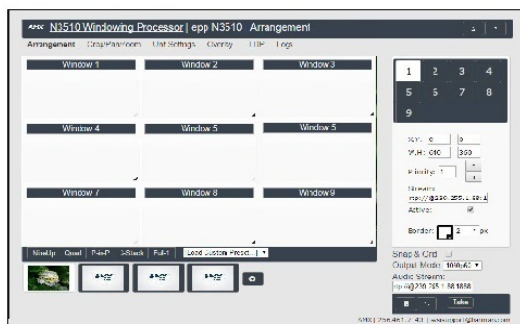

Stored presets Nine Up example

FIG. 6 PRESET EXAMPLES

Crop/Pan/Zoom Page

The **Crop/Pan/Zoom** page allows finer control of the individual windows. See FIG. 7.

Selected crop area (this sample screen shows a stored background image)

Window selection

Crop coordinates

Window resolution

Upload file to be used as window background.

Click **Take** to apply setting changes.

Enable **Aspect Ratio** to crop to the window's current resolution.

FIG. 7 CROP/PAN/ZOOM PAGE

NOTE: The background image is user-defined and displayed by individual windows if no input stream is detected. If no background image has been uploaded, the windows display the N3510's local play image instead.

Unit Settings Page

The **Unit Settings** page (shown in FIG. 8) allows you to configure unit and network settings as well as import/export presets for your Windowing Processor. Available options include:
- **Device Name**: Configure a user-friendly name for your unit.
- **Stream Output**: Enable this option prior to viewing the output of the N3510 with a Decoder. When enabled, you can route video in N-Able (or your other configuration choice) to the nine windows and route the output of the N3510 to an N3000 Decoder to verify operations.
- **Output Stream**: If desired, modify from the default stream number. N-Able (or your other configuration choice) may also prompt for this to be changed when the unit is first discovered.

In the **Network Setup** section on the **Unit Settings** page:
- **IP address** is required, and will be used as the control IP address.
- Configure the **Netmask** and default **Gateway address** as needed or directed by IT personnel.

NOTE: If you do need to make changes to the Network Setup section, click Trial Save once changes are made. If the control IP address is different from the default, you will need to log in to the unit using its new IP address. Once re-logged back in, click Confirm to keep the changes. If the unit is power cycled before the changes are confirmed, it will revert to its original IP address.

FIG. 8 UNIT SETTINGS PAGE

Specifications

PRODUCT SPECIFICATIONS	
Power Requirements:	1.0 Amp @ 120 Volts DC; 100-240 Volts AC power supply
Dimensions (HWD):	3.5" x 17.25" x 15.5" (8.9 cm x 43.8 cm x 39.4 cm)
Weight:	19 lbs (8.6kg)
Certifications:	FCC, CE, and NTRL
Environmental:	**Temperature:** 32° to 104°F (0° to 40°C) **Humidity:** 10% to 90% RH (non-condensing)

Troubleshooting

Use the following guidelines when troubleshooting your setup.

The N3510 is routed to a Decoder, but the Decoder is showing local play content.
- Is **Stream Output** enabled on the N3510?
- Does the N3510 have a Control IP address?
- Did you verify that no other devices have the same **Output Stream** number as the N3510?
- Is the Decoder properly assigned to the output of the N3510?
- Is the network configured appropriately for N3000 video traffic?

The N3510 is routed to a Decoder, but the Decoder only shows nine AMX logos.
- Are the source Encoders enabled?
- Are the video sources properly routed to windows of the N3510?
- Is the network configured appropriately for N3000 video traffic?

You cannot access the unit properties after discovery.
Verify that the host PC has an IP address in the same range as the N3510.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 (some older versions of Internet Explorer are not supported).

Contact SVSI technical support at svsisupport@harman.com or 256.461.7143 x9900 for any installation issues.

800-3510   REV: A

Last Revised: 01/2016