

**PSA PRODUCT SCORECARD**

The PSA Product Scorecard is a tool that contributes to the evaluation of a manufacturer or their product. Some evaluations will be comprehensive and based upon extensive bench-testing; some evaluations will not. The goal is to provide PSA integrators with a common means to aggregate evaluative information.

**PRODUCT: Next Level | NLSS Video Decoder for Spot Monitors** **Average Star Rating: 4**

Company: Aronson Security Group  
Tester Name: Robert Birley

Testing Environment: Bench  
Testing Period: 14 days

Star Rating System
<b>5</b> = Excellent (exceeded expectations)
<b>4</b> = Pretty Good (better than other similar products)
<b>3</b> = Acceptable (nothing to clearly differentiate it from similar products)
<b>2</b> = Not so Good (poorer than other similar products)
<b>1</b> = Unacceptable (did not meet minimum expectations)
<b>0</b> = No opinion / Not applicable / Undetermined
* Only questions with a rating greater than zero are used to determine average rating.

Using the key above, rate the following:	Star Rating
Product's initial performance	4
Product's performance after 6 months	0
Product's performance after 12 months	0
Product's overall build quality	5
Product's feature set	4
Rate the product's "ease of use"	4
Quality of the product's documentation	4
Quality of the product's technical support	4
Availability of the product's technical support	0
Product's use of industry standards	4
Product's manufacturer rep. support	4
Product's price compared to value	0
Product's Warranty	3
Product's RMA process	0
Additional Comments: *See attached summary	

# Next Level Security Systems

## HD Decoder

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### Summary

The Next Level Security System HD Decoder is a high-definition (up to 1080p) video decoder that supports multiple video pane layouts and is compatible with most HD display monitors and cameras from all major manufacturers. These video streams can be displayed in 1x1, 1x2, 2x2, and 3x3 pane layouts, as well as rotated video displays.

### Testing Process

ASG set up the decoder connected to a 19 inch monitor and the lab network. Additionally five Axis cameras and three truVision cameras were set up on the same subnet as the decoder.

### Initial setup

The decoder was connected a monitor using it's DVI port. It was also connected to the Renton lab network, and booted up. Initial IP address was 192.168.0.110. Default username and password are both "superuser"

### Configuring

Using a web browser, (IE, Chrome and Firefox were tested), the decoder can be accessed via IP address, or using <https://nlss-dc400-macaddress.local> where macaddress is the MAC address of the target decoder. The MAC address is found on a label on the Decoder. For example, if the MAC address of the decoder is 90:E6:BA:B2:F7:C8, then the following URL is entered, with the colons removed from the MAC address: <https://nlss-dc400-90e6bab2f7c8.local>.

The decoder was assigned the IP address of 10.30.32.149 (an IP address compatible with the Lab DHCP range). The truVersion cameras were assigned 10.30.32.150-152, and the Axis cameras were assigned 10.30.32.153-157. The decoder automatically discovered all eight cameras. The decoder could not view the video streams from the truVision cameras as discovered, since the decoder couldn't detect the driver type/manufacturer of the cameras. The cameras had to be deleted and reloaded manually using the ONVIF driver.

### Users

The NLSS HD Decoder includes three user types: *SuperUser*, *Administrator*, and *Operator* account.

Each user type has specific abilities:

- *SuperUser*: Has full control over the decoder.
  - Default User Name: **superuser**
  - Default Password: **superuser**
  - **Note**: The default SuperUser cannot be deleted, but the name and password can be edited.
- *Administrator*: Can run all operations except add, delete, and edit users.
  - Default User Name: **admin**
  - Default Password: **admin**
- *Operator*: Has read-only access to most menus. Can display any Channel, View, and Sequence that is already configured. Can only add, delete, or edit the numbers and names of existing channels, and the names of existing Views and Sequences.
  - Default User Name: **operator**
  - Default Password: **operator**

## Cameras

The decoder can detect any IP cameras in its subnet (if discovery is enabled), and will automatically attempt to establish communications with them. If the camera is from one of the manufacturers that the decoder is preprogrammed with (Panasonic RSTP, Sony, Axis, IQEye, Arecont, or Pelco), and is still set with the default password, its streams will automatically be added. If the password is changed, or the camera is from an unknown manufacturer, it will show up as "XX\_Camera\_IP\_A.B.C.D" (Where A.B.C.D is the IP address of the camera). These cameras will need to be deleted and re-added manually. Updating the username and password does not work, as the driver type field will stay "UNKNOWNDRV". Instead, add the camera manually (With name, make, model, IP address, username and password), and the decoder will ascertain the remaining information based on the stream received from the camera.

Cameras not located in the same sub-network as the decoder can be manually added.

If all the cameras in the environment have the same login information, this can be set in the "Decoder" tab by setting the "Global UserName" and "Global Password". This will over-ride the use of the factory default

## Streams

Besides camera streams, the decoder can also display locally stored video streams or ones pulled from the internet. These streams can be used the same as those pulled from cameras. Also multistream cameras (such as the AV8185 and AV8365) can be used with the decoder by using the stream feature, and creating streams using each individual stream's http address (e.g. <http://10.30.32.158/mjpeg1?res=half&x0=0&y0=0&x1=1600&y1=1200&quality=10&doublescan=0&ssn=1400000618550&id=1400000623828>).

## Channels

Channels are the basic display unit used by the decoder. Channels are automatically created for cameras that are automatically detected in the discovery process. Cameras and streams that are manually added will need to have channels created for them. Any channel can be set to active and will then displayed.

## Views

Views can be built from channels in 1x1, 1x2H, 1x2V, 1x4H, 2x2, 2x4, 3x3, and 4x4 configurations. The decoder will automatically create 1x1 displays for the cameras that were automatically discovered. If too many streams are displayed simultaneously, lag can occur. Next Level recommends D1 resolution for displays of more than 4 streams. Since the decoder simply displays the stream sent from the camera, the resolution will need to be changed at the camera.

## Sequences

A sequence consists of two or more views, displayed consecutively in a series. Multiple views can be monitored automatically. Only existing views can be added to a sequence.

## Basic Functionality

Standard functionality such as discovery of standard single stream cameras from major manufacturers, displaying 1x1, 1x2, 2x2 and, at lower resolution, 3x3 and 4x4 video pane layouts, or a sequence of these functioned flawlessly

## Advanced Features

The only real difficulty come in when using cameras from a manufacturer other than the six major companies that the decoder is programmed for, or when using a camera that has multiple streams such as an AV8365DN. These difficulties can be overcome once the needed information has been acquired.

## Conclusion

The overall ease and performance of the NLSS HD Decoder was exemplary. The Axis cameras tested with the device were discovered and functional within minutes of powering the decoder on. The same was true of the Arecont camera tested - though accessing the separate streams initially took significantly more work. The non-major manufacturer cameras (the truVision cameras) also took more work initially. However both the multi-stream cameras and the truVision cameras were not difficult to get functioning, once the correct configuration had been determined. Creating and displaying new views and sequences is just a matter of drag-and-dropping the channels and views into place.

The bottom line is this decoder does just what it was meant to do. It easily displays one or more video streams to a monitor with no extra on-screen clutter.