

Overview

The N1115 Decor Style Wallplate Encoder is part of the SVSI N1000 MPC (Minimum Proprietary Compression) Series and used in conjunction with N1000 MPC Series Decoders (N1222 or N1233) for transmission of HDMI or analog video over Ethernet. All Encoders and Decoders of the N1000 MPC Series feature input and output scaling, balanced audio, HDMI video connection, and Power-over-Ethernet (PoE).

Wallplate is available in white (WH) and black (BL)

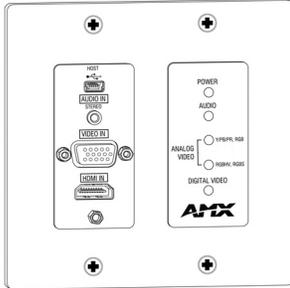


FIG. 1 N1115 WALLPLATE ENCODER

Installing the N1115 Wallplate Encoder:

Follow the steps below to mount your new N1115 MPC Encoder into an existing dual gang electrical box. The instructions given assume the box is already installed with Ethernet access running to it.

1. Connect the PoE-enabled Ethernet cable to the rear connector of the N1115 MPC Encoder. This provides both network and power connection to the Encoder.
2. Place the N1115 MPC Encoder display into the box and secure it with four screws (included in shipment).
3. Check LEDs for normal display (see the LED table at right).
4. Attach the (customer-provided) front cover plate to the unit to complete installation.

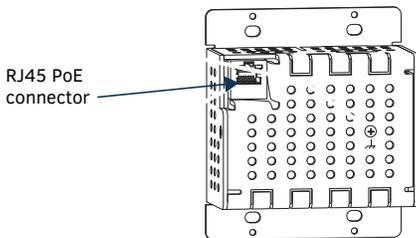


FIG. 2 CONNECT ETHERNET TO ENCODER

Attaching Signal and Control Cables

The following table explains how to attach cables to the front of the Encoder. Keep in mind that, by default, the HDMI connection has precedence for signal transmission. To transmit either analog video or analog audio without detaching the HDMI connector, the Encoder's precedence settings must be changed on the **Settings** page.

IMPORTANT: Encoders must be securely mounted and connected to the switch before attaching the remaining cables.

Basic Cabling Guidelines

Connector	Description
HDMI IN	Digital Video Connection For video encoding of a <i>digital</i> source, connect from the source to the Encoder's HDMI IN connector using a video cable with an HDMI connector (or adapter).
VIDEO IN	Analog Video Connection For video encoding of an <i>analog</i> source, connect the source to the Encoder's VIDEO IN VGA port using a video cable with a VGA connector (or component adapter).
AUDIO IN - STEREO	Audio Encoding Insert an analog audio cable from the source into the AUDIO IN STEREO jack (optional), OR use the embedded audio from the video source.
HOST	USB Control (optional) Attach a USB cable from the PC to the Encoder's USB mini-B port.

This table shows LED states on initial power up. If not normal, check connections.

Indicator LEDs	Normal power up	Indicates
Front-Right LEDs		
POWER	Green	PoE power is applied.
AUDIO*	Green	Configured to pass analog audio (coupled with digital or analog video path).
ANALOG VIDEO*	One of the two LEDs is Green**	Configured to pass analog video: • Y/Pb/Pr, RGB (three component) • RGBHV (five component) or RGBS (four component)
DIGITAL VIDEO*	Green	Configured to pass HDMI with embedded audio.
Front-Center LEDs (located under customer-provided cover plate, if installed)		
HDCP	Yellow	On when HDCP is active.
STREAM	Green	On when the unit is streaming video to the network.
STATUS	Green	On flashing (green) when there is software activity.
LINK/ACT	Green	On when there is Ethernet activity.

* The LEDs for **DIGITAL VIDEO**, **ANALOG VIDEO**, and **AUDIO** each indicate the configured state of the connectors (not necessarily the presence of signals through the Encoder).

** When an analog video signal is being received from the source device, only one of the two **ANALOG VIDEO** LEDs will be green at any time.

Additional Buttons and Port

The front-center section of the unit is shown in FIG. 3. This section is covered by the cover plate once it has been installed.

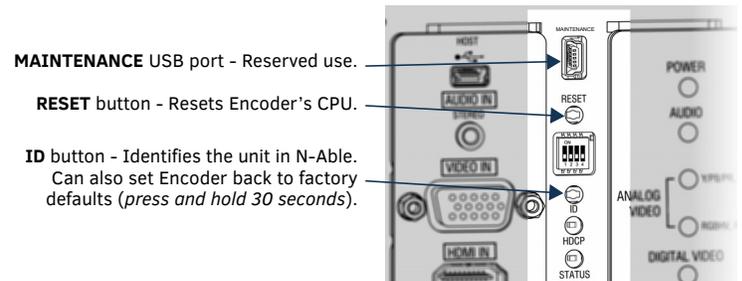


FIG. 3 BUTTONS LOCATED ON FRONT-CENTER OF UNIT

- MAINTENANCE** USB port - Reserved use.
- RESET** button - Resets Encoder's CPU.
- ID** button - Identifies the unit in N-Able. Can also set Encoder back to factory defaults (*press and hold 30 seconds*).

Establishing Connection

Before using your N1115 MPC Encoder, it must be configured using the free N-Able setup utility 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*.

*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> Mac version - <http://www.amx.com/products/N-ABLE-MAC.asp>
2. Attach your N1115 MPC Encoder 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, 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.

Logging in Using N-Able Software

Once the host IP address is configured properly, you can view all discovered units using the N-Able software. Access the N1115 MPC Encoder units from the following tabs:

- **Unit Management** tab - **N1000 Encoder/Decoder** is listed in the **Type** field.
- **Video Matrix** tab - N1115 MPC Encoder units are found on the **N1000** sub-tab of this screen.

Double-click the unit's name (in one of the lists mentioned above) to view its **Settings** page. If prompted, enter **admin** and **password** for the default username and password. Once logged in, you can change the username and password (using the options on the unit's **Settings** page). From this page, you can access any of the main pages of the unit's GUI.

NOTE: If you would like for N-Able to support auto-login to your units, make sure N-Able's Device Auto-login settings match the unit's username and password (by selecting N-Able > Settings from the N-Able tool bar).

NOTE: N1115 MPC Encoder units force HTTPS connections, so your web browser may give you a security warning. N-Able on Windows will ask you to download OpenSSL for Windows to connect HTTPS.

Basic KVM Setup

The N1115 MPC Encoders are KVM-capable. By default, USB connections are enabled and configured to follow video switching. Follow these steps for basic KVM setup. To learn about some of the more advanced KVM capabilities, see the section *Advanced KVM Setup (with added security features)*.

1. On the N1115 MPC Encoder, connect the USB Mini-B port to the computer to be controlled.
2. Connect the computer's video output to the Encoder's **HDMI IN** port.
3. On a KVM-capable SVSI N1000 Decoder, connect the **HDMI OUT** to the display.
4. Connect a USB keyboard and mouse to the Decoder's USB Standard-A ports (they can be plugged into either port).

NOTE: For wireless devices, simply plug the wireless signal receivers into these ports. For keyboard and mouse combos (with a single connection) use the keyboard port.

5. Using N-Able, click the **Unit Management** tab.
6. Click the **Auto Discover** button to discover your new devices (if you have not already done so).
7. Once discovery is complete (and you see the new units listed in N-Able), click the **Video Matrix** tab.
8. On the matrix, click the common cell for the desired Encoder/Decoder streaming combination. See the screen shot below for an example.
9. Click the **Take** button to make the change to your matrix. The radio button turns green to indicate the connection was successful.

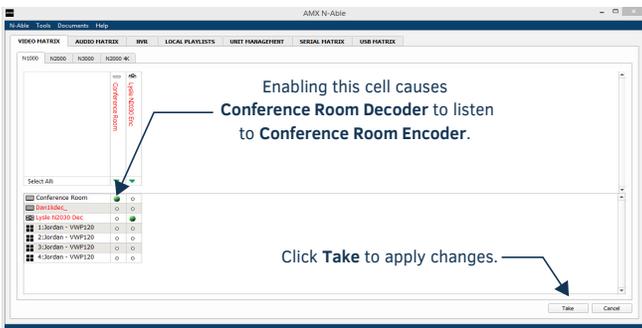


FIG. 4 CREATING STREAMING COMBINATIONS

Video/USB Switching Options

USB Follows Video: By default, units can be switched using N-Able without modifying the configuration. When you switch video streams (using the matrix as shown above) the USB functionality will follow the video.

Independent USB Switching: Use N-Able's **USB Matrix** tab to switch USB control (without affecting video).

Independent Video Switching: To switch video streams *without* affecting USB control, first select **N-Able > Settings** from N-Able's main menu. When the **N-Able Settings** dialog box is displayed, disable the **USB follows Video switching for KVM units**. Now you can use the **Video Matrix** to switch video streams only.

Advanced KVM Functionality: To have the ability to use KVM hotkeys for switching, **KVM Advanced Settings** must be enabled on the individual unit (select **KVM** from the top of the unit's web interface). The next section discusses these settings in more detail.

Advanced KVM Setup (with added security features)

You can configure devices for more advanced KVM operation on the Encoder and Decoder **KVM** pages. To access these pages, double-click the unit's name in the matrix and click **KVM** at the top of the **Settings** page (see below).



FIG. 5 SELECTING THE KVM PAGE

NOTE: Many of these options are easier to manage in N-Able's KVM Wizard (especially in large configurations). Select Tools > KVM Wizard from the N-Able main menu to access the wizard.

The following table describes some of the more advanced functionality. It is important to note that many of these options only appear on the **KVM** page when **USB** is enabled as well as **KVM Advanced Settings**.

Options	Descriptions
Permission Levels	This feature determines which Decoders can communicate with which Encoders. A Decoder must have a permission level that is <i>equal to or greater than</i> the Encoder in order for communication to be successful.
KVM Encoders table	Use the KVM Encoders table (on the Decoder's KVM page) to: <ul style="list-style-type: none"> • Let the Decoder know the Encoder passwords it needs to establish communication. • Assign Encoder hotkeys. • Add/remove Encoders from the Decoder's list.
Passwords	By default, KVM streams are encrypted with a common password. You can change the password on the Security page of the Encoder. If you change Encoder passwords, you will need to supply the new information to the Decoders to allow communication to continue. A Decoder only receives password information for the Encoders on the network that have been associated with that Decoder as mentioned previously.
Hotkeys	To use hotkeys for easy switching, enable KVM Directory Screen Enable on the Decoder's KVM page. You can now access the KVM Directory Screen at any time by pressing the <Scr Lk> button twice on the keyboard connected to the Decoder. This screen displays all Encoders associated with that Decoder (and their corresponding hotkey).
Import and export KVM CSV files.	Multiple Encoders and Decoders can be configured from a single CSV file (which is generated using the KVM Wizard in N-Able). Once all changes are made, upload the file to each unit using its KVM page. Click the Choose File button, browse to the CSV file you exported from the wizard, and click the Upload button.

Warning! You must assign KVM passwords to your Encoders and Decoders (as well as change the default login password from admin/password) in order for your system to be secure.

Product Specifications

Models Available:	NMX-ENC-1115-WP-BL (black) NMX-ENC-1115-WP-WH (white)
Power Requirements:	Powered via a PoE switch or other equipment with a PoE source. Conforms to IEEE 802.3af Class 3 (802.3at Type 1).
Dimensions:	4 1/16" x 3 1/2" x 2 1/4" (10.31 cm x 8.84 cm x 5.72 cm)
Weight:	Approx. .75 lb (0.34 kg)
Certifications:	FCC, CE, and NTRL
Environmental:	Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)
Installation	Mounts onto standard 2 gang US back boxes Mounts into standard decor style wallplates (not included)

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



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