ENOVA DVX-2210HD 4x2 All-in-One Presentation Switcher

Overview

This guide applies to the following Enova DVX-2210HD 4x2 All-in-One Presentation Switchers:

- DVX-2210HD-SP (**FG1906-07**)
- DVX-2210HD-T (**FG1906-09**)

The purpose of this document is to illustrate how to set up a device in its simplest configuration by a trained technician.

What's in the Box?

The following items are included with the DVX-2210HD:

- (1) Power Cord, Universal
- (1) Commoning Strip, Cypher, 8 Pos., 3.5 mm, Phoenix Connector
- (2) Front Rack Mounting Brackets
- (8) #8-32 x .375 screws
- (4) rubber feet
- (2) CC-NIRC, IR Emitter with 3.5mm Phoenix Connector (**FG10-000-11**)
- (1) CC-DVIM-VGAF, DVI to HD-15 Female Adapter (**FG10-2170-13**)

Power

IEC Power Cord Connector, ~100-240 VAC, 50/60Hz

Environmental Requirements

The environmental requirements for the DVX are as follows:

- **Operating Temperature**: 32° F (0° C) to 104° F (40° C)
- **Storage Temperature**: 4° F (-15° C) to 140° F (60° C)
- **Operating Humidity**: 5% to 85% RH

Getting Connected

Once the DVX is powered on, you can connect to it through its IP address.

NOTE: The DVX fully supports IPv6 network addressing. If the LAN port is connected to an IPv6 capable network it will self select an appropriate IPv6 address based on the discovered address parameters of the network to which it's attached.

Locating the IP Address of the DVX

You can locate the IP address of the DVX by using the buttons on the front panel of the unit. The IP address appears on the LCD display on the front panel of the DVX. Perform these steps to locate the IP address of the unit:

1. Press the STATUS button on the front panel of the unit to open the Status Menu. The Status options appear on the LCD display.
2. Use the UP and DOWN navigational arrow buttons to navigate through the options until you find the IP address. Note the IP address for future reference.

NOTE: You can use the Status menu to verify current TCP/IP settings using the UP and DOWN navigational buttons.

Switching to Static or Dynamic IP Addressing

To toggle between static or dynamic IP addressing, the controller cannot be currently booting or it must be in ID Mode. If these conditions are met, holding the ID pushbutton for 10 seconds changes the current IP addressing mode.

Changing the IP Address Once You Are Connected

Perform these steps to change the IP address once you are connected to the controller:

NOTE: Ensure the PC you are using to connect to the controller has the latest version of NetLinx Studio 4.0 installed on it.

1. Set the IP address on your PC to the same network the controller is currently on.
2. In NetLinx Studio, select **Diagnostics > Network Addresses** from the menu bar to open the Network Addresses dialog.
3. Click **Get IP Information** to enable the fields for editing.
4. Enter the System, Device (0 for NetLinx Masters), and Host Name information.
5. To specify a network IP address, select **Specify IP Address**.
6. Enter the IP parameters into the available fields.
7. Click **Set IP Information** to retain the pre-reserved IP Address to the Master.
8. Click **Reboot Device** to finish assigning the IP address to the Master, and click **OK** to close the dialog.

Default Settings

The following sections list the default settings for the controller.

Default User Names and Passwords

The following table lists the default user names and passwords for accessing the DVX through NetLinx Studio or the WebConsole.

DEFAULT USER NAMES AND PASSWORDS		
	User Name	Password
NetLinx Studio	netlinx	password
WebConsole	administrator	password

Default IP Addresses

The following table lists the default IP addresses for the DVX.

DEFAULT IP ADDRESSES		
	IP Address	Subnet
Static IP	192.168.1.3	255.255.255.0
ICSLAN	198.18.0.1	255.255.0.0
Link-local	169.254.x.y, where x and y are the least significant two octets of the MAC address.	

Configuration

All items in this section require accessing the front panel of the DVX.

Using the Front Panel Buttons

You can access the configuration settings for the DVX by using the VIDEO MENU, AUDIO MENU, SWITCH, and STATUS buttons on the front panel of the DVX. Pressing any button opens its respective menu on the LCD display on the front panel.

Press the TAKE pushbutton to implement an audio/video switch while you are in the Switch menu on the LCD display. When in an audio or video menu, press the button to cycle through audio and video inputs or outputs (depending on the menu.)

Use the Navigational buttons to traverse the available options and change their values. FIG. 1 displays the navigational function of each button.
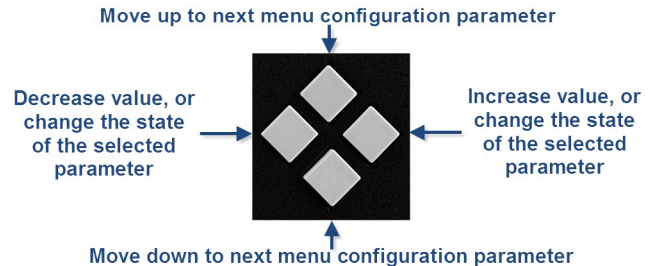

Move up to next menu configuration parameter

Decrease value, or change the state of the selected parameter

Increase value, or change the state of the selected parameter

Move down to next menu configuration parameter

FIG. 1 NAVIGATION BUTTONS

Selecting a Video Test Pattern

Selecting a test pattern for your input source can help determine if you have your video devices connected correctly. Perform these steps to select a test pattern:

1. Press the VIDEO MENU button on the front panel of the DVX to open the Video Output menu.
2. Press the left and right navigation buttons to select the output on which to display the test pattern (ALL, 1, or 2). (Note: You cannot display a test pattern on the DXLINK output (1) from the front panel menu. Refer to documentation for the DXLink receiver for information on displaying a test pattern from the receiver.)
3. Press the down navigational button until the Output Test Pattern option appears.
4. Use the left and right navigational buttons to select an appropriate output test pattern.

Selecting an Audio Test Tone

Selecting a test tone for your input source can help determine if you have your audio devices connected correctly. Perform these steps to select a test tone:

1. Press the AUDIO MENU button on the front panel of the DVX to open the Audio Output menu.
2. Press the left and right navigation buttons to select the output on which to play the test tone (ALL, 1, 2, or 3).
3. Press the down navigational button until the Test Tone option appears.
4. Use the left and right navigational buttons to select an appropriate audio test tone.

Setting the Video Type for a Video Input

Each video input type must be set manually. Perform these steps to set the video type for a video input:

1. Press the VIDEO MENU button on the front panel of the DVX two times to open the Video Input menu.
2. Press the left and right navigation buttons to select the input to change. You can select any input from 1-4.
3. Press the down navigational button until the Type option appears.
4. Use the left and right navigational buttons to select the video format for the selected input. For Multi-Format inputs, you can choose from HDMI, DVI, VGA, Component, S-Video, and Composite. The default setting is Component. For HDMI inputs, you can choose from HDMI or DVI.

Accessing the WebConsole

The DVX has a built-in WebConsole that allows you to make various configuration settings via a web browser on any PC with access to the device.

The WebConsole consists of a series of web pages that are collectively called the "Master Configuration Manager". Refer to the *NX Series NetLinx Integrated Controllers WebConsole & Programming Guide* for details on the WebConsole.

From any PC with access to the LAN that the target DVX resides on:

1. Open a web browser and type the IP Address of the target DVX in the Address Bar.
2. Press **Enter** to access WebConsole for the DVX. The initial view is the WebControl page.
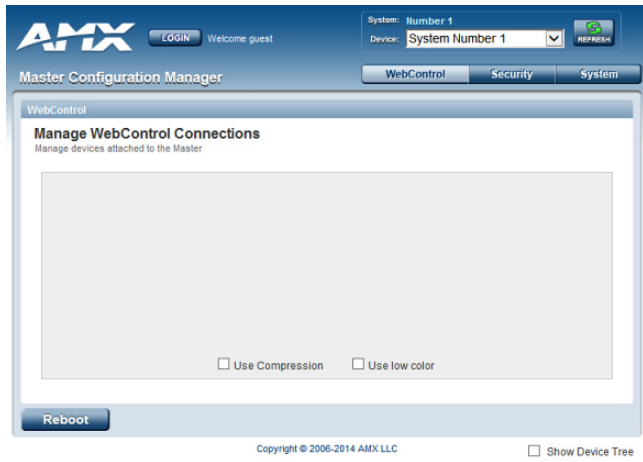
FIG. 2 WEBCONSOLE (MAIN PAGE)

Enabling Security

To enable security:

1. Select the **Security** tab on the WebConsole. The System Security Details appear.
2. Click the **Enabled** check box to enable security and activate the Access options.
3. Select the Access options which you want to require a login and password.
4. Configure users and groups as necessary.

Wired 802.1x Security

The DVX supports wired 802.1x, an IEEE Standard for Port-based Network Access Control. To enable wired 802.1x, you must load an 802.1x certificate file to your controller using NetLinx Studio. Once you add the certificate file to your workspace, NetLinx Studio transfers the file to the appropriate directory on the controller.

1. Click to select (highlight) a System (in the Workspace tab of the Workspace Bar).
2. Right-click on the **Other** folder to access the Other File Folder context menu, and select **Add Existing Other File**.
3. In the Add Existing Other File dialog, locate and select the certificate file (.crt) that you want to add to the selected System. Change the Files of Type option to All Files (*.*) to look for other file types, if necessary.
4. Click **Open** to access the File Properties dialog, where you can view/edit general file information for the selected file.
5. Click **OK** to add the file to the selected System. The file should now appear in the Other folder under the selected System.

Hardware Information

This section lists important hardware information for the DVX.

Port Numbers

The following table lists the port numbers for the all 2210-series DVX models:

DVX-2210HD PORT NUMBERS				
RS-232	**RS-422/485**	**IR/Serial**	**I/O**	**Relay**
2-4	1	11-14	22	21

Mounting the DVX into an Equipment Rack

The DVX occupies three rack units in a standard equipment rack. Install the included rack mounting brackets using the supplied mounting screws prior to securing the unit in the rack.

CAUTION: The DVX should not be installed in enclosed spaces. ALWAYS ensure that the rack enclosure is adequately ventilated. Do not block any ventilation openings. It is recommended that you leave 1 RU of space above the DVX when you install it in a rack. DO NOT stand other units directly on top of the DVX when it is rack mounted, as this will place excessive strain on the mounting brackets.

ALWAYS ensure that the rack enclosure is adequately ventilated. Do not block any ventilation openings. Sufficient airflow must be achieved (by convection or forced-air cooling) to satisfy the ventilation requirements of all the items of equipment installed within the rack.

NOTE: Connect the LAN port to a LAN with DHCP before powering up the device.

Additional Documentation

Additional documentation for this device is available at www.amx.com.

- Refer to the *Enova DVX-325xHD/22xxHD All-in-One Presentation Switchers Instruction Manual* for additional details on installing, wiring, and updating the firmware for your device.
- Refer to the *NX Series NetLinx Integrated Controllers WebConsole & Programming Guide* for detailed configuration instructions.

You can also access this Quick Start Guide online by using your mobile device to scan the QR code located on the bottom of the DVX.