ClearOne®

VIEW® CONSOLE Software User Manual

Notices

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VIEW CONSOLE Software User Manual

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Chapter 1

Introduction

Topics:

- *VIEW & VIEW Pro Product Family Overview*
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This chapter contains some basic concepts and tasks important to understanding and using the VIEW® CONSOLE® application. The VIEW CONSOLE is a new software that gives end users and integrators a comprehensive platform that allows easy configuration, management, monitoring, and control of entire VIEW / VIEW Pro system installations. StreamNet systems are also interoperable with third-party controllers.

This manual covers navigation of the basic setup process for a VIEW / VIEW Pro system in the VIEW CONSOLE, how to adjust software settings, and how to utilize system features, tools, and additional resources.

VIEW & VIEW Pro Product Family Overview

Congratulations! You have purchased a ClearOne® VIEW® or VIEW Pro streaming solution. The VIEW and VIEW Pro product portfolios afford organizations of any size flexible and competitive state-of-the-art audiovisual streaming capabilities. Meet dynamic streaming needs with any VIEW or VIEW Pro encoder, decoder (software or hardware), controller (software or hardware), amplifier, ethernet switch, power supply, and accompanying accessory. ClearOne products consistently deliver on industry-leading audio and visual quality with unsurpassed reliability.

The VIEW and VIEW Pro IP-based audio and video distribution systems are decentralized. Distributed architecture allows hardware and processing power to be spread out across a TCP/IP network, and enables virtually unlimited zones and sources along with the most advanced integration capabilities available in distributed audio and video.

Our proprietary StreamNet® technology forms the foundation of the VIEW and VIEW Pro product families, and provides optimal audio and video delivery for today's multimedia streaming environments. The StreamNet platform enables seamless communication with other third-party systems, such as lighting control, automation, and security systems.

Applications

The VIEW and VIEW Pro product families provide scalable streaming solutions for any size venue. Some common applications include:

- Digital Signage
- Hospitality
- Entertainment
- Gaming
- Government
    - Public Safety
    - Emergency Communication
    - Command & Control Centers
- Corporate Communications
- Healthcare
    - Telemedicine
- Education
    - Distance Learning
- Transportation
- Conferencing
- Finance
- Call Centers
- Houses of Worship
- Residence

Models

The VIEW and VIEW Pro product families and associated products include the following:

- VIEW Pro E110 Encoder
- VIEW Pro E120 Encoder
- VIEW Pro D110 Decoder
- VIEW Pro D210 Decoder
- VIEW Pro D310 Decoder
- VIEW Pro Panorama software
- VIEW Multimedia Receiver software
- VIEW Virtual Matrix software
- VIEW MLAV9500 Digital AV Encoder
- VIEW VL9300 Digital AV Decoder
- VIEW MLAV9300 Digital AV Encoder
- VIEW VL9100 Digital AV Decoder
- VIEW MLA101 Digital Audio Encoder
- VIEW SLX300 Zone Controller/Amplifier
- VIEW AMP2200 Amplifier
- VIEW SL251 Zone Controller/Amplifier
- VIEW SL254 Zone Controller/Amplifier
- VIEW SL9250 Zone Controller/Amplifier
- VIEW Ethernet Switches - 24 & 48 Ports
- VIEW PL960 Power Supply
- VIEW PL250 Power Supply
- VIEW PL118 Power Supply
- VIEW PL140 Power Supply

VIEW and VIEW Pro System Requirements

Before you can install a VIEW or VIEW Pro system and download the VIEW CONSOLE, please note the following prerequisites.

VIEW and VIEW Pro System Infrastructure Requirements

For infrastructure requirements, refer to the *Infrastructure and Network Design Guide* and the *Network Infrastructure Pre-Qualification Checklist* on the ClearOne Resource Library.

Installer Requirements

For installer requirements, the manual assumes the installer:

- has completed ClearOne StreamNet Certification Training and other training such as Custom Electronic Design and Installation Association's (CEDIA's) boot camp
- knows how to install audio keypads and connect audio components
- knows how to install and connect video components
- knows how to use basic installation tools such as an RJ45 crimper to terminate CAT5 cables
- has pulled all necessary wire to the locations where the preamp, keypads, and speakers are to be installed
- understands basic Microsoft® Windows® commands such as how to browse, create folders, save files, etc.

For more information on meeting the prerequisites, contact ClearOne Technical Support at +1(800) 283-5936.

Note:

The VIEW CONSOLE software only works over a wired connection to the switch. DO NOT use a wireless connection to run the software.

Note:

The VIEW CONSOLE software will not work properly if it is not connected directly to a StreamNet SwitchLinX or Qualified 3rd Party Switch.

Note:

Properly label all cables on the front end to facilitate installation.

Minimum PC Requirements

You can install the VIEW CONSOLE on any Windows PC that meets the following requirements:

- This software is required to be running on a PC or laptop located on the same segment of your StreamNet network.
- Windows 7 or higher OS
- 2GHz processor
- 4 GB RAM (32 or 64-bit) Memory
- 2 GB of free Hard Drive Space

Prior to Installation

The following are important to know before installing a VIEW or VIEW Pro system:

- Cable Connections. Ensure all cables are connected and terminated properly. Please reference the DigiLinX Installation and Design Guide, VIEW PRO Encoder Installation Manual, or VIEW Pro Decoder Installation Manual for cabling instructions.
- Firewall. Temporarily disable all firewalls that may be running on your PC.
- IP Addressing for third-party hardware. Set the IP address for IP cameras and speakers prior to configuring them in VIEW CONSOLE. Consult the product's user guide for information on setting the IP address.
- Diagnostics Tool. Run diagnostics to test your connection. This is covered in Diagnostics in Chapter 11.

- Restart. Restarting your PC enables some network setting changes. To restart, close the VIEW CONSOLE software and reboot your computer.

📝 **Note:**

If you have difficulty establishing a network connection after completing these steps, call ClearOne tech support at +1-800-283-5936 or email at tech.support@clearone.com.

Downloading & Installing VIEW CONSOLE

Before you can start using the VIEW CONSOLE, you must download and install the software.

The VIEW CONSOLE software is free to download from the ClearOne Resource Library at:

http://www.clearone.com/resources#network_media_streaming

Hardware installation instructions are also available at the link above.

The software is installed by running a self-extracting executable. The process is outlined below.
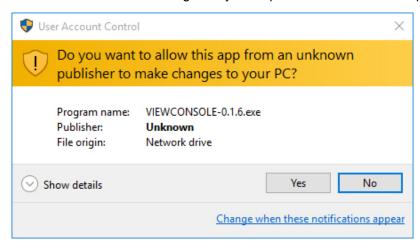
📝 **Note:**

Please ensure that you have downloaded the most recent software, manual, and technical notes from the ClearOne Resource Library.
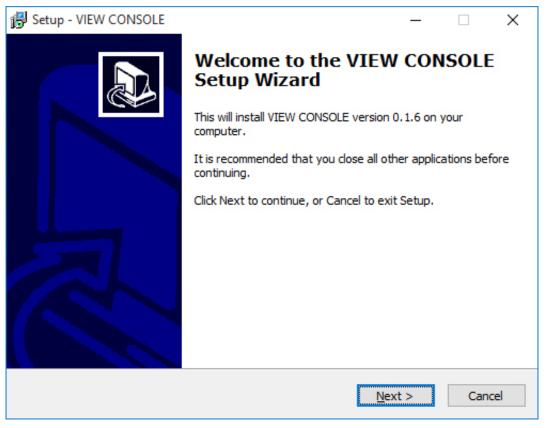
1. Run the installation application, VIEWCONSOLE-x.x.x.exe (where the x's represent the version number).

   A User Account Control dialog asks you for permission to allow the application to install the software.
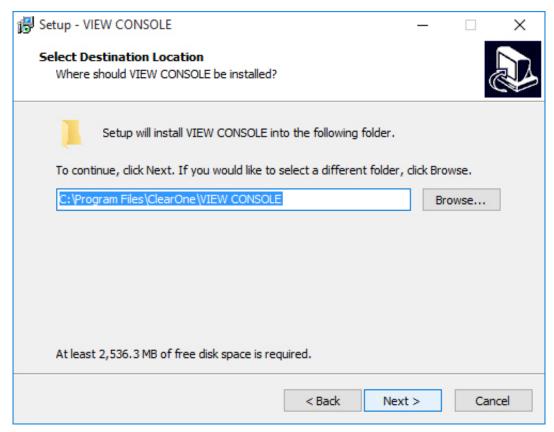
2. Click **Yes** to move forward in the installation process.

   The VIEW CONSOLE Setup Wizard begins, and the Welcome window displays.
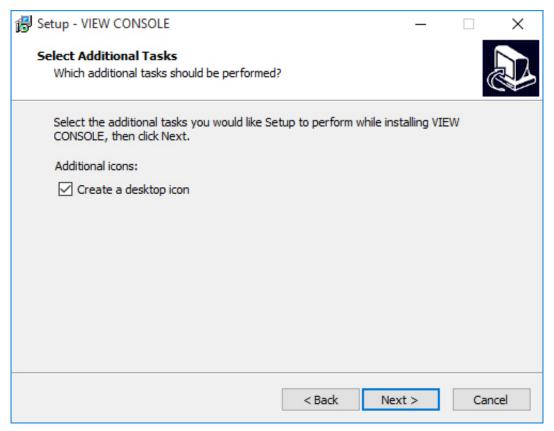
3. Click **Next**.

   The Select Location screen displays.
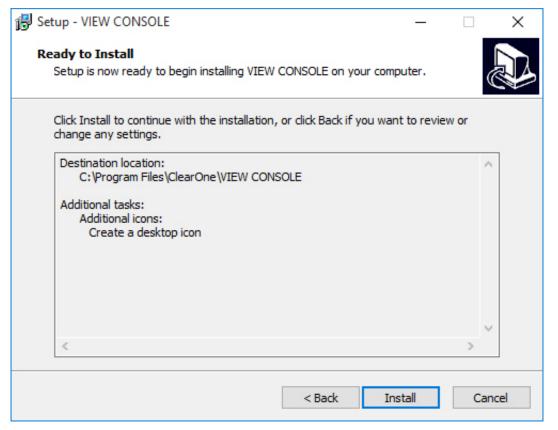
4. If you want to install the application somewhere other than to the default location (ClearOne\VIEW_CONSOLE), click **Browse** and choose an alternate location. Once you have chosen your preferred location, click **Next**.

The Additional Tasks screen displays.
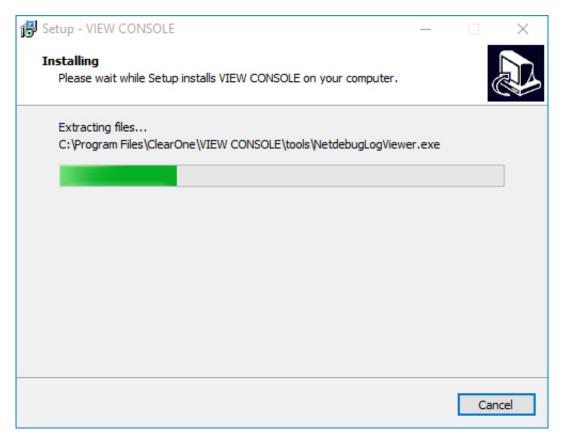
5. If you do not want an additional task to be completed, uncheck it, and click **Next**.

The application is ready to install.
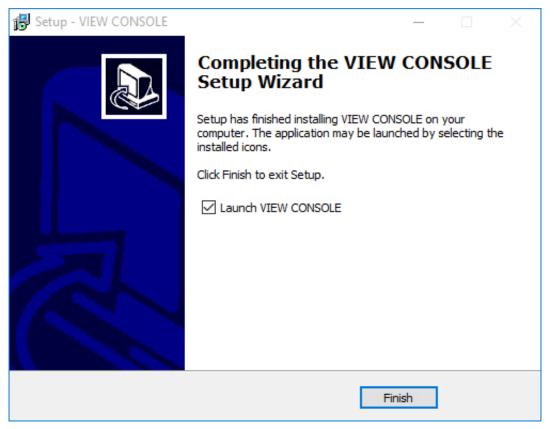
6. Click Install.
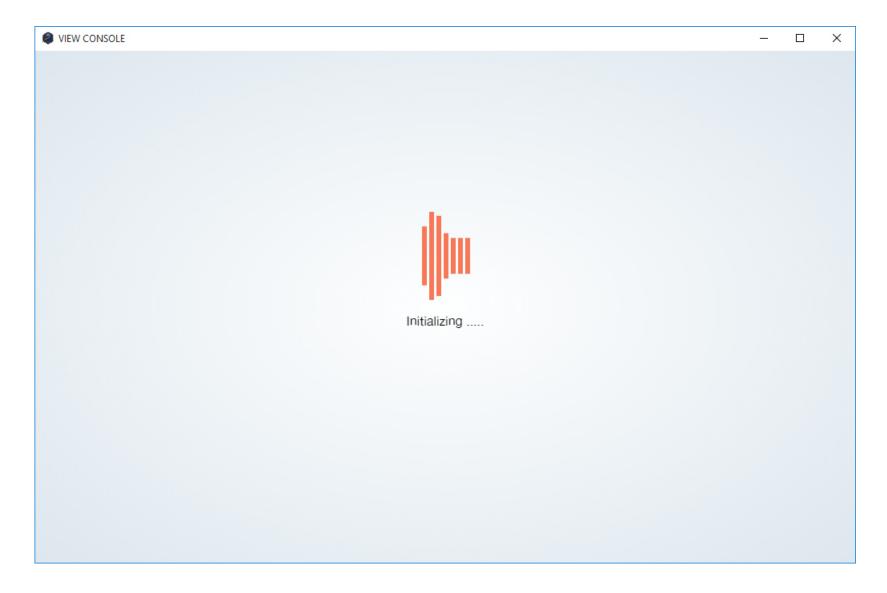
   The Installing screen displays, and the application begins installing VIEW CONSOLE software.

When the program finishes installing, the VIEW CONSOLE Setup Wizard completion screen displays:
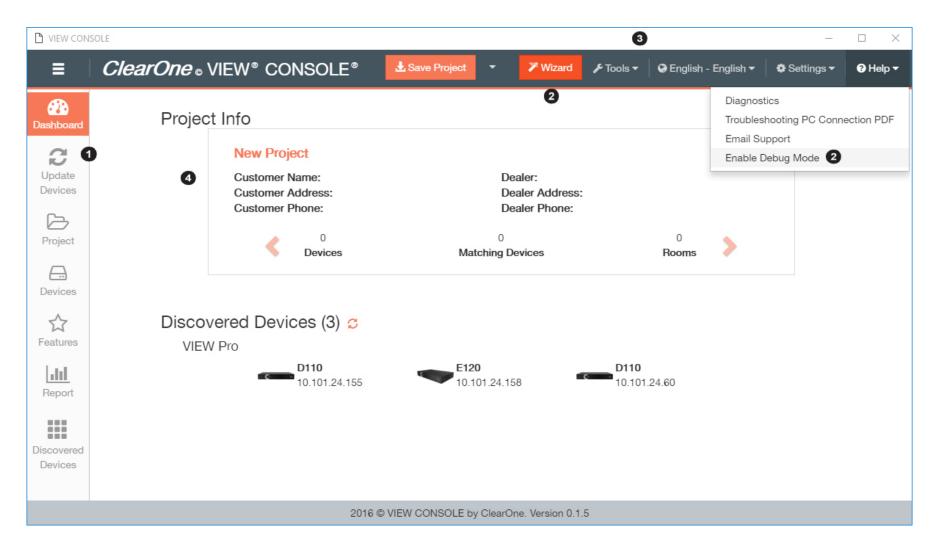
7. If you want to launch the software upon completion, leave Launch VIEW CONSOLE checked, and click **Finish**.

   The software launches and starts to initialize.

About VIEW CONSOLE Interface

The VIEW CONSOLE interface has been designed to make it easier and more intuitive to configure and control your audio and visual streaming environment(s).

❶ Left-hand Toolbar

The left-hand Toolbar is where you will find the essential features of setting up and configuring your VIEW / VIEW Pro system.

📝 **Note:**

Discovered Devices is also directly accessible from the Dashboard screen.

1. The basic setup process is completed in this toolbar. These steps are required before you can adjust (system) Features in your project:

    a. *Update Devices*

    b. *Create or Access a Project*

    c. *Devices*

- *Add Devices* to the project.
- *Match Devices* (discovered on the network) to devices you have added to your project.
- *Configure Devices*. Besides device configurations, you can perform the following Actions for individual devices from this screen:

  - *Send Device Configurations*
  - View Config XML
  - View GUI XML
  - View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
  - Load Anthology Configuration
  - Load Firmware
  - Load Files
  - Erase Flash Files
  - Restart
  - Ping Device
  - IR Tools
  - Remove
  - About
  - Stop Load
  - Launch Virtual Control
  - Launch Demo
  - Socket Generic
- Save your project.
- Send configuration files to the physical hardware devices.

    📝   **Note:**

        Wizard Mode can guide you through the basic setup process.

2. Navigation through the [system] Features, Reports, and Discovered Devices tiles is not part of Wizard Mode, but is outlined in the manual after basic setup steps:

- The Features tile in the left-hand toolbar is where you change VIEW / VIEW Pro system features:

  - Group Management
  - Subscriber Management
  - Skin Setup (for Virtual Control)
  - Lockout PIN Assignment

- Intercom Management
- Static Menus
- Macro
- Favorites
- The Reports tile in the left-hand toolbar gives you an exportable summary of system rooms and devices with configuration details.
- The Discovered Devices tile in the left-hand toolbar lists discovered devices that are not in a project. You can also perform the following Actions for individual devices from this screen:

  - Launch Virtual Control
  - Load Anthology Config
  - Load Firmware
  - Load Files
  - Ping Device
  - Socket Generic
  - Erase Flash Files
  - Restart
  - Stop Load (individual devices)
  - View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
  - View Config XML
  - View GUI XML

❷ Modes

There are three modes in which you can operate: Standard Mode, Wizard Mode, or Debug Mode.

📝 **Note:**

Wizard and Debug Mode are accessed from different menu screens, and can be enabled at the same time. For more

Mode	Function	Note
Standard	The default operating mode.	
Wizard	Wizard Mode guides you through the basic setup process of a VIEW / VIEW Pro system.	Wizard Mode only affects screens in the basic setup process.
Debug	Debug Mode enables erasing of flash files and inclusion of firmware during device updates, and manage the number of devices that can be updated concurrently.	Debug Mode only affects the *Update Devices* screen.

❸ Top Menu Bar

The Menu bar at the top of the window allows you to quickly make changes to VIEW CONSOLE software settings, save your projects, access Wizard Mode, and access additional tools and resources.

1. Navigation through software settings, tools and additional resources is not part of Wizard Mode, but is outlined in the manual after exploring the essential functions of the left-hand toolbar:

    • The *About Tools* menu in the top Menu bar provides additional tools for managing and monitoring your system.

        • Design Rules Check (displays errors to be corrected/noted)
        • Socket Generic (for more advanced users, integrators, etc.)
        • ID Devices (only available when you have created a project)
        • Invalidate All Devices
        • (launch) NetDebug Tool
        • (launch) Panorama (summary, refer to Panorama documentation)
        • Launch Demo (demos the Virtual Control w/out actually doing anything, refer to TL documentation)
        • Optimize Streams (does nothing)
        • Stop Load

    • The Language menu in the top Menu bar allows you to select the language you would like the VIEW CONSOLE to run and display in.
    • The *Settings* menu in the top Menu bar allows you to adjust additional VIEW CONSOLE settings:

        • Plugin (displays which plugins are installed)
        • Preferences (choosing your network adapter, GUI language for TouchLinX, Virtual Control)

    • The *Help* menu allows you to access additional system information, settings, and support:

        • Diagnostics (System/Software Information)
        • Troubleshooting PDF document
        • Email Support
        • Debug Mode

❹ Interface Screen Area

The interface screen area is where you make changes to features. The contents of the interface screen change depending on what you select in the left-hand Toolbar or top Menu bar.

Getting Started with VIEW CONSOLE

Once you have downloaded and installed the VIEW CONSOLE software, you can get started with the basic setup process.
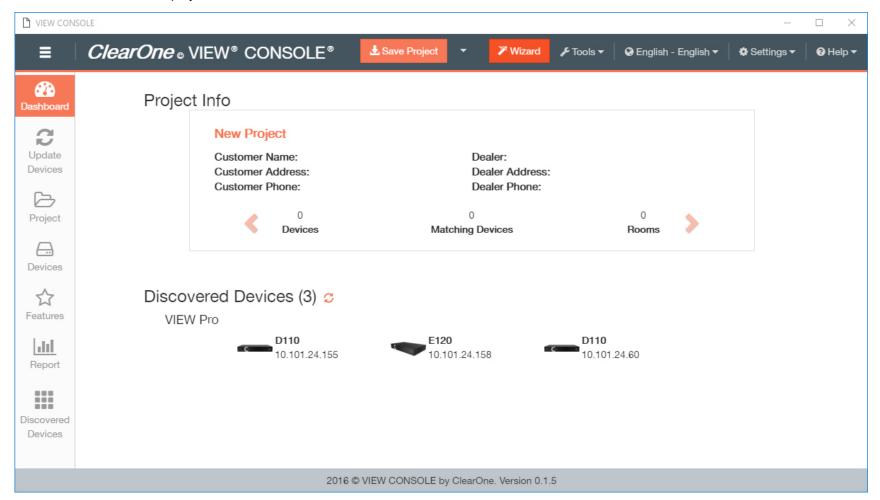
VIEW CONSOLE can be run on a PC or laptop to configure all current StreamNet products, as well as StreamNet legacy devices.

Legacy devices are ClearOne devices that are no longer in production, but are still supported in the VIEW CONSOLE.

1. The VIEW CONSOLE software is manually initialized by double-clicking the desktop icon.

   Once initialized, the software performs auto-discovery of the StreamNet system running on the network segment. Any StreamNet devices found populate under the Discovered Devices section of the Dashboard, or under the Discovered Devices section in the left-hand sidebar.

   The Dashboard screen displays.

2. You can manually navigate the setup process, or enter Wizard mode (button in the top menu bar) for a guided basic setup process. For more information on operating modes, see *Operating Modes*.

   The software enters Wizard mode. A Wizard pop-up appears and remains in the lower left corner until closed, or setup is complete.

Process Review

This is a complete chronological review of the processes for adjusting software settings, and utilizing system features, tools, and additional resources in the VIEW CONSOLE.

Pre-System Setup

Before you can start using the software and perform basic setup, you must complete the following:

1. Review VIEW and VIEW Pro system requirements.
2. Download and install the VIEW CONSOLE software.
3. Make settings change(s). This can also be completed after the basic setup process.
4. Determine whether you want to operate in Debug Mode. For more information on operating modes, see *Operating Modes*.
5. Determine whether you want to operate in Wizard or Standard Mode. For more information on operating modes, see *Operating Modes*.

Basic System Setup

Once you have completed pre-system setup steps, you can begin basic setup of your VIEW or VIEW Pro system.

> 📝 **Note:**
>
> Wizard Mode can guide you through the basic setup process. For more information on operating modes, see *Operating Modes*.

1. *Update Devices*
2. *Create or Access a Project*
3. *Devices*

   a. *Add Devices* to the project.
   b. *Match Devices* (discovered on the network) to devices you have added to your project.
   c. *Configure Devices*. Besides device configurations, you can perform the following *Actions* for individual devices from this screen:

   - *Send Device Configurations*

     View Config XML

     View GUI XML

     View Advanced VIEW & VIEW Pro CONSOLE Manual (online)

     Load Anthology Configuration

     Load Firmware

     Load Files

     Erase Flash Files

Restart

Ping Device

IR Tools

Remove

About

Stop Load

Launch *Virtual Control*

Launch Demo

Socket Generic

For unmatched individual devices, you can perform the following Actions:

- *Match Devices*

Remove

Stop Load

Launch Demo

d. Save your project.

e. *Send Device Configurations* files to the physical hardware devices.

System Features

After you complete basic setup of your VIEW or VIEW Pro system, you can start adjusting system features.

- *Group Management*
- *Subscriber Management*
- *Skin Setup* (for *Virtual Control* interface)
- *Lockout* PIN Assignment
- *Intercom Management*
- Static Menus
- *Macro*
- *Favorites*

Tools

The VIEW CONSOLE includes tools that help with troubleshooting and monitoring statuses as you go through the basic setup process and adjust system features:
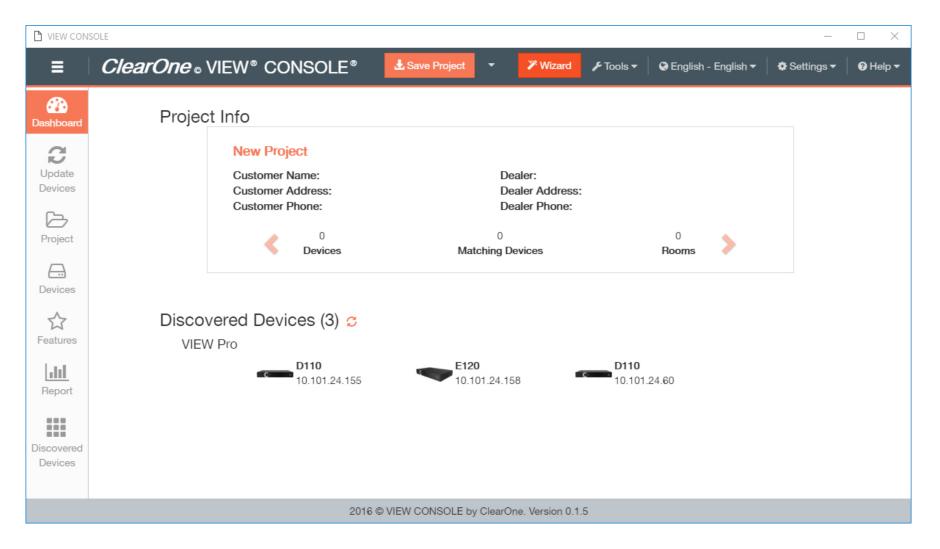
- The Report tile in the left-hand toolbar gives you an exportable summary of system rooms and devices with configuration details.
- The Discovered Devices tile in the left-hand toolbar lists devices discovered in the network that are not yet matched to a device in the open project. You can also take the following *Actions* for individual devices on this screen:

  - Launch *Virtual Control*
  - Load Anthology Config
  - Load Firmware
  - *IR Learning and Control*
  - Ping Device
  - Restart
  - *Stop Load* (individual device)
  - View Advanced VIEW & VIEW Pro Manual Online
  - View Config XML
  - View GUI XML
  - Load Files
  - Launch Demo (demos the *Virtual Control* control interface without actually making system changes)
  - About
  - Remove

- The *Tools* menu in the top Menu bar provides additional tools for managing and monitoring your system.

  - Design Rules Check (displays errors to be corrected/noted)
  - *Socket Generic* (for more advanced users, integrators, etc.)
  - ID Devices (only available when you have created a project)
  - Invalidate All Devices
  - (launch) *NetDebug Tool*
  - (launch) PANORAMA
  - Launch Demo (demos the *Virtual Control* control interface without actually making system changes)
  - Optimize Streams
  - *Stop Load*

Operating Modes

The VIEW CONSOLE can be in one of three possible modes: Standard, Wizard, or Debug mode.
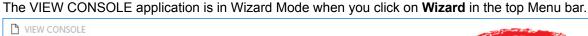
Standard Mode
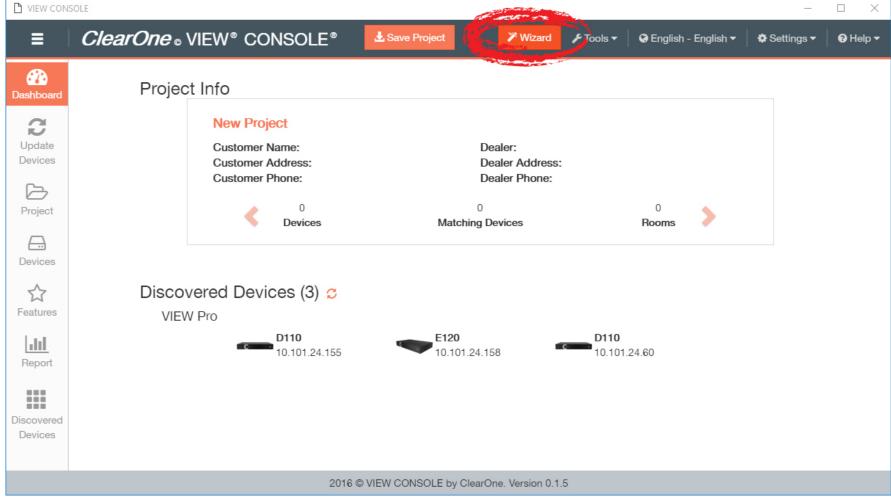
The Standard mode of operating the VIEW CONSOLE is the default mode.

Wizard Mode

Wizard Mode guides you through the basic setup process of a VIEW / VIEW Pro system. Refer to *Basic System Setup* in the *Process Review* chapter for more information about the basic setup process.

The VIEW CONSOLE application is in Wizard Mode when you click on **Wizard** in the top Menu bar.

If you enter Wizard Mode, a pop-up for the Wizard displays in the lower left corner until closed, or setup is complete.
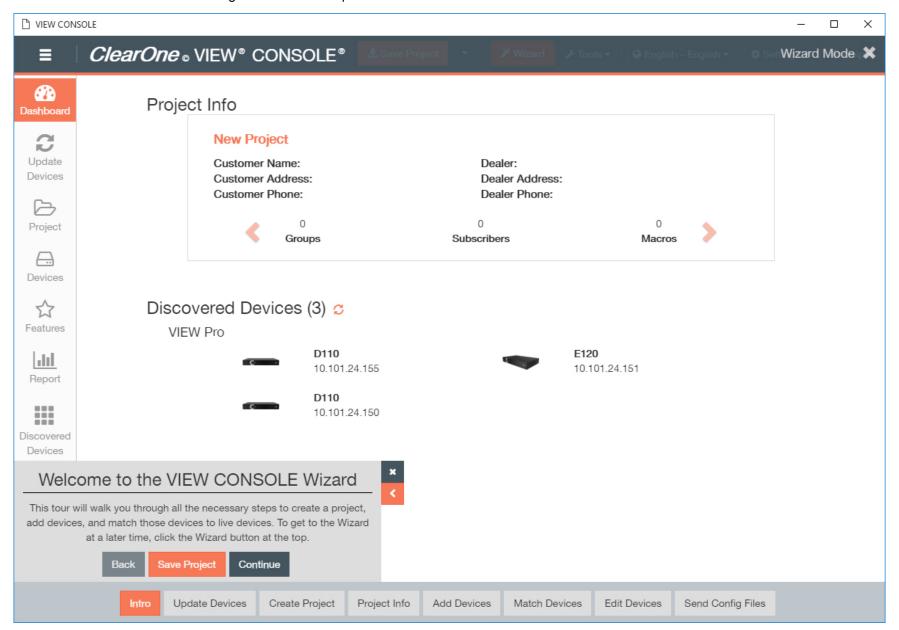
Click on the [×] button to close the Wizard pop-up.

Click on the [‹] button to minimize the Wizard pop-up.

Click on the **Back** button to navigate to the previous step.

Click on the **Save Project** button to save your project.

Click on the **Continue** button to navigate to the next step.
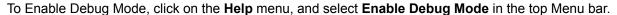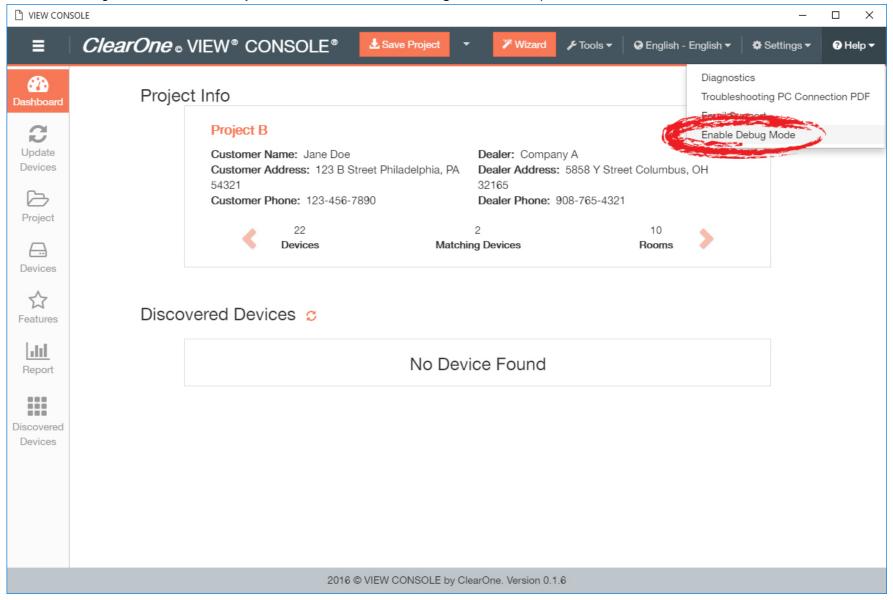
The entire navigation list is shown at the bottom of the screen, and indicates where you are in the setup process.

Debug Mode

Debug Mode enables you to modify the way *Device Updates* functions by adding settings that allow you to troubleshoot update issues that may occur.

Debug Mode and Wizard Mode can run at the same time.

To Enable Debug Mode, click on the **Help** menu, and select **Enable Debug Mode** in the top Menu bar.
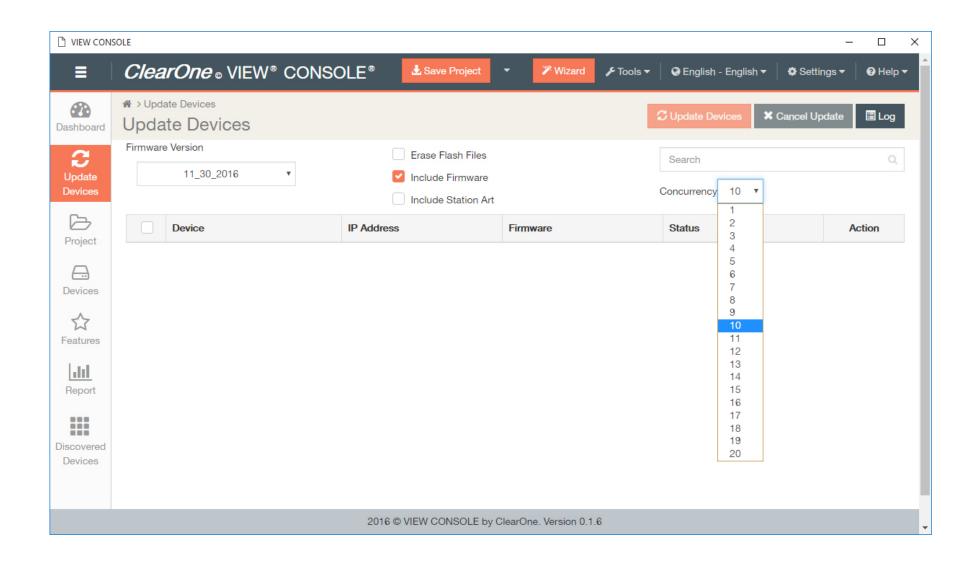
Enabling Debug Mode adds the following options to the Update Devices menu:

Additional Option	Function	Use Cases	Default
Erase flash files	Allows you to select whether Update Devices erases previous configuration files on the selected device(s) before updating firmware.	If a previous update has corrupted files, this option allows you to erase previous configuration files.	Disabled (No)
Include Firmware	Allows you to select whether or not Firmware Update is part of Update Devices for selected device(s).	You can do a bulk Erase Flash Files without changing or reloading the firmware, if an incorrect configuration has been loaded to several devices. **Note:** Erase Flash Files exists as a menu item on a different screen, but is only available for single devices at once.	Enabled (Yes)
Concurrency	A drop-down box that allows you to select how many devices are updated at one time (number of open TCP/IP sockets). Concurrency can be increased or decreased to match the processing capabilities/speed of the computer with VIEW CONSOLE.	This option gives you the ability to manage updates for lower capacity computers. A brand new i7 octo-core CPU computer may be able to handle several more concurrent TCP/IP sockets and file transfers than a 2005 era Windows XP box.	10

Note:

Debug Mode only affects the Update Devices screen.

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⬇ Save Project ▾ | 🪄 Wizard | 🔧 Tools ▾ | 🌐 English - English ▾ | ⚙ Settings ▾ | ❓ Help ▾

🏠 > Update Devices

Update Devices

🔄 Update Devices | ✖ Cancel Update | 📋 Log

Firmware Version

| 11_30_2016 ▾ |

☐ Erase Flash Files
☑ Include Firmware
☐ Include Station Art

| Search | 🔍 |

Concurrency | 10 ▾ |

☐	Device	IP Address	Firmware	Status		Action

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Dashboard
Update Devices
Project
Devices
Features
Report
Discovered Devices

Chapter 2

Settings

Topics:

- *About Settings*
- *Viewing Plugins*
- *Preferences*

This chapter outlines how to adjust the settings.

About Settings

The Settings menu allows you to view plugins that are installed, and to make change some system and network configurations. Settings changes can be made before or after the basic setup process.

Chapter Overview:
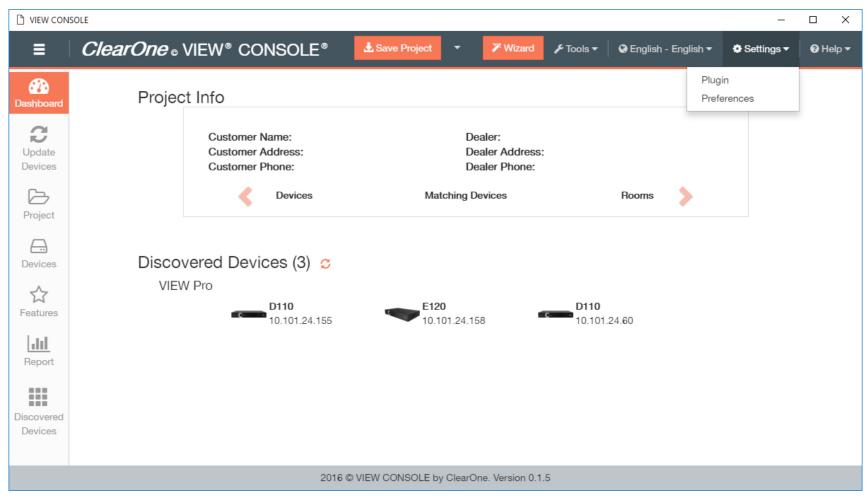
1. Plugins
2. Preferences

   a. Choose Adapter
   b. Auto IP
   c. GUI Language
   d. System Multicast for Auto Discovery
   e. Time To Live (TTL)

Viewing Plugins

View the plugins available to communicate with StreamNet devices. These are automatically downloaded and installed with the software.
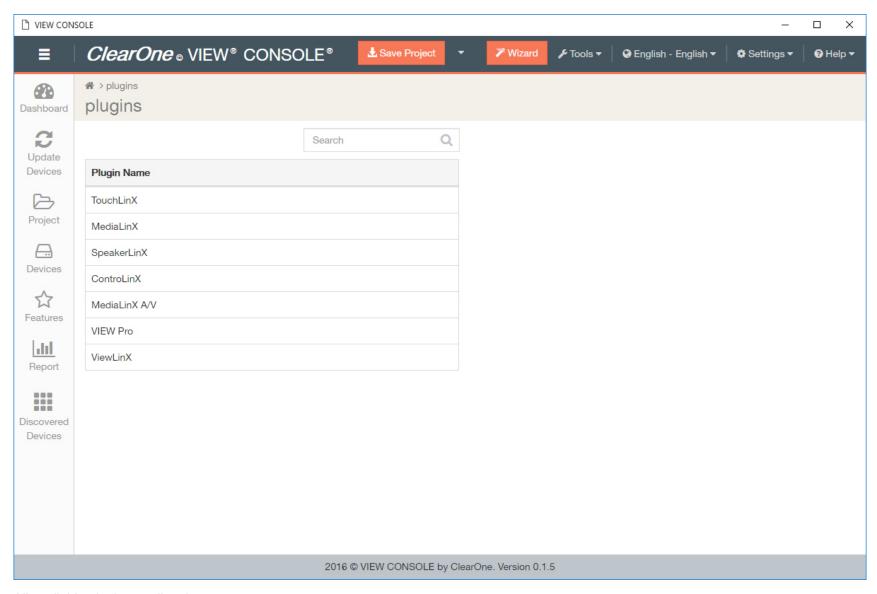
To view available plugins:

1. Select the **Settings** menu in the top Menu bar.

2. From the **Settings** menu, choose **Plugin**.

   The Plugins screen displays:

All available plugins are listed.
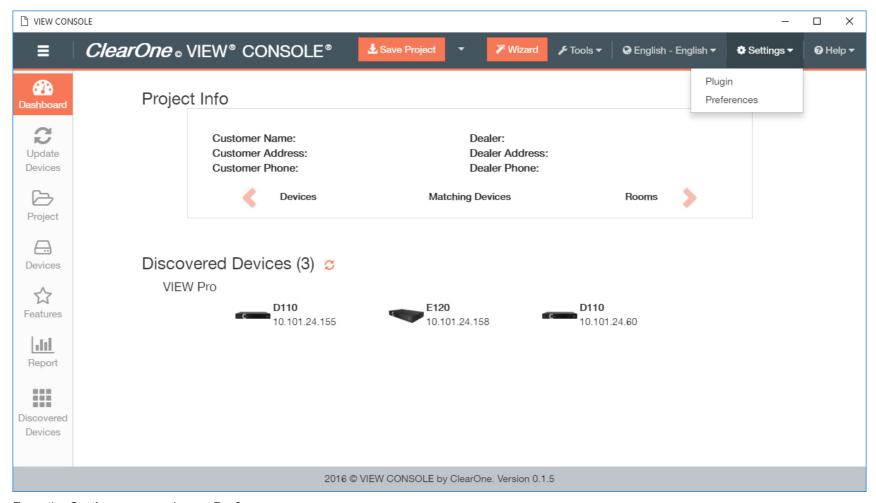
Preferences

Settings can also be changed on an individual basis for each device, but ClearOne does not recommend this.

To change the VIEW or VIEW Pro system preferences:
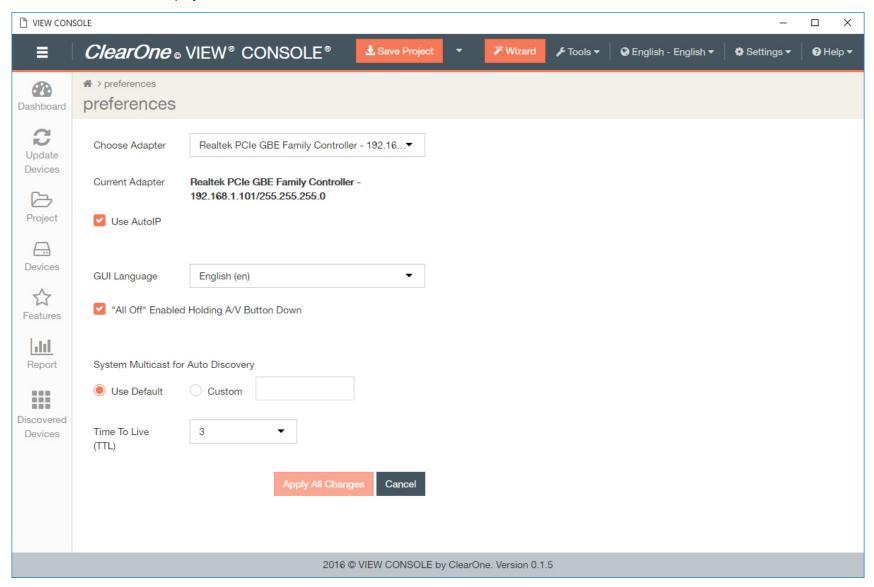
1. Select the **Settings** menu in the top Menu bar.

   The Settings menu displays.

2. From the **Settings** menu, choose **Preferences**.

The Preferences screen displays:

Choose Adapter

3. If the **Use All NIC Cards** option in the drop-down menu does not apply, select a NIC option for the network that the VIEW or VIEW Pro system communicate on.

The selected adapter displays next to Current Adapter.

Current Adapter	Realtek PCIe GBE Family Controller – 192.168.1.101/255.255.255.0

AutoIP

4. To turn on the Auto IP feature, select the **Use AutoIP** check box.

AutoIP allows the user to set a range of IP addresses for devices without going through a DHCP server, or setting individual device static addresses.

> **Note:**
>
> The feature does not work with VIEW Pro devices. The default setting for VIEW Pro devices is to find a DHCP server. Auto IP is the default setting for VIEW devices.

GUI Language

5. To select a language for TouchLinX or Virtual Control devices, choose an option from the **GUI Language** drop-down menu.

Virtual Control interface:

A/V Button

6. To enable the ability to turn off all decoders by holding down the A/V button within Virtual Control or on TouchLinx devices, select the **"All Off"**

Enabled Holding A/V Button Down check box.

System Multicast

7. To select a custom system multicast IP address, select **Custom** and type an address in the **Custom** field.

System Multicast for Auto Discovery

⦿ Use Default   ○ Custom   [   ]

📝 **Note:**

ClearOne strongly recommends against using a custom multicast address. For a custom multicast address to work, each device must also be configured with the custom multicast address and the configuration must be pushed to each device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

Time To Live (TTL)

8. To set the Time To Live value for StreamNet packets, choose an option from the **Time To Live (TTL)** drop-down list.

This option specifies how many network hops a packet can make before it expires. A TTL of 1, for example, requires that all packets must be sent only across a single subnet.

Time To Live (TTL)   [3   ▼]

9. To apply any changes you've made to the preferences, click **Apply All Changes**.

Chapter 3

Device Updates

Topics:

- *About Device Updates*
- *Update Devices*

This chapter contains information about updating your devices.

About Device Updates

The first thing you should do upon startup of the VIEW CONSOLE software is update the firmware on your devices. Device updates help to ensure correct configuration of your system with the latest features and fixes. Accompanying technical, application, and release notes can be found in the ClearOne Resource Library:

http://www.clearone.com/resources#network_media_streaming

Chapter Overview:
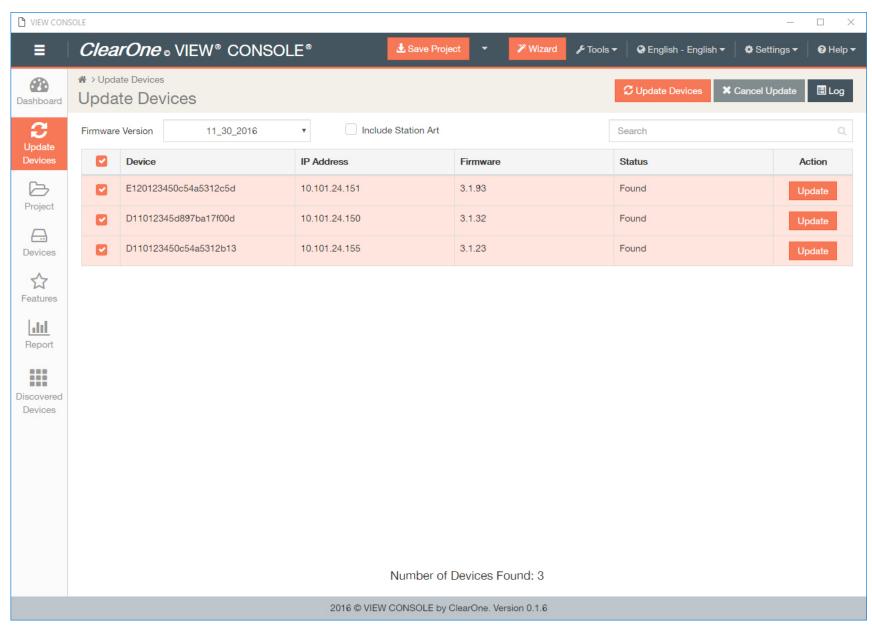
1. Update Devices

    a. Update Log

Update Devices

Updating Devices is the first step in the Wizard, and in the basic setup process.

1. If not in Wizard mode, manually select **Update Devices** in the left-hand sidebar.

    The Update Devices screen displays. The screen shows you a current listing of all devices connected to the system and their current firmware version(s).

2. Select the "Firmware Version" you would like to download from the drop-down menu.

Firmware Version	11_30_2016 ▼

3. Select the devices you would like to update. ☑

4. Click the **Update Devices** button to update all selected devices, or click the individual **Update** button(s) for each device.
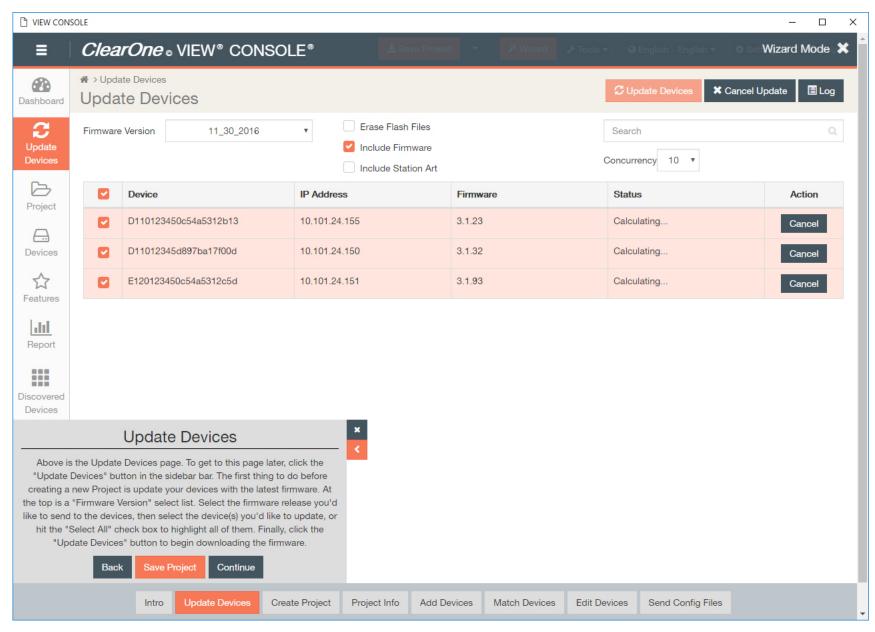
If you have Debug Mode enabled, Erase Flash Files, Include Firmware, and Concurrency will be additional parameters you can set in the update.

📝 **Note:**

> If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete. For more information on operating modes, see *Operating Modes*.

The devices run through several phases of updating. Each device is restarted. This can take quite some time for larger systems. For especially large systems, devices are updated ten at a time. It is normal for devices to restart more than once. When all devices have been upgraded, you will see "Update device complete" in the status column for each device.
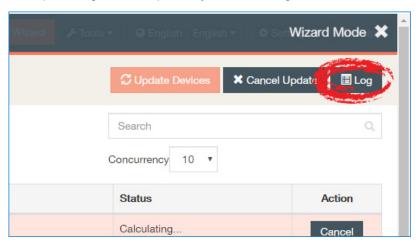
VIEW Pro devices may continue to update for a few minutes after update in software has completed.

Update Log
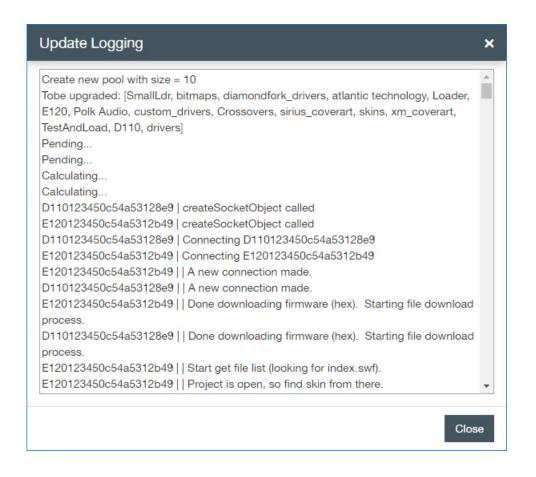
5. Select **Log** to review any current updates you've made.

The update log records updates you are making in the current session, but does not save them outside of the current session.

The log displays. To save a log, you must copy and paste the log text into an external document type of your choice.

Update Logging

```
Create new pool with size = 10
Tobe upgraded: [SmallLdr, bitmaps, diamondfork_drivers, atlantic technology, Loader,
E120, Polk Audio, custom_drivers, Crossovers, sirius_coverart, skins, xm_coverart,
TestAndLoad, D110, drivers]
Pending...
Pending...
Calculating...
Calculating...
D110123450c54a53128e9 | createSocketObject called
E120123450c54a5312b49 | createSocketObject called
D110123450c54a53128e9 | Connecting D110123450c54a53128e9
E120123450c54a5312b49 | Connecting E120123450c54a5312b49
E120123450c54a5312b49 | | A new connection made.
D110123450c54a53128e9 | | A new connection made.
E120123450c54a5312b49 | | Done downloading firmware (hex).  Starting file download
process.
D110123450c54a53128e9 | | Done downloading firmware (hex).  Starting file download
process.
E120123450c54a5312b49 | | Start get file list (looking for index.swf).
E120123450c54a5312b49 | | Project is open, so find skin from there.
```

Close

Chapter 4

Projects

Topics:

- *About Projects*
- *Create or Access a Project*

This chapter contains information about creating, editing, accessing, and saving your projects.

About Projects

A project is a file (saved with an extension of .nspx) that contains all of the settings for each of the devices in a system. You can change the settings for a VIEW or VIEW Pro device, as well as for how the device interacts with audio, display, and control devices.

You can also create a project that is specific to each home that has a StreamNet system. For example, you can name a project "John Doe" and transfer it to the home system after the hardware has been installed. This allows you to create a project while you're connected to a StreamNet system, or in the comfort of your own office.

Users can create and save multiple system projects and load them in the VIEW CONSOLE as needed.

📝 **Note:**

Procedures vary slightly depending on whether or not you are connected to the StreamNet network at the time you create the project. Entering Wizard Mode is the best way to prevent errors in project creation.

To begin a project while connected to the StreamNet network, the software must locate all devices.

StreamNet devices use auto-discovery, so your software will automatically populate devices found on the network. StreamNet devices that are found but not in a project populate under the *Discovered Devices* on page 296 tile. This information is also visible on the Dashboard.

Chapter Overview:
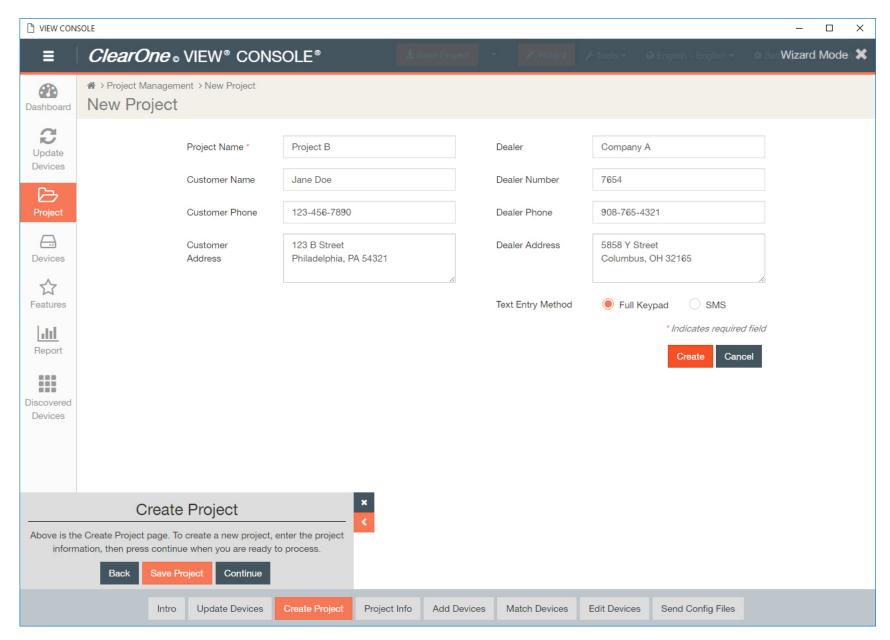
1. Creating & Accessing Projects

Create or Access a Project

Creating, editing, and/or accessing your projects are the second and third steps in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Project** in the left-hand sidebar.
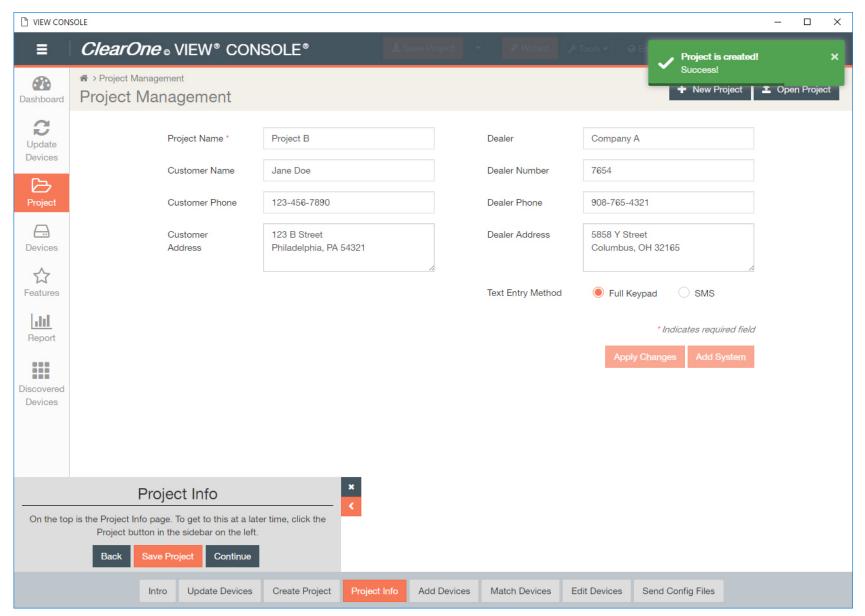
The Project screen displays.

VIEW CONSOLE

☐ VIEW CONSOLE   — ☐ ✕

≡   *ClearOne* © VIEW® CONSOLE®   ⬆ Save Project ▾   ↗ Wizard   ⚙ Tools ▾   ⊕ English - English ▾   ⚙ Set **Wizard Mode** ✖

🏠 > Project Management > New Project

New Project

Project Name *	Project B	Dealer	Company A
Customer Name	Jane Doe	Dealer Number	7654
Customer Phone	123-456-7890	Dealer Phone	908-765-4321
Customer Address	123 B Street Philadelphia, PA 54321	Dealer Address	5858 Y Street Columbus, OH 32165

Text Entry Method   ● Full Keypad   ○ SMS

* Indicates required field

[Create] [Cancel]

Left sidebar:
- Dashboard
- Update Devices
- Project
- Devices
- Features
- Report
- Discovered Devices

Create Project   ✖   ◄

Above is the Create Project page. To create a new project, enter the project information, then press continue when you are ready to process.

[Back] [Save Project] [Continue]

| Intro | Update Devices | Create Project | Project Info | Add Devices | Match Devices | Edit Devices | Send Config Files |

📝 **Note:** If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Choose to create or open an existing Project.

a) If you are creating a new project, after you enter the following details of the new project, click **Apply Changes**.

- Project Name - Create a unique project name for this project (such as "John Doe's House").
- Customer Name - The name of the customer for which you are creating this project.
- Customer Phone - The phone number of the customer for which you are creating this project.
- Customer Address - The address of the customer for which you are creating this project.
- Dealer Name - The name of the dealer installing this project.
- Dealer Number - The ID number of the dealer installing this project.
- Dealer Phone - The phone number of the dealer installing this project.
- Dealer Address - The address of the dealer installing this project.

A green notification in the upper right corner indicates the action has been completed successfully.
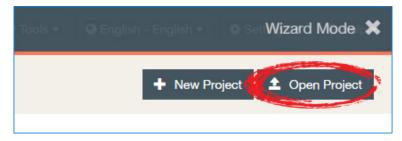
b) If you are only updating project details, after you update details, click **Apply Changes**.

A green notification in the upper right corner indicates the action has been completed successfully.

Project was updated!
Success!

c) If you are opening a saved project, select **Open Project**.

The Devices screen displays, and a green notification in the upper right corner indicates the action has been completed successfully.

Success!

Chapter 5

Devices

Topics:

- *About Devices*
- *Add Devices*
- *Importing Devices*
- *Match Devices*
- *Configure Devices*
- *Send Device Configurations*
- *RS-232 Controls*
- *VIEW Pro and VIEW Legacy Interoperability*

This chapter outlines how to manage your StreamNet products and legacy devices in your project.

About Devices

The Devices tile in the left-hand sidebar is where you complete the final fourth, fifth, sixth, and seventh steps of the basic setup process of your VIEW or VIEW Pro system.

Chapter Overview:

1. Adding Devices

    a. Importing Devices
2. Matching Devices
3. Configuring Devices

    a. D110
    b. D210-D310
    c. E110-E120
    d. MLAV300-MLAV9300CS
    e. MLAV9500CS
    f. MediaLinX MLs
    g. SpeakerLinX SLs
    h. SpeakerLinX-Lab TLs
    i. ViewLinX
    j. ViewLinX TL
    k. Control CLs
    l. RS-232 Controls
4. Send Device Configurations
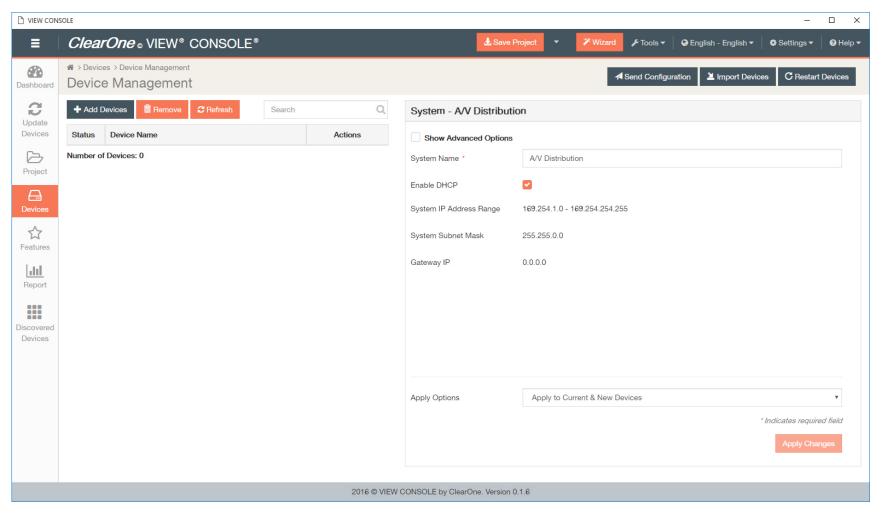
Add Devices

Adding your devices to a project is the fourth step in the Wizard and basic setup process.

Adding devices to the project in Wizard Mode is recommended. Devices can also be manually added in Standard Mode, or *Imported* (not recommended). This section outlines how to add devices in Wizard or Standard Mode. For more information on operating modes, see *Operating Modes*.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.
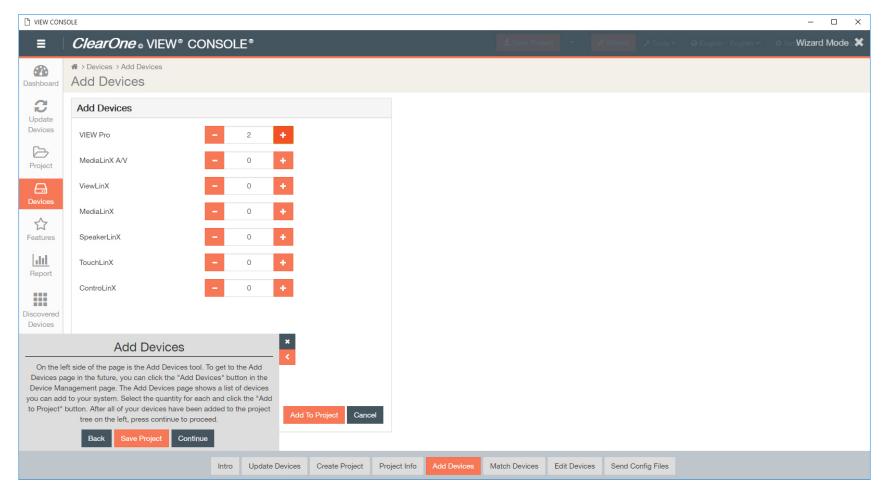
    The Devices screen displays.

📝 **Note:**

If you have navigated to the Devices page using the Wizard, you will automatically be prompted to start adding devices, and the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.
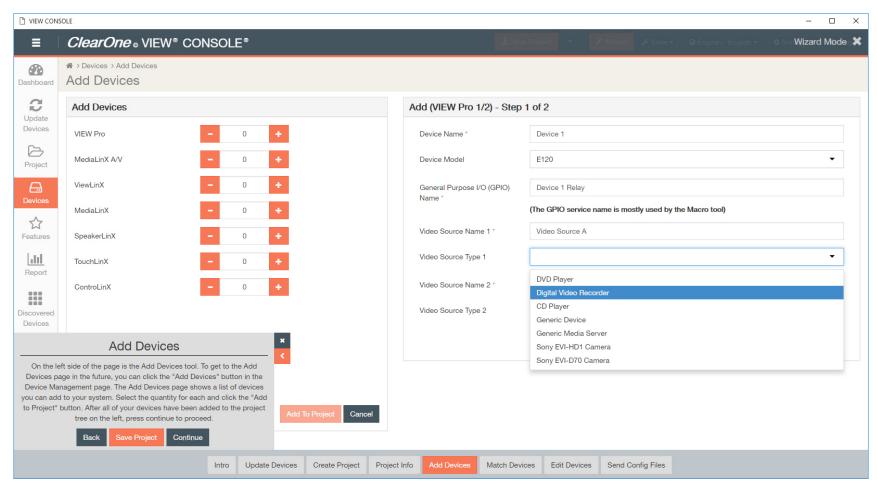
2. Manually select **Add Devices** if not using the Wizard. Otherwise, use the + / - keys or type in the fields next to each device to indicate how many of each are in the system (additional devices can be added later), and click **Add To Project**.

- VIEW® Pro. A next generation device in the VIEW family, delivering the ultimate in high-quality, low-latency, 4:4:4 R'G'B' true color digital media over existing IP networks.
- MediaLinX A/V. An IP video component that provides real time encoding of audio and video signals from a legacy video source (such as an HDTV tuner, cable, or satellite set top box, Digital Video Recorder, Blue-Ray/HD-DVD or DVD player) into an uncompressed A/V stream that can then be distributed over a TCP/IP network at a rate of 1Gb/second. StreamNet Video Distribution solution can distribute high definition video or standard definition video, depending on the video source connected to the MediaLinX A/V, along with analog or digital (S/PDIF) audio.
- ViewLinX. An IP video component that features component, S-Video, composite or VGA video outputs as well as analog and S/PDIF RCA audio outputs for maximum connection flexibility. An RCA audio input is also included for TV monitor output. ViewLinX also includes an RCA output for easy control of the display, an IR Receiver input connection (IR Receiver included), and a Phoenix connector for power. An
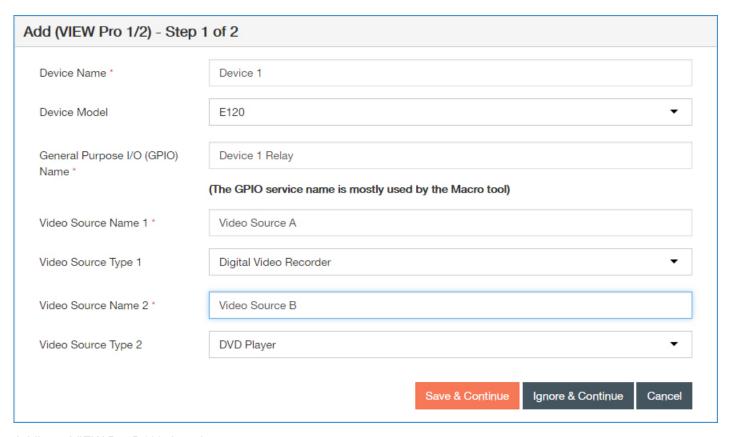
additional IR Out/RS232 connection provides two way control of an A/V receiver. The relay output can drive a projector lift, motorized screen, or other items.

- MediaLinX. A StreamNet device which converts analog or digital audio signals from one or up to four legacy source to TCP/IP uncompressed WAV audio streams. The MediaLinX MLA101 converts one legacy source. The MediaLinX Pro MLA4000 converts the audio of up to four legacy sources. It has four definable slots, with each slot capable of functioning as an MLA101 or ControLinX CL100. A fifth slot provides a dedicated CL100.
- SpeakerLinX. A StreamNet room controller and amplifier that:

  1. accepts TCP/IP-based uncompressed (WAV or MP3) streams
  2. produces the output required by the speaker
  3. serves as the controller for that room

- TouchLinX. A StreamNet IP-based touch-screen keypad device with a built-in four-port, 10/100 Ethernet switch. When integrated in a StreamNet IP-based Multi-Room Audio, Video and Control system, the TouchLinX displays the metadata (artist, album, song, cover art, and play list) and transport controls available for each audio source or SpeakerLinX module.
- ControLinX. The ControLinX CL100 allows you to easily integrate and control supported brands of lighting, automated heating and cooling, and other subsystems with your StreamNet IP-based Multi-Room Audio and Control system using IR, RS-232, or voltage sensor inputs.

3. Select and enter device details.

   In this example, we are entering information for a VIEW Pro E120 encoder:
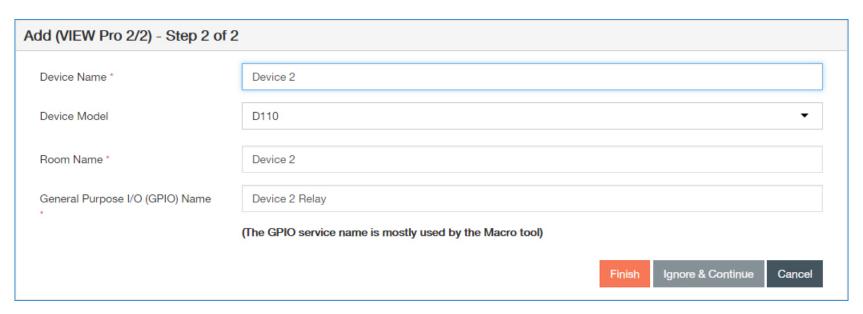
4. Select **Save & Continue**, and repeat Step 3 for next devices.

Different devices allow for and require different details. Your dialog boxes may differ depending on what you have connected on the network. If you don't have a device described in this example, continue to the section that shows how to enter device information for the particular devices in your project.

Add (VIEW Pro 1/2) – Step 1 of 2

Device Name *	Device 1
Device Model	E120 ▼
General Purpose I/O (GPIO) Name *	Device 1 Relay

(The GPIO service name is mostly used by the Macro tool)

Video Source Name 1 *	Video Source A
Video Source Type 1	Digital Video Recorder ▼
Video Source Name 2 *	Video Source B
Video Source Type 2	DVD Player ▼

Save & Continue   Ignore & Continue   Cancel

Adding a VIEW Pro D110 decoder:

Add (VIEW Pro 2/2) – Step 2 of 2

Device Name *	Device 2
Device Model	D110 ▼
Room Name *	Device 2
General Purpose I/O (GPIO) Name *	Device 2 Relay

(The GPIO service name is mostly used by the Macro tool)

Finish   Ignore & Continue   Cancel
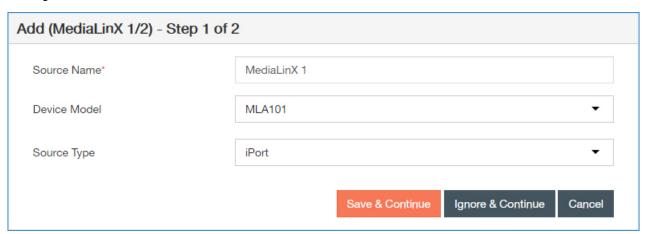
Adding a VIEW Pro D210 or D310 decoder:

Add (VIEW Pro 1/14) – Step 1 of 14

Device Name *	Device 4
Device Model	D210 ▼
Room Name *	Device 4

Save & Continue   Ignore & Continue   Cancel
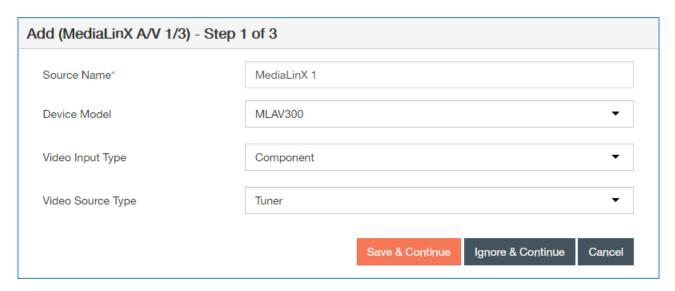
Adding a VIEW Pro E110 encoder:

Add (VIEW Pro 1/2) – Step 1 of 14

Device Name *	Device 3
Device Model	E110
General Purpose I/O (GPIO) Name *	Device 3 Relay
	(The GPIO service name is mostly used by the Macro tool)
Video Source Name 1 *	Video Source C
Video Source Type 1	Generic Device

Save & Continue   Ignore & Continue   Cancel
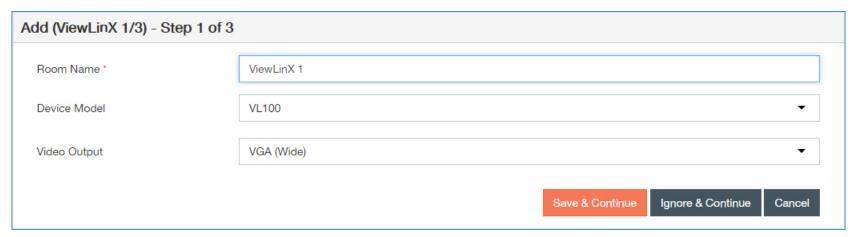
Adding a MediaLinX MLA101 or MLA9101-CS encoder:

Add (MediaLinX 1/2) – Step 1 of 2

Source Name*	MediaLinX 1
Device Model	MLA101
Source Type	iPort

Save & Continue   Ignore & Continue   Cancel
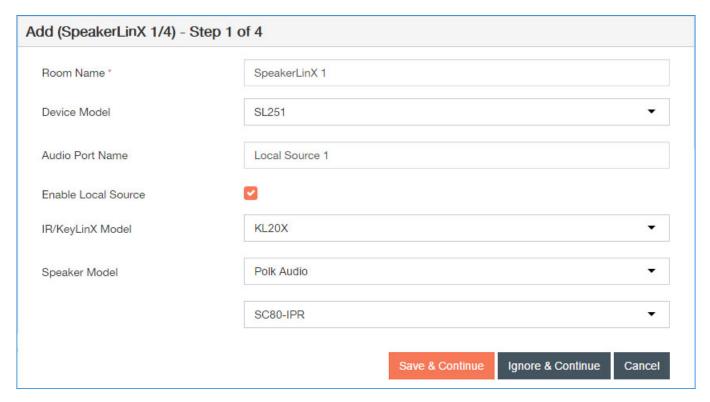
Adding a MediaLinX MLAV300, MLAV9300-CS or MLAV9500-CS encoder:

Add (MediaLinX A/V 1/3) – Step 1 of 3

Source Name*	MediaLinX 1
Device Model	MLAV300 ▾
Video Input Type	Component ▾
Video Source Type	Tuner ▾

Save & Continue   Ignore & Continue   Cancel
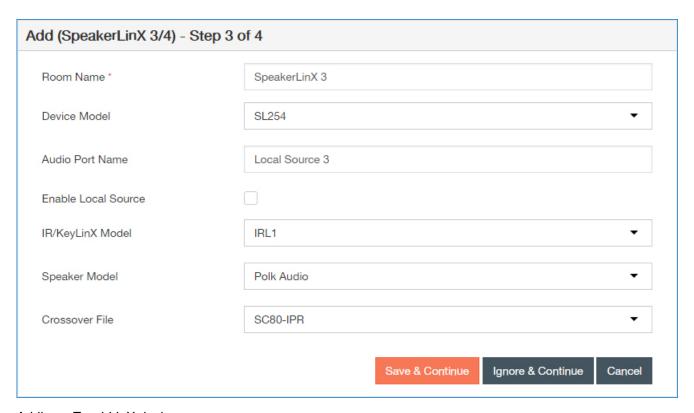
Adding a ViewLinX device:

Add (ViewLinX 1/3) – Step 1 of 3

Room Name *	ViewLinX 1
Device Model	VL100 ▾
Video Output	VGA (Wide) ▾

Save & Continue   Ignore & Continue   Cancel
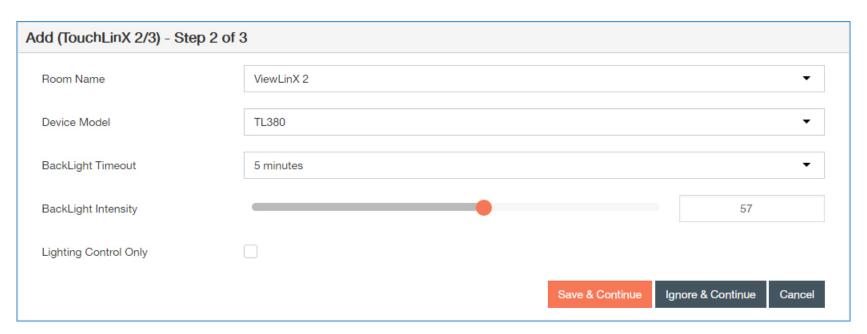
Adding a SpeakerLinX SL251 device:

Add (SpeakerLinX 1/4) – Step 1 of 4

Room Name *	SpeakerLinX 1
Device Model	SL251 ▼
Audio Port Name	Local Source 1
Enable Local Source	☑
IR/KeyLinX Model	KL20X ▼
Speaker Model	Polk Audio ▼
	SC80-IPR ▼

Save & Continue   Ignore & Continue   Cancel
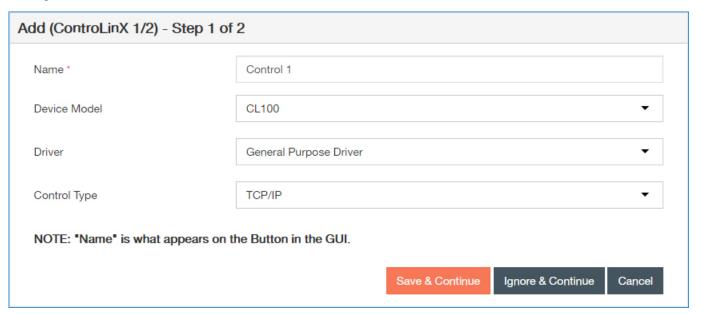
Adding a SpeakerLinX SL254, SL9250-CS or SLX300 device:

Add (SpeakerLinX 3/4) – Step 3 of 4

Room Name *	SpeakerLinX 3
Device Model	SL254
Audio Port Name	Local Source 3
Enable Local Source	☐
IR/KeyLinX Model	IRL1
Speaker Model	Polk Audio
Crossover File	SC80-IPR

Save & Continue   Ignore & Continue   Cancel
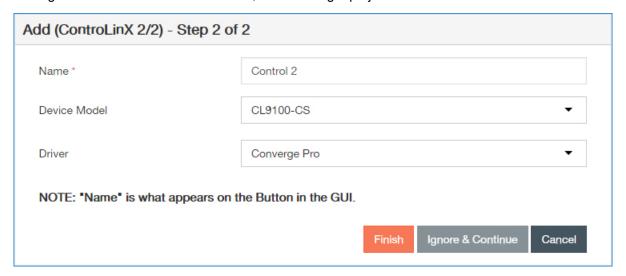
Adding a TouchLinX device:

Add (TouchLinX 2/3) – Step 2 of 3

Room Name	ViewLinX 2 ▾
Device Model	TL380 ▾
BackLight Timeout	5 minutes ▾
BackLight Intensity	———●——— 57
Lighting Control Only	☐

Save & Continue   Ignore & Continue   Cancel

Adding a ControLinX CL100 device:

Add (ControLinX 1/2) – Step 1 of 2

Name *	Control 1
Device Model	CL100 ▾
Driver	General Purpose Driver ▾
Control Type	TCP/IP ▾

NOTE: "Name" is what appears on the Button in the GUI.

Save & Continue   Ignore & Continue   Cancel

5. Select **Finish** when you have finished entering and selecting all information for your devices.

Adding a ControLinX CL9100-CS device, and finishing a project:

Add (ControLinX 2/2) – Step 2 of 2

Name *	Control 2
Device Model	CL9100-CS ▼
Driver	Converge Pro ▼

NOTE: "Name" is what appears on the Button in the GUI.

Finish   Ignore & Continue   Cancel
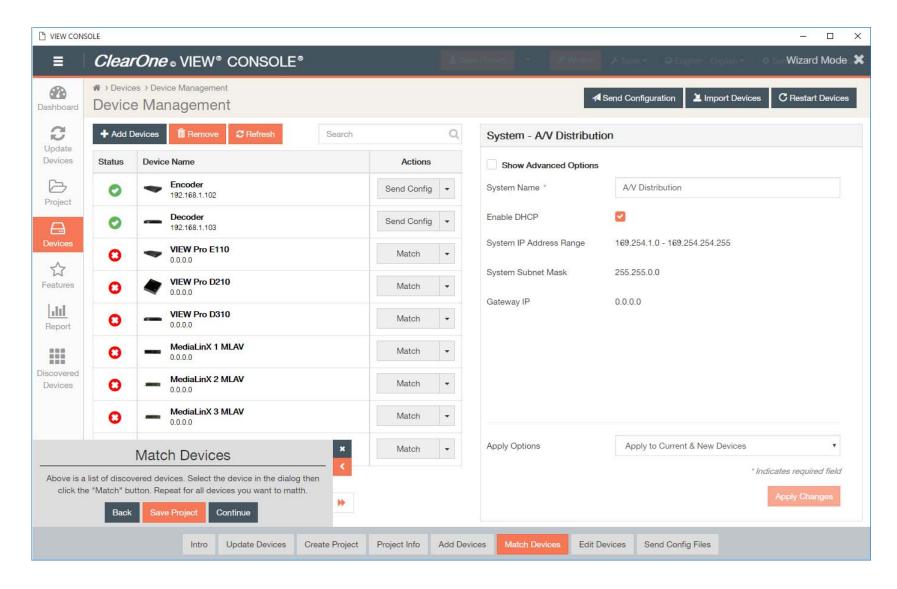
The main Devices screen displays again, where you may have to match and configure your devices.

Note:

If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.
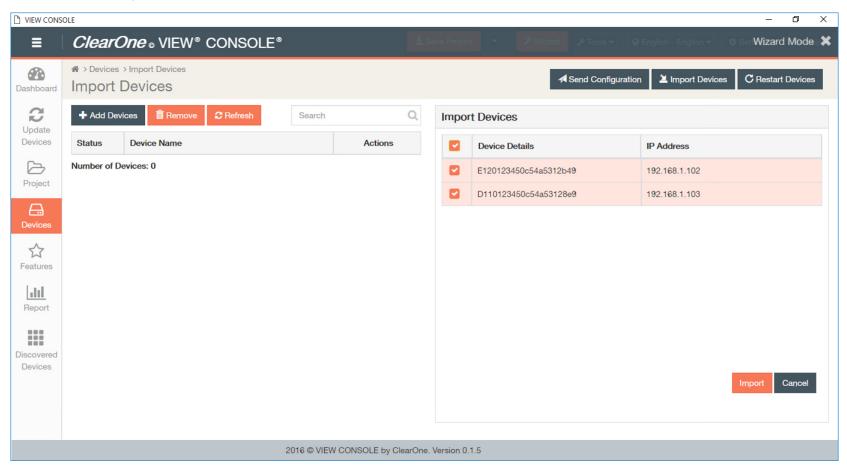
Importing Devices

Importing your devices is an alternative method for adding devices to your project. Adding devices to the project in Wizard Mode is recommended. Wizard mode does not guide you through the import process.

Devices can also be manually added in Standard Mode. For more information on operating modes, see *Operating Modes*.
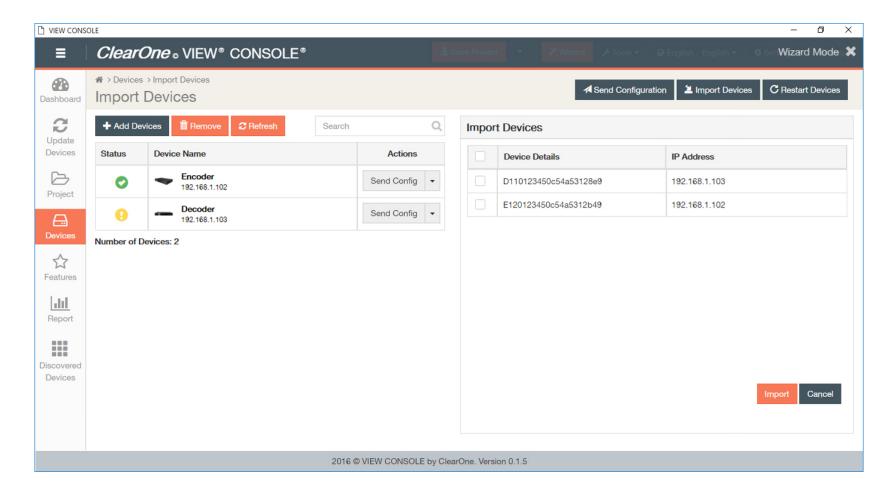
This section outlines how to use the Import Devices feature.

1. Manually select **Devices** in the left-hand sidebar.

   The Devices screen displays.

2. Select **Import Devices**.

3. Under the "Import Devices" section, check next to individual devices, or select all discovered devices by checking off the box in the upper left corner of the section, next to "Device Details".

4. Click **Import**.

   If successfully imported, the devices will now appear under the list of project devices in the left-hand pane.

Match Devices
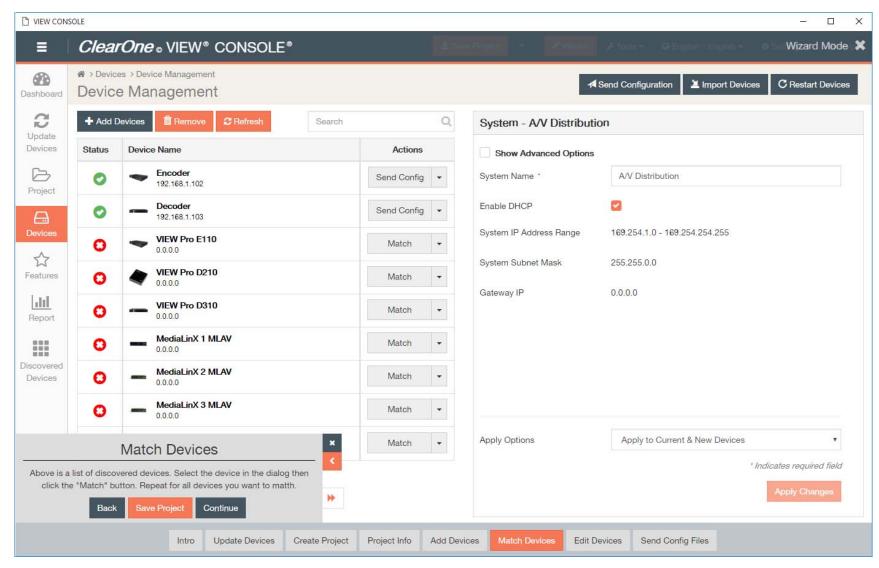
This section outlines how to match the StreamNet products and legacy devices in your project to discovered devices.

Matching your project devices is the fifth step in the Wizard and basic setup process.

For your system to work properly, the devices in the project file need to be matched with the related hardware in the project file you just created. The red "x's" in the Status column in the left-hand pane of the VIEW CONSOLE window show the files are not yet matched.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

   The Devices screen displays.

Note:

If you have navigated to this step on the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Select **Match** for each device that you want to match, under Actions.
   The icon under the "Status" column will either change from:

1.
a ⊗ to a ⚠ icon or ✅ mark,

2.
or a ⚠ icon to a ✅ mark once the device has been successfully matched.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
⊗	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.
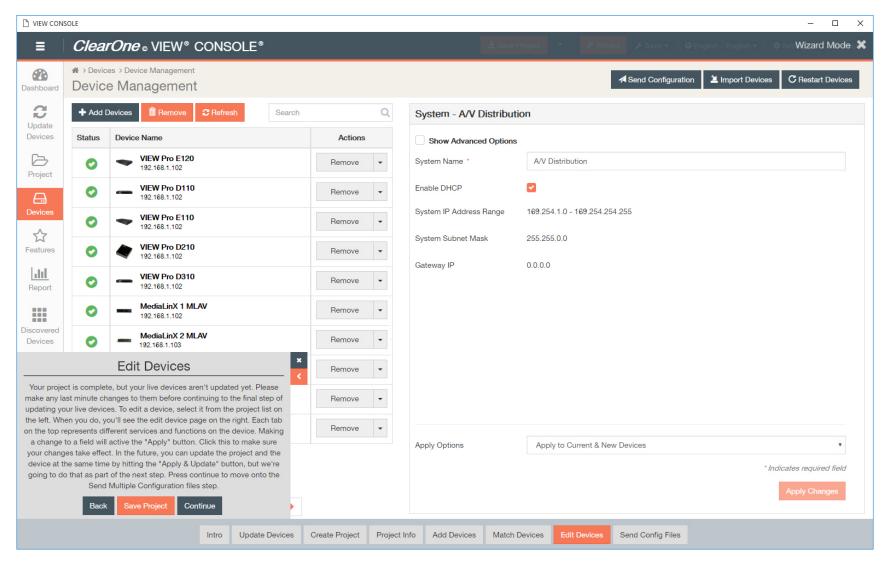
Configure Devices

This section outlines how to configure distribution settings for all of the StreamNet products and legacy devices in your project at one time (recommended over individual distribution device setting configurations).

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.
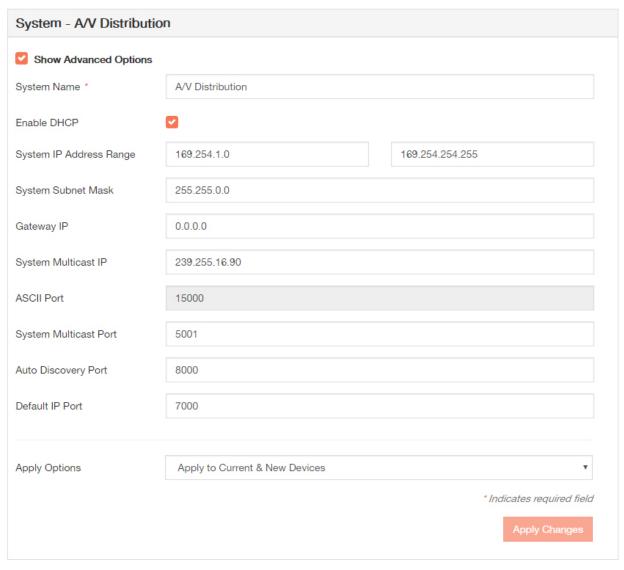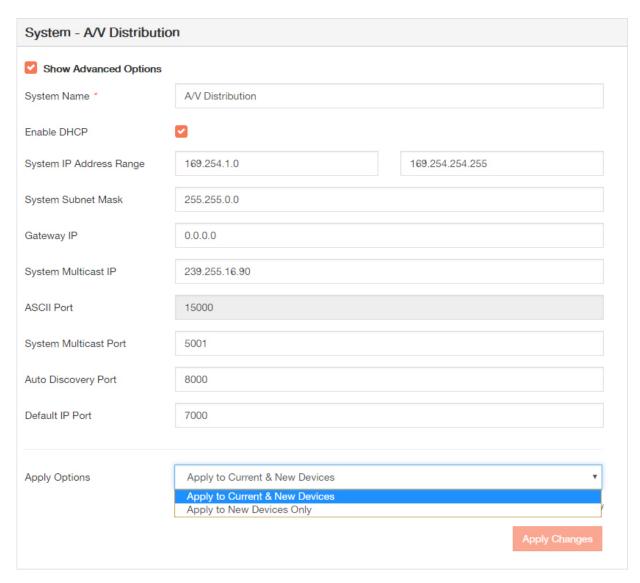
> **Note:**
>
> If you have navigated to the Devices screen using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. For advanced options, check the "Show Advanced Options" box in the "System - A/V Distribution" pane on the right.

System – A/V Distribution

☑ **Show Advanced Options**

System Name *	A/V Distribution
Enable DHCP	☑
System IP Address Range	169.254.1.0 169.254.254.255
System Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
System Multicast IP	239.255.16.90
ASCII Port	15000
System Multicast Port	5001
Auto Discovery Port	8000
Default IP Port	7000

Apply Options   Apply to Current & New Devices ▾

* Indicates required field

Apply Changes

📝 **Note:**

Configuration options will vary with device.

3. Enter and select your setting details, and click **Apply Changes**.

System - A/V Distribution

☑ **Show Advanced Options**

System Name *	A/V Distribution
Enable DHCP	☑
System IP Address Range	169.254.1.0 169.254.254.255
System Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
System Multicast IP	239.255.16.90
ASCII Port	15000
System Multicast Port	5001
Auto Discovery Port	8000
Default IP Port	7000
Apply Options	Apply to Current & New Devices ▼

Apply to Current & New Devices
Apply to New Devices Only

Apply Changes

A warning dialog will appear. If you want to continue with your changes, click **OK.**

System Info Changed   ✕

Any change you make to the settings on this screen may seriously damage the DigiLinX system. Press OK to apply your changes.

OK   Cancel
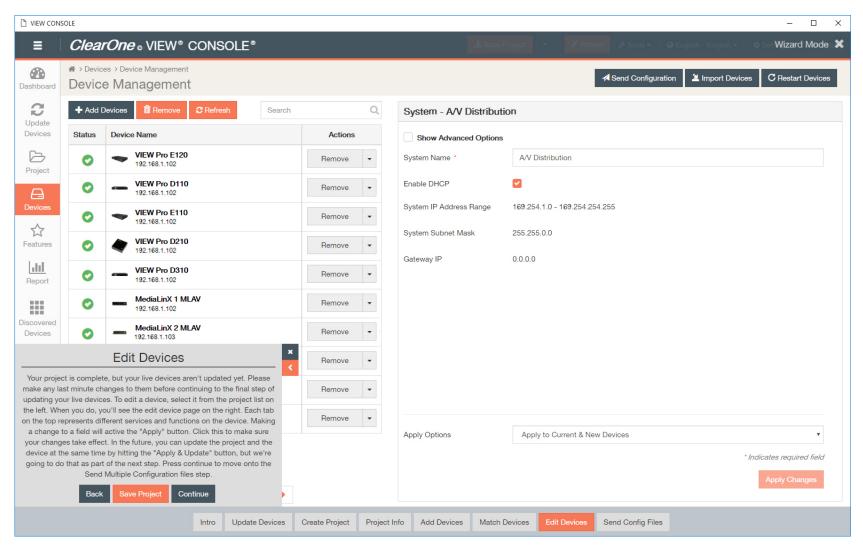
Configuring the VIEW Pro E110 or E120

This section outlines how to configure the VIEW Pro E110 or E120 encoders in your project. Setting configurations are the same for the VIEW Pro E110 and E120 encoders.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

   The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

VIEW CONSOLE

☰ | *ClearOne* ○ VIEW® CONSOLE®   ⬆ Save Project ▼   ⚡ Wizard   🔧 Tools ▼   🌐 English - English ▼   ⚙ Settings ▼   ❓ Help ▼

🏠 > Devices > Device Details

Device Details   ✈ Send Configuration   ⬆ Import Devices   ↻ Restart Devices

📊 Dashboard	**+ Add Devices** 🗑 Remove ↻ Refresh Search 🔍	**VIEW Pro E110**
↻ Update Devices		Information Sources General Purpose I/O (GPIO)

Status	Device Name	Actions
✅	**VIEW Pro E120** 192.168.1.102	Send Config ▼
✅	**VIEW Pro D110** 192.168.1.103	Send Config ▼
✅	**VIEW Pro E110** 192.168.1.102	Send Config ▼
✅	**VIEW Pro D210** 192.168.1.102	Send Config ▼
✅	**VIEW Pro D310** 192.168.1.102	Send Config ▼
✅	**MediaLinX 1 MLAV** 192.168.1.103	Send Config ▼
✅	**MediaLinX 2 MLAV** 192.168.1.102	Remove ▼
✅	**MediaLinX 3 MLAV** 192.168.1.102	Send Config ▼
✅	**ViewLinX 1 VL** 192.168.1.103	Remove ▼
✅	**ViewLinX 2 VL** 192.168.1.103	Send Config ▼
✅	**ViewLinX 3 VL** 192.168.1.103	Remove ▼
✅	**MediaLinX 1 ML** 192.168.1.103	Remove ▼

Number of Devices: 22

⏮ ◀ **1** 2 ▶ ⏭

Sidebar icons: Dashboard, Update Devices, Project, **Devices**, Features, Report, Discovered Devices

Information panel (VIEW Pro E110):

☐ Show Advanced Options

IP Address	**0.0.0.0**
Subnet Mask	**0.0.0.0**
Device Type	**VIEW Pro**
Device Model	**E110**
Firmware Version	
Device Name *	VIEW Pro E110
Serial Number	
Location	

Apply   Cancel

3. Select and enter device details.

a) The first tab is for Information settings. Default device information displays:

VIEW Pro E110

Information   Sources   General Purpose I/O (GPIO)

☑ Show Advanced Options

IP Address	**0.0.0.0**
Enable Static IP	☐ 0.0.0.0
Enable DHCP	☑
Do Not Log	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▼

Any changes you make to the settings on this screen may seriously damage the system's ability to function properly.

Apply   Cancel

- Current IP Address - The current IP address of the device.
- Current Subnet Mask - The current subnet mask of the device.
- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.

Note:

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - Checking the check box allows entry of an IP address for the encoder. By default, this setting for VIEW Pro devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW Pro devices find IP addresses automatically via a DHCP server. A checked box means the encoder IP Address is assigned by a DHCP Server.
- Do Not Log - Disables logging of device.
- Network Subnet Mask - Allows setting the subnet for the encoder.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.

b) The second tab is for Source settings. Disabling the Video Stream(s) will create a fourth tab, Advanced Editor.

VIEW Pro E110

Information   Sources   General Purpose I/O (GPIO)

Enable Video Stream 1	☑
Video Source Name 1 *	Video Source C
Video Source Type 1	Generic Device ▼
Audio Source	HDMI ▼
Gain	0dB ▼
Driver File	No Control ▼

Enable Audio Stream 1	☑
Stream Name	Device 3 Audio Stream 1
Audio Source	Balanced ▼
Gain	0dB ▼

Enable Audio Stream 2	☑

Apply   Cancel

The Sources tab contains all of the settings and information about the sources connected to the E110 or E120. There are two Audio/Video (HDMI) and two Analog sources available for the E110 or E120. Each one used needs to be configured within the project.

- Source Name - This name appears as a selection on all user interfaces and identifies the source.
- Source Type - The type of source connected to the VIEW Pro. (May be selected from CD player, DVD player, DVR, generic device, generic media server or cameras etc.)
- Driver File - The new driver file for the video source. (Allows you to select the designated .lua driver file. The ViewPro Lua files are stored in the ClearOne StreamNet Dealer Setup directory (C:\ Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers).

> **Note:**
>
> Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Audio Source - Allows you to select what kind of audio input the VIEW Pro uses for this stream (may be selected from HDMI 1, HDMI 2, Balanced or Unbalanced).
- Gain - The Audio Gain drop-down for setting the audio input gain up or down to match that of other sources in the system. Select from ± 0, 3, or 6 dB amplification or attenuation of audio source.
- Advanced Editor - This button is unavailable and greyed out when any Video Stream source check box is selected. To enter Advanced Editor, uncheck the check boxes, and press the Apply button. For more information on this feature, see *Navigating to the Advanced Editor* on page 88, *Advanced Editor - Adding New Stream*, and *Advanced Editor - Edit Stream Preset*.

c) The third tab is for GPIO settings.

This tab allows you to choose a macro associated with each input state: High/Open and Low/Closed. The VIEW Pro macros are created and used in the same manner as the VIEW legacy products. Refer to the *Macro* section of the Features chapter for more detail.
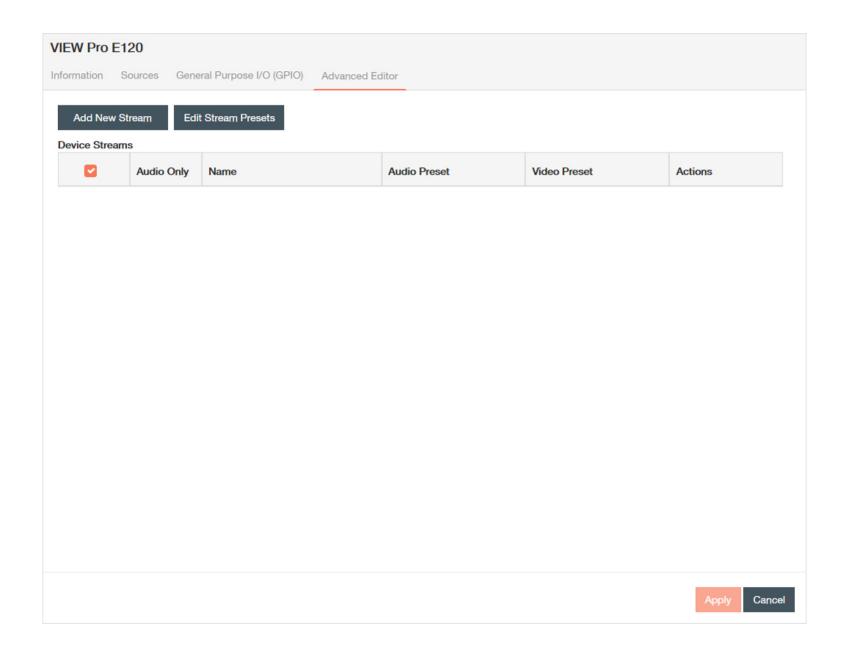
VIEW Pro E110

Information   Sources   General Purpose I/O (GPIO)

Logic I/O (GPIO) Settings

General Purpose I/O (GPIO) Name *   Device 3 Relay

(The GPIO service name is mostly used by the Macro tool)

Enter Macro Assignments

Input 1	High/Open	None ▼
	Low/Closed	None ▼
Input 2	High/Open	None ▼
	Low/Closed	None ▼
Input 3	High/Open	None ▼
	Low/Closed	None ▼

Choose the Macro associated with each input state.

Apply   Cancel

- GPIO Name - Enter the name of the GPIO service. This is mainly used in macros. By default, this receives the Device Name.

  The GPIO is a set of relays that triggers a macro(s), or even physical controls (like opening a curtain, etc.).
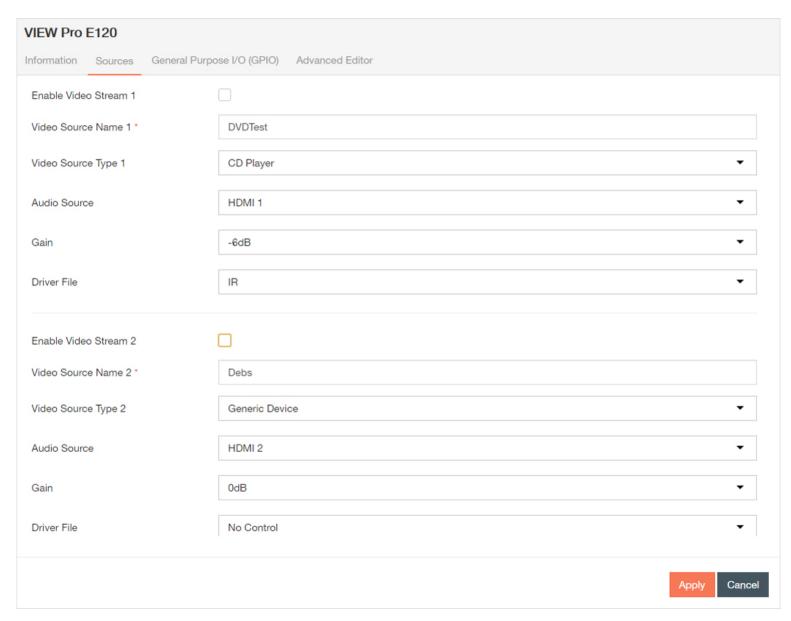
Low/Closed = Euroblock inputs connected/shorted

High/Open = Pins left open
- Macro Assignments - In the GPIO Tab you can select previously created Macros from the drop-down list for both or one Input states High/Open and Low/Closed, these Macros are triggered based on the configured state and State changes.
- Relay Assignments - Each of the three relays can be set in three states: None, Normally Open and Normally Closed. These relays can be triggered to change state between Normally Open and Normally Closed to trigger an event with the connected devices (projector lifts, motorized screens, lighting, shades, etc...). These relays can be triggered by system macros (found in the *Macro* Builder pane) or via TCP/IP and/or serial control commands.
- Enable Service - Check or uncheck this box to enable or disable relay service.

d) There is a fourth tab is for Advanced Editor settings. This tab appears only if you disable the Video Stream(s) in the Sources tab (3b).

This screen allows the addition, editing and deletion of device streams for the encoder. When a new stream is added, it can be selected to then edit the stream and edit the stream presets. Up to two Audio/Video streams can be defined as well as multiple Audio-Only streams.

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)   Advanced Editor

Add New Stream   **Edit Stream Presets**

Device Streams

☑	Audio Only	Name	Audio Preset	Video Preset	Actions

Apply   **Cancel**

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)   Advanced Editor

Enable Video Stream 1	☐
Video Source Name 1 *	DVDTest
Video Source Type 1	CD Player ▼
Audio Source	HDMI 1 ▼
Gain	-6dB ▼
Driver File	IR ▼

Enable Video Stream 2	☐
Video Source Name 2 *	Debs
Video Source Type 2	Generic Device ▼
Audio Source	HDMI 2 ▼
Gain	0dB ▼
Driver File	No Control ▼

[Apply] [Cancel]

For more information on this feature, see *Navigating to the Advanced Editor* on page 88*Navigating to the Advanced Editor* on page 88, *Advanced Editor - Adding New Stream*, and *Advanced Editor - Edit Stream Preset*.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.

The in the status column of the device will become a until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Navigating to the Advanced Editor

This section outlines how to navigate to the Advanced Editor for the VIEW Pro E110 or E120 encoders in your project.

The Advanced Editor settings are available only for configuring VIEW Pro E110 or E120 encoders. Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices screen using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.
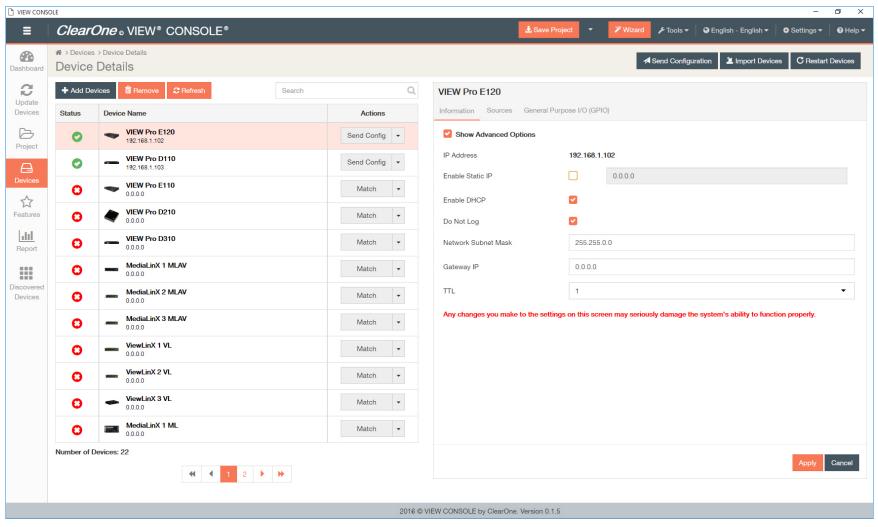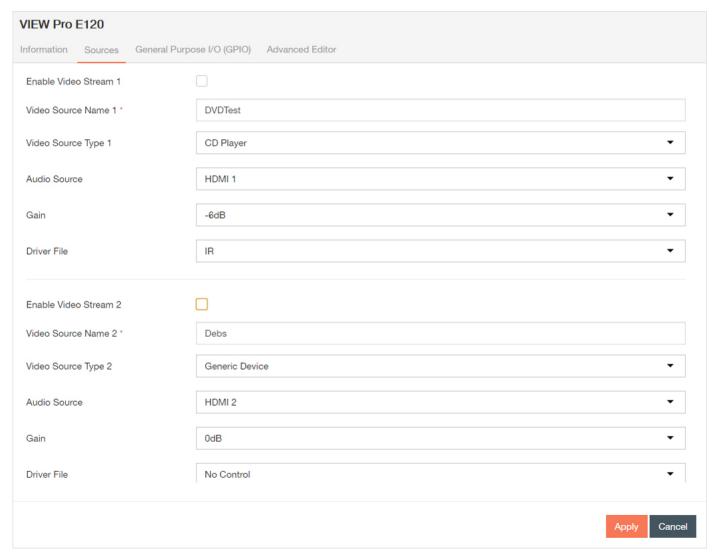
The settings populate in the right-hand pane.
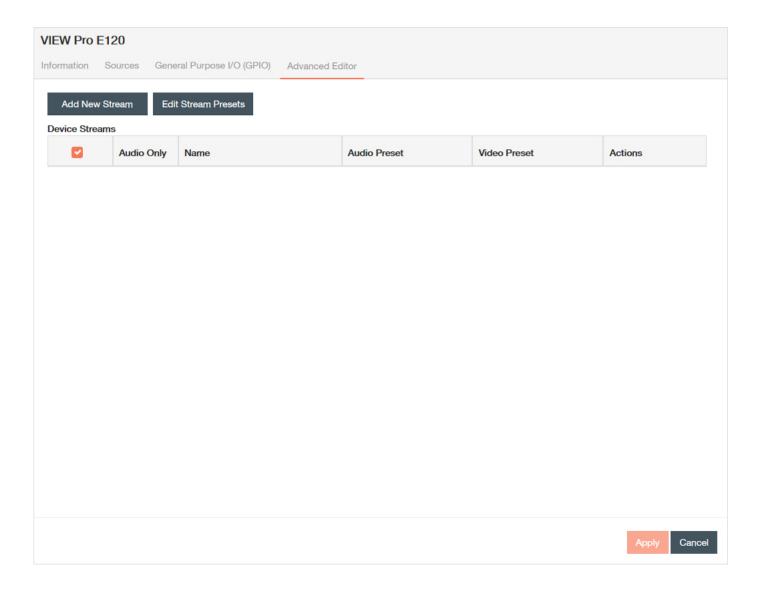
3. Select the Sources tab. Deselect any "Enable Video Stream" check boxes.

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)

Enable Video Stream 1   ☑

Video Source Name 1 *   DVDTest

Video Source Type 1   DVD Player   ▼

Audio Source   HDMI 1   ▼

Gain   0dB   ▼

Driver File   No Control   ▼

Enable Video Stream 2   ☑

Video Source Name 2 *   Debs

Video Source Type 2   Generic Device   ▼

Audio Source   HDMI 2   ▼

Gain   0dB   ▼

Driver File   No Control   ▼

Apply   Cancel

The Advanced Editor tab should appear.

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)   Advanced Editor

Enable Video Stream 1	☐
Video Source Name 1 *	DVDTest
Video Source Type 1	CD Player ▼
Audio Source	HDMI 1 ▼
Gain	-6dB ▼
Driver File	IR ▼

Enable Video Stream 2	☐
Video Source Name 2 *	Debs
Video Source Type 2	Generic Device ▼
Audio Source	HDMI 2 ▼
Gain	0dB ▼
Driver File	No Control ▼

Apply   Cancel

4. Select the Advanced Editor tab. You can choose to Add New Stream or Edit Stream Presets.

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)   Advanced Editor

Add New Stream   **Edit Stream Presets**

Device Streams

☑	Audio Only	Name	Audio Preset	Video Preset	Actions

Apply   **Cancel**
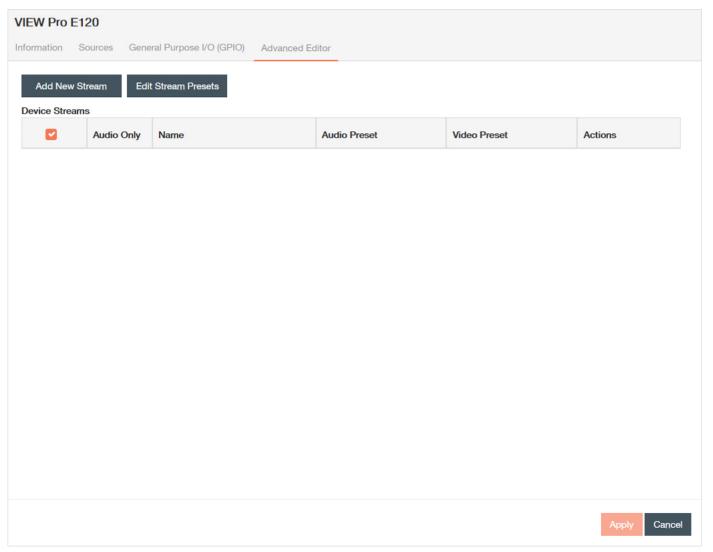
Advanced Editor - Adding New Stream

This section outlines how to add new streams in the Advanced Editor for the VIEW Pro E110 or E120 encoders in your project. If the default (Basic) stream configuration is too limited for your needs, the Advanced Editor opens all configuration options.

The Advanced Editor settings are available only for configuring VIEW Pro E110 or E120 encoders. Configuring your devices to a project is the sixth step in the Wizard. To navigate to this window, please follow instructions in the "Advanced Editor" section.

1. Select the Advanced Editor tab.

2. Click on Add New Stream. Enter and adjust settings as required.

   The "Advanced Stream Editor" window displays, on the "Main" tab.

- Audio Device – The physical input port for the audio stream.
- Video Device – The physical input port for the video stream.
- Audio Preset File – The audio preset file that is linked to this stream.
- Video Preset File – The video preset file that is linked to this stream
- Driver File – The lua driver that executes any source or 3rd-party commands coming from the network to control the stream including IR.

> 📝 **Note:**
>
> Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Source Type – The type of source for the stream (CD, DVD, Tuner).
- Gain - Sets the volume of the stream in the final mix. The Audio Gain drop-down for setting the audio input gain up or down to match that of other sources in the system. Select from ± 0, 3, or 6dB amplification or attenuation of audio.
- Slave Service Names – The names of the lua/ir services in the system that handle ASCII control commands.
- Height – The display height of the stream in pixels.
- Width – The display width of the stream in pixels.
- Channels Count - Sets the number of audio channels that are present in the stream.
- Max Allowed Latency - Sets the maximum latency the video stream allows, beyond which frameswill be dropped to avoid limit-less buffering.
- Audio Only – makes the stream audio only, with no video present.
- Framerate Slave - When turned on, the stream's frame rate is dynamically controlled by the source layout's frame rate. Otherwise, the frame rate is set by these parameters.
- Resolution Slave - When turned on, the stream's resolution is dynamically controlled by the source layout's resolution. Otherwise, the resolution is set by these parameters.
- Enable RTSP Stream - Decides whether the data will be available through a UNICAST RTSP stream as well as the default proprietary stream.

> 📝 **Note:**
>
> Unicast RTSP Streaming means that every instance of the Stream selected by an UDP Player (e.g.: PotPlayer, VLC) will create a unique UDP Stream from the Encoder. Three programs trying to access this stream over RTSP will require the Encoder to create three instances of the stream, which takes up resources within the Encoder and limits the number of Players that can watch/listen to this stream.

- Enable UDP Stream - Decides whether the data will be available directly through a UNICAST UDP stream as well as the default proprietary stream.
- UDP Unicast Address - UDP unicasting is very similar to the RTSP stream, except there is no need to distribute a configuration file to the client via RTSP. Due to this, manually specifying a destination address is necessary.

- UDP Unicast Port - UDP unicasting is very similar to the RTSP stream, except there is no need to distribute a configuration file to the client via RTSP. Due to this, manually specifying a port for traffic is necessary.
- Multicast Re-Transmission - High volume retransmission requests from chronically slow or lossy receivers can overwhelm publishing applications and even overwhelm the entire network. Receiver loss can result from faulty network hardware, oversubscribed applications, or underpowered host computers.Enabling retransmission control can help detect lossy receivers and suppress their retransmission requests.
- Jumbo Packet - Enabling packets with a payload greater than the standard maximum transmission unit (MTU) of 1,500 bytes.
- Serial Port - Select a streaming port for your encoders. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.

  Note:

  Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the *RS-232 Controls* section later in this manual.

- Baud Rate - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Parity - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Data Bits - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Stop Bits - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Legacy Audio Support - This Premium Licensed Feature allows the creation of Audio-Only Streams which can be selected and listened to using the ClearOne Legacy Renderers (SLxxx, VLxxx).
- UDP Multicast Address - UDP unicasting is very similar to the RTSP stream, except there is no need to distribute a configuration file to the client via RTSP. Due to this, manually specifying a destination address is necessary.
- Optional URL Suffix - Enter a URL suffix, for example, that can specify packet size.
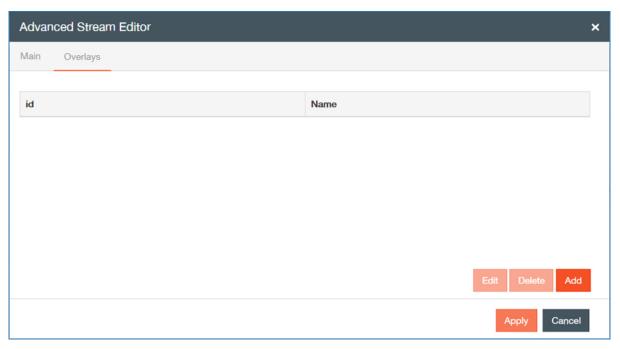
Note:

Multicast UDP or RTSP Streaming means that the Encoder will create only one instance of the A/V or Audio Only Stream, and will send it to Players requesting a connection via Multicast. Any number of Players can attach to this Stream without increasing bandwidth or processing loading on the Encoder. Multicast UDP or RTSP requires Licensing, but any number of Players can join the Stream without additional overhead CPU or Networking capacity being used due to the use of the Multicast Networking.

- MultiCast UDP Support - This Premium Licensed Feature allows an UDP-compatible A/V or audio-only stream to be created within the Encoder. When creating an Multicast UDP stream, the Basic Features box for Enable UDP Stream must also be checked.
- MultiCast RTSP Support - This Premium Licensed Feature allows an RTSP-compatible A/V or audio-only stream to be created within the Encoder. When creating an Multicast RTSP stream, the Basic Features box for Enable RTSP Stream must also be checked.

Advanced Stream Editor

Main   Overlays

Stream Name   New Stream

Basic Features

Audio Device	HDMI Audio Input 1 ▼	Gain	0dB ▼
Video Device	HDMI Input 1 ▼	Slave Service Name	
Audio Preset File	▼	Height	1080
Video Preset File	▼	Width	1920
Driver File	No Control ▼	Channels Count	2
Source Type	CD Player ▼	Max Allowed Latency (Ms)	1000

Serial Port	1 ▼	Audio Only	Off	Enable RTSP Stream	Off
Serial Baud Rate	300 Baud ▼	Framerate Slave	On	Enable UDP Stream	Off
Serial Parity	None ▼	Resolution Slave	On	UDP Unicast Address	0.0.0.0
Serial Data Bits	8 ▼	Multicast Re-Transmission	Off	UDP Unicast Port	0
Serial Stop Bits	1 ▼	Jumbo Packet	Disable ▼		

Premium Features

Legacy Audio Support	Off	Multicast RTSP Support	Off
Multicast UDP Support	Off	udp://239.16.1.1:1234	
Optional URL Suffix	pkt_size=1023		

Apply   Cancel

3. To add, edit, or delete overlays, select the Overlays tab.

Advanced Stream Editor	✕

Main   Overlays

id	Name

Edit   Delete   Add

Apply   Cancel

a) If you are choosing to edit an overlay, choose an overlay and click **Edit**; if you are just adding an overlay, just click **Add**.

The Overlay window will appear.
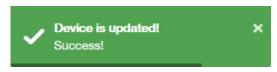
- Name - Enter the name of the overlay.
- Template - Select the Template.
- Font Name - Select the font.
- Font Color - Select the color.
- Horizontal Alignment - Select the horizontal alignment.
- Vertical Alignment - Select the vertical alignment.
- Vertical Size - Select the vertical size.
- Text Field - Insert overlay text, if using TEXT Template.

> **Note:**
>
> You can select only one overlay at a time.

    b) If you are deleting an overlay, click on the overlay you wish to delete, and click Delete.

4. Select **Apply** each time you make changes in a tab or window.

A green notification in the upper right corner will confirm that the device has been successfully updated.
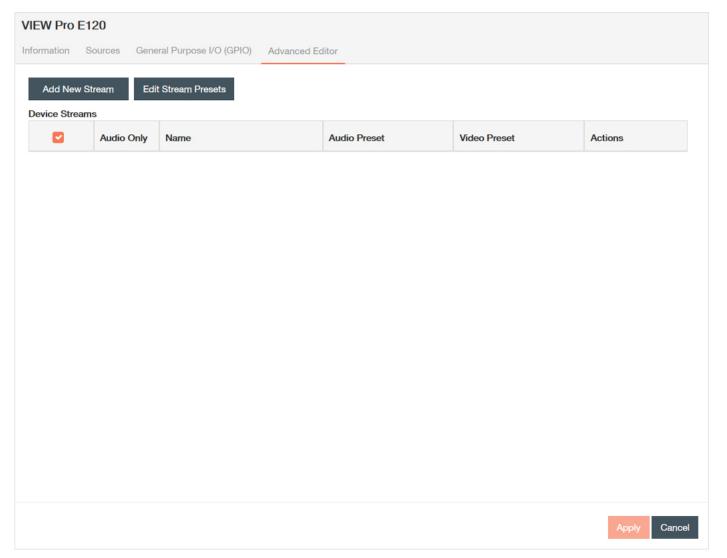
Advanced Editor - Edit Stream Preset

This section outlines how to edit a stream preset in the Advanced Editor for the VIEW Pro E110 or E120 encoders in your project.
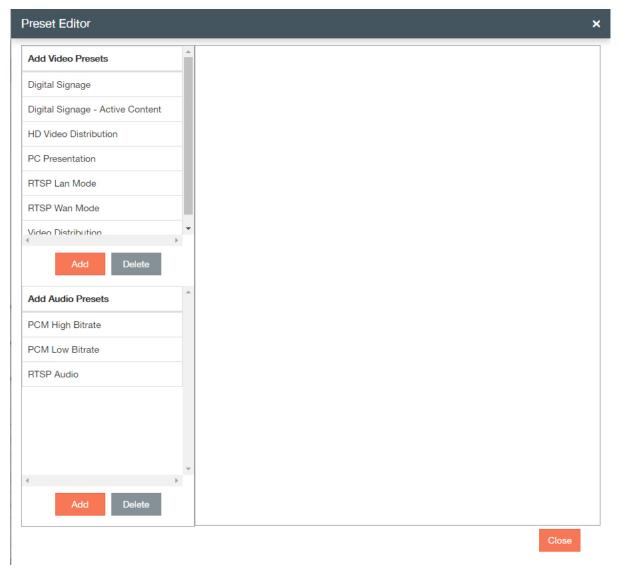
The Advanced Editor settings are available only for configuring VIEW Pro E110 or E120 encoders. Configuring your devices to a project is the sixth step in the Wizard and basic setup process. To navigate to this window, please follow instructions in the "Advanced Editor" section.

1. Select the Advanced Editor tab.

VIEW Pro E120

Information   Sources   General Purpose I/O (GPIO)   Advanced Editor

[Add New Stream]   [Edit Stream Presets]

Device Streams

☑	Audio Only	Name	Audio Preset	Video Preset	Actions

[Apply]   [Cancel]
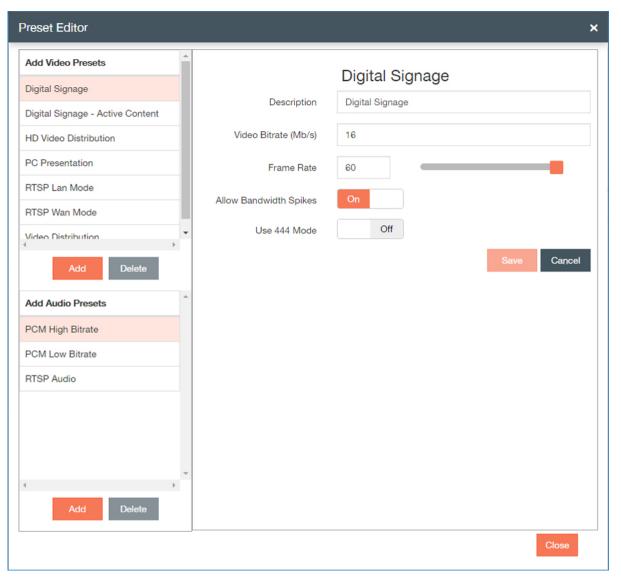
2. Click on Edit Stream Presets.

The "Preset Editor" window displays. You can add, edit, or delete a stream preset as needed.

Preset Editor   ✕

Add Video Presets

Digital Signage

Digital Signage - Active Content

HD Video Distribution

PC Presentation

RTSP Lan Mode

RTSP Wan Mode

Video Distribution

[Add] [Delete]

Add Audio Presets

PCM High Bitrate

PCM Low Bitrate

RTSP Audio

[Add] [Delete]

[Close]

1. If you are choosing to edit a preset, choose a stream preset, and edit details.

    • Video Presets

        • Description – Assign a name to the video stream preset.
        • Video Bitrate – Sets the desired video bitrate of the video (in Mbps).

- Frame Rate – The output frame rate.
- Allow Bandwidth Spikes – If checked, allows the stream to exceed the allotted bandwidth momentarily, but not on average. Useful for LANs, reduces latency.
- Use 444 Mode – Sets color sampling to 24 bits.

The pre-existing presets are set with these default values.
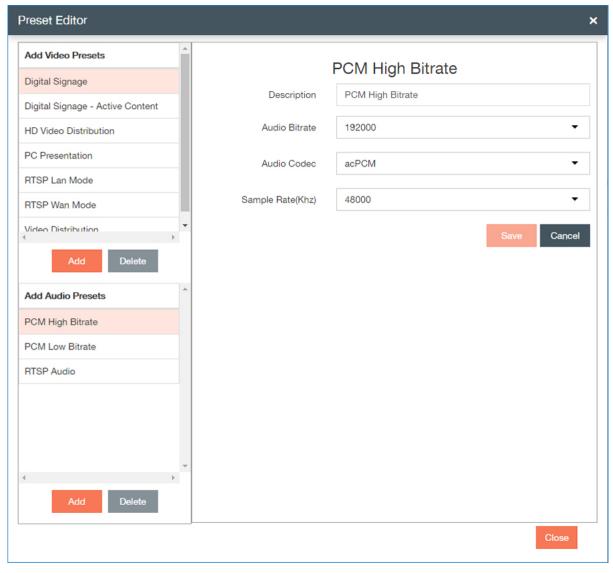
Video Presets	Video Bitrate(Mb/s)	Frame Rate	Allow Bandwidth Spikes	Use 444 Mode
Signage Active Content	60Mb	60	Yes	No
Signage	16Mb	60	Yes	No
HD Video Distribution	60Mb	60	Yes	No
Video Distribution	16Mb	60	Yes	No
PC Presentation	60Mb	60	Yes	Yes
RTSP LAN Mode	8Mb	60	No	No
RTSP WAN Mode	2Mb	60	No	No

- Audio Presets

    - Description – Assign a name to the audio stream preset.
    - Audio Bitrate - Sets the bitrate in bps of the audio encoding. Select 32000. 96000, 128000, 192000 or 320000 bps.
    - Audio Codec - Sets the codec used for audio. acAAC means using AAC encoding, acPCM will use PCM 16-bit uncompressed audio.
    - Sample Rate - Sets the sampling rate of the stream's audio. Select 32000, 44100, 48000, 96000, 128000 or 192000 bps.

The pre-existing presets are set with these default values.

Audio Presets	Audio Bitrate	Audio Codec S	Sample Rate (kHz)
PCM High Bitrate	192000	acPCM	48000
PCM Low Bitrate	128000	acPCM	44100
RTSP Audio	128000	acAAC	44100
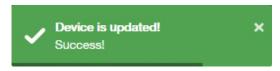
2. If you are choosing to add a preset, just click Add, and enter details.

> **Note:**
>
> You can select only one preset at a time.

3. If you are deleting an overlay, click on the overlay you wish to delete, and click **Delete**.

3. Select **Save** or **Apply** each time you make changes in a tab or window.

A green notification in the upper right corner confirms that the device has been successfully updated.
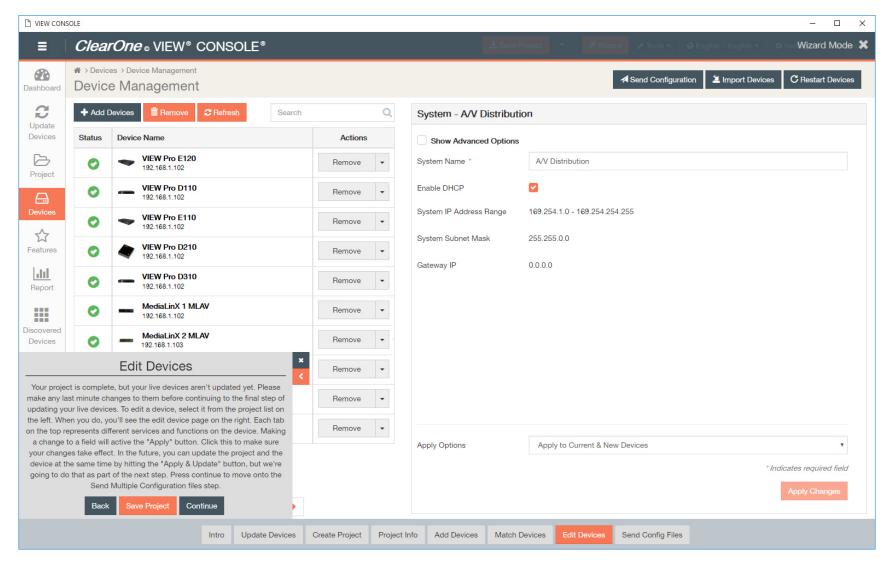
Configuring the VIEW Pro D110

This section outlines how to configure your VIEW Pro D110 decoder in your project.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

   The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

a) The first tab is for Information settings.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO

☑ **Show Advanced Options**

IP Address	**192.168.1.103**	
Enable Static IP	☐	0.0.0.0
Enable DHCP	☑	
Do Not Log	☑	
Enable Switch Latency (seconds)	☐	4
Enable Video Rotation	☐	0 degrees ▼
Enable Volume Bar	☐	5 %
Network Subnet Mask	255.255.0.0	
Gateway IP	0.0.0.0	
TTL	1 ▼	
Network Latency (ms)	60 ▼	

Any changes you make to the settings on this screen may seriously damage the system's ability to function properly.

Apply   Cancel

- Default device information displays:

  - Current IP Address - The current IP address of the device.
  - Current Subnet Mask - The current subnet mask of the device.
  - Device Type - The type of StreamNet device that this is.
  - Device Model - The model of the Device Type.

- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

- Click the Show Advanced Options check box, and device system distribution options display:

📝 **Note:**

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - Checking the check box allows entry of an IP address for the decoder. By default, this setting for VIEW Pro devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW Pro devices find IP addresses automatically via a DHCP server. A checked box means the decoder IP Address is assigned by a DHCP Server.
- Network Subnet Mask - Allows setting the subnet for the decoder.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.

- IP Address - The device IP address is displayed. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Do Not Log - Disables logging of device.
- Enable Switch Latency (seconds)
- Enable Video Rotation
- Enable Volume Bar - Enables the Volume Bar for the D110.
- Network Latency (ms) - This is used to set a network latency threshold in ms for the decoder.

b) The second tab is for Display Output settings.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO)

Decoder Settings

Display Output

Room/Zone Name	Lab
Driver File	IR

Lua Driver Config

Baud Rate	9600 Baud
Parity	None
Port	1
Data Bits	8
Stop Bits	1

Audio Output

Apply   Cancel
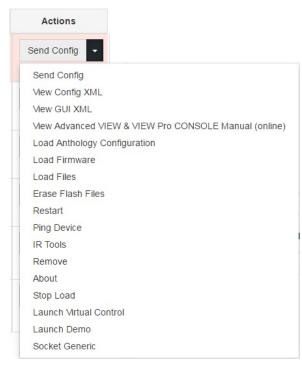
- Room/Zone Name - A field used to change the name of the device. Devices in the same room can be grouped together using this feature. See *Group Management* for more information.
- Driver File - The driver file used to communicate with the device.

   📝   **Note:**

Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the *RS-232 Controls* section later in this manual.

- Baud Rate - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Parity - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Port - Select a display port for your decoders. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Data Bits - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Stop Bits - Information provided by the manufacturer of the attached device. A standard serial communication parameter and/or port specified by the manufacturer of a device, such as a television, that allows communication between the decoder and that device.
- Audio Output - Check the decoder outputs providing the audio stream. Decoder Audio Outputs can be discrete outputs or paired with the video output using the "Linked Audio to Video Output" option. Otherwise the audio outputs can be custom named and used discretely from the Decoder video output.
- Auto-select Previously Selected Source - Select if the decoder is to auto-start using the last known source.
- Enable Local Playback - Enables local playback, a function that allows files to be played from an external USB drive when connected to the decoder.
- User-Defined Logo - The logo on display(s) when there is no media being streamed. Upload in a PNG format using the Load Files function under the *Actions* column in the left-hand pane.

Actions

Send Config

- Send Config
- View Config XML
- View GUI XML
- View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
- Load Anthology Configuration
- Load Firmware
- Load Files
- Erase Flash Files
- Restart
- Ping Device
- IR Tools
- Remove
- About
- Stop Load
- Launch Virtual Control
- Launch Demo
- Socket Generic
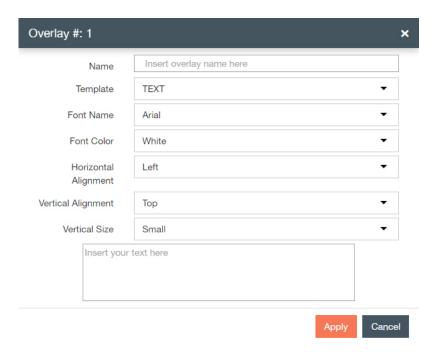
c) The third tab is for RTSP/Overlay settings. Click **Add** to add more overlays.

Overlays are text that can be added to display over streaming image(s) or video.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO)

id	Name	URL

Delete   Add

id	Name

Edit   Delete   Add

Apply   Cancel

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO)

id	Name	URL	
1		rtsp ▾	rtsp://

Delete   Add

id	Name

Edit   Delete   Add

Apply   Cancel
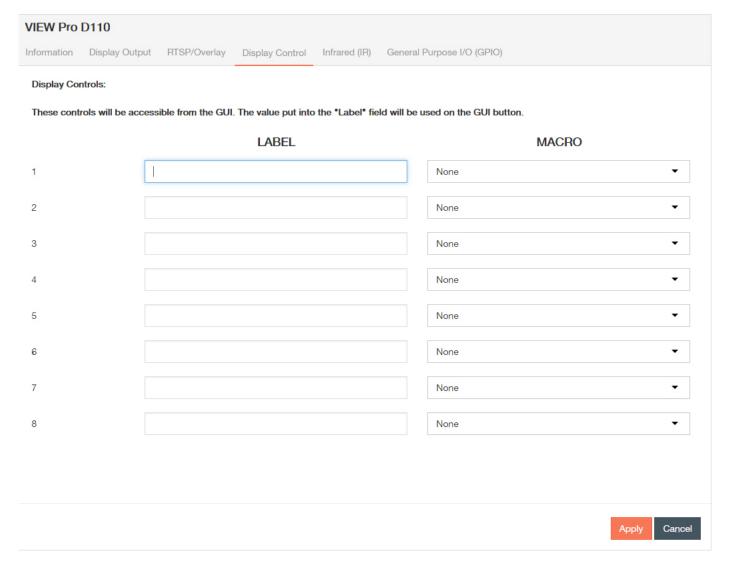
- Overlay Name - Change the name of the overlay.
- URL - Identify the RTSP or UDP URL of the overlay.

Overlay #: 1   ✕

Name	Insert overlay name here
Template	TEXT ▼
Font Name	Arial ▼
Font Color	White ▼
Horizontal Alignment	Left ▼
Vertical Alignment	Top ▼
Vertical Size	Small ▼

Insert your text here

Apply   Cancel

- Name - Enter the name of the overlay.
- Template - Select the Template.
- Font Name - Select the font.
- Font Color - Select the color.
- Horizontal Alignment - Select the horizontal alignment.
- Vertical Alignment - Select the vertical alignment.
- Vertical Size - Select the vertical size.
- Text Field - Insert overlay text, if using TEXT Template.

d) The fourth tab is for Display Control settings.

Allows the user to control the display. A button is assigned to a command or macro and the button can be given a custom label.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO)

Display Controls:

These controls will be accessible from the GUI. The value put into the "Label" field will be used on the GUI button.

	LABEL	MACRO
1		None ▾
2		None ▾
3		None ▾
4		None ▾
5		None ▾
6		None ▾
7		None ▾
8		None ▾

Apply   Cancel

- LABEL - Enter name of the button that executes the macro.
- Macro - Assign the appropriate macro. If you have not created the macros yet, you can come back and assign it later. *Buildingmacros* isdiscussed in the Features chapter.

e) The fifth tab is for Infrared (IR) settings.

The IR tab allows you to configure how a device responds when it receives a source or macro IR command. By default, devices are configured to allow IR pass through the network to the currently selected source. Network IR must be disabled if you do not want IR to pass from the selected device. You can configure source and macro assignment.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO)

IR Properties

Enable Infrared Service   ☑

Enable IR Network Passthrough   ☑

Apply   Cancel

- Enable Infrared Services - Enable a device to be remote controlled. Infrared is a wireless medium of remote control, which sends signals to a device via pulses, transmitted in the infrared light spectrum. Its use is restricted to equipment within line-of-sight or reflections off a wall or ceiling.
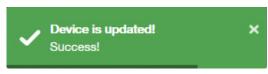
- Enable IR Network Passthrough - Enables IR network passthrough (default).

f) The sixth tab is for General Purpose I/O (GPIO) settings.

- GPIO Name - Enter the name of the GPIO service. This is mainly used in macros. By default, this receives the Device Name. The GPIO is a set of relays that triggers a macro(s), or even physical controls (like opening a curtain, etc.).
- Macro Assignments - Assign the appropriate macro(s) to each input. You can select previously created Macros from the drop-down list for both or one Input states High/Open and Low/Closed. These Macros are triggered based on the configured state and State changes.

- Relay Assignments - Designate which relays are normally open and normally close the contacts of the relay on the GPIO Interface. Each of the three relays can be set in three states: None, Normally Open and Normally Closed. These relays can be triggered to change state between Normally Open and Normally Closed to trigger an event with the connected devices (projector lifts, motorized screens, lighting, shades, etc...). These relays can be triggered by system macros (found in *MacroBuilder*) or via TCP/IP and/or serial control commands.
- Enable Service - Check or uncheck this box to enable or disable relay service.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

   1. A green notification in the upper right corner confirms that the device has been successfully updated.

   2.
   The in the status column of the device will become a until you *sendtheupdatedconfiguration(s)* again.

Status	
	Device has is on network, matched, configured, and configuration has been sent.
	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring the VIEW Pro D210 or D310

This section outlines how to configure your VIEW Pro D210 and D310 decoders in your project. Setting configurations are the same for the VIEW Pro D210 and D310 decoders.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

   The Devices screen displays.

> **Note:**
>
> If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings.

VIEW Pro D110

Information   Display Output   RTSP/Overlay   Display Control   Infrared (IR)   General Purpose I/O (GPIO

☑ **Show Advanced Options**

IP Address	**192.168.1.103**	
Enable Static IP	☐	0.0.0.0
Enable DHCP	☑	
Do Not Log	☑	
Enable Switch Latency (seconds)	☐	4
Enable Video Rotation	☐	0 degrees ▾
Enable Volume Bar	☐	5 %
Network Subnet Mask	255.255.0.0	
Gateway IP	0.0.0.0	
TTL	1 ▾	
Network Latency (ms)	60 ▾	

Any changes you make to the settings on this screen may seriously damage the system's ability to function properly.

Apply   Cancel

- Default device information displays:

    - Current IP Address - The current IP address of the device.
    - Current Subnet Mask - The current subnet mask of the device.
    - Device Type - The type of StreamNet device that this is.
    - Device Model - The model of the Device Type.

- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.
- Click the Show Advanced Options check box, and device system distribution options display:

  - IP Address - The device IP address is displayed. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
  - Do Not Log - Disables logging of device.
  - Enable Switch Latency (seconds)
  - Enable Video Rotation
  - Enable Volume Bar - Enables the Volume Bar for the D110.
  - Network Latency (ms) - This is used to set a network latency threshold in ms for the decoder.

  📝 **Note:**

  ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

  - Enable Static IP - Checking the check box allows entry of an IP address for the decoder. By default, this setting for VIEW Pro devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
  - Enable DHCP - By default, VIEW Pro devices find IP addresses automatically via a DHCP server. A checked box means the decoder IP Address is assigned by a DHCP Server.
  - Network Subnet Mask - Allows setting the subnet for the decoder.
  - Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
  - TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.

b) The second tab is for Display Output settings.

VIEW Pro D210

Information   Display Output   RTSP/Overlay   Display Control

Decoder Settings

Display Output

Room/Zone Name	Device 4 ▼
Driver File	CDTemplate.lua ▼

Lua Driver Config

Baud Rate	9600 Baud ▼
Parity	None ▼
Port	1 ▼
Data Bits	8 ▼
Stop Bits	1 ▼

Audio Output

Apply   Cancel

- Room/Zone Name - A field used to change the name of the device.
- Driver File - The driver file used to communicate with the device.
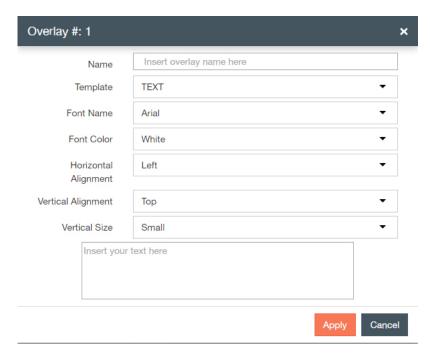
📝 **Note:**

Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template

that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Baud Rate - Information provided by the manufacturer of the attached device.
- Parity - Information provided by the manufacturer of the attached device.
- Port - Select a display port for your decoders.
- Data Bits - Information provided by the manufacturer of the attached device.
- Stop Bits - Information provided by the manufacturer of the attached device.
- Audio Output - Check the decoder outputs providing the audio stream. Decoder Audio Outputs can be discrete outputs or paired with the video output using the "Linked Audio to Video Output" option. Otherwise the audio outputs can be custom named and used discretely from the Decoder video output.
- Auto-select Previously Selected Source - Select if the decoder is to auto-start using the last known source.
- Enable Local Playback - Enables local playback.
- User-Defined Logo

c) The third tab is for RTSP/Overlay settings. Click **Add** to add more overlays.

VIEW Pro D210

Information   Display Output   RTSP/Overlay   Display Control

id	Name	URL	
1		rtsp ▼	rtsp://

Delete   Add

id	Name

Edit   Delete   Add

Apply   Cancel
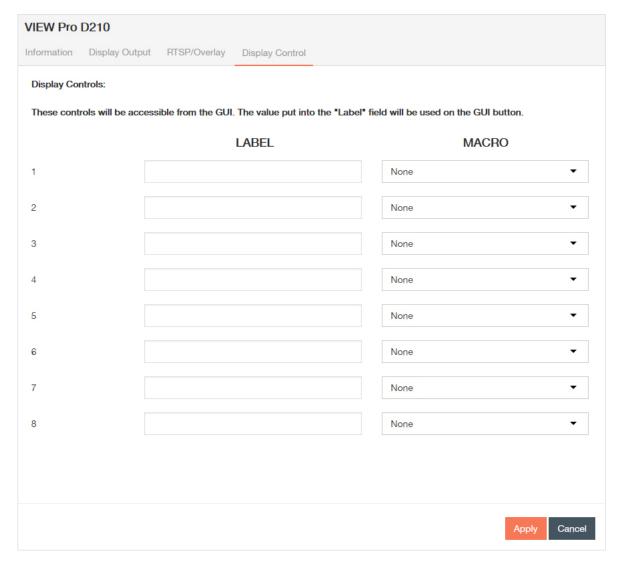
- Overlay Name - Change the name of the overlay.
- URL - Identify the RTSPRTSP or UDP URL of the overlay.

Overlay #: 1 ✕

Name	Insert overlay name here
Template	TEXT ▾
Font Name	Arial ▾
Font Color	White ▾
Horizontal Alignment	Left ▾
Vertical Alignment	Top ▾
Vertical Size	Small ▾
	Insert your text here

Apply   Cancel

- Name - Enter the name of the overlay.
- Template - Select the Template.
- Font Name - Select the font.
- Font Color - Select the color.
- Horizontal Alignment - Select the horizontal alignment.
- Vertical Alignment - Select the vertical alignment.
- Vertical Size - Select the vertical size.
- Text Field - Insert overlay text, if using TEXT Template.

d) The fourth tab is for Display Control settings.

Allows the user to control the display. A button is assigned to a custom command or macro and the button can be given a custom label.

For example, if you want to create and run a macro with the specific overlays, logos, and other settings discussed above in a stream in a specific room, you can label it your command "Meeting Room 4".

VIEW Pro D210

Information   Display Output   RTSP/Overlay   Display Control

Display Controls:

These controls will be accessible from the GUI. The value put into the "Label" field will be used on the GUI button.

	LABEL	MACRO
1		None ▾
2		None ▾
3		None ▾
4		None ▾
5		None ▾
6		None ▾
7		None ▾
8		None ▾

Apply   Cancel

- LABEL - Enter name of the button that executes the macro.
- Macro - Assign the appropriate macro. If you have not created the macros yet, you can come back and assign it later. See *Macro* for more information.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

   1. A green notification in the upper right corner confirms that the device has been successfully updated.

Device is updated!
Success!

2.
The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring the MLAV300 or MLAV9300-CS

This section outlines how to configure the MediaLinX MLAV300 and MLAV9300-CS audiovisual devices in your project. Setting configurations are the same for the MLAV300 and MLAV9300-CS.

Configuring your devices to a project is the sixth step in the Wizard.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings. Default device information displays:

   - Current IP Address - The current IP address of the device.
   - Current Subnet Mask - The current subnet mask of the device.

- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.

Note:

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.

- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

MediaLinX 1 MLAV

Information   Sources   Relay   Input

☑ Show Advanced Options

IP Address	**0.0.0.0**
Enable Static IP	☐ 0.0.0.0
Enable DHCP	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▼
System Multicast IP	239.255.16.90
ASCII Port	**15000**
System Multicast Port	5001
System Admin Port	5000
Auto Discovery Port	8000
Default IP Port	7000

Apply   Cancel

b) The second tab is for Source settings.

- Source Name - The descriptive name entered by the installer when the device was added. This name appears in the graphical user interface. Edit or keep the default.
- Video Source Type - Use the dropdown list (using the down arrow key) to select what type of source this is. The source type brings up the appropriate controls for the source. There are several types of sources: a Tuner, CD player, DVD player, Digital Video Recorder, XM Tuner, Parasound® ZTuner, iPort, Sirius, Marantz ST7001, Marantz CC4001, Marantz IS201, MarantzNA7004, Sony EVI-HD1 Camera, Sony EVI-D70 Camera, Impress/MagicBox, ClearOne Anthology, a Generic Media Server, or a Generic Device.

  📄 **Note:**

  An audio source where the audio is stored on a hard disk. This allows StreamNet to take advantage of the metadata to access the songs stored on the server. Compatible media servers include:

  - Audio ReQuest® (all models)
  - Imerge SoundServer MKII®
  - Escient Fireball® (E-40, E-120, E2-40, E2-100, E2-160, E2-200, E2-300, DVDM-300, DVDM-552, MX-752, MX-531, MX111, AVX-552. AVX-331, or AVX-211 models only)
  - NetStreams' Streaming Music Manager.

- Video Input Type - Select a Video input type (Component, Composite, S-Video, or VGA).
- Digital Audio Input Type - Select either PCM, Bitstream, or None as the input type for the MediaLinX A/V to function properly. This tells the MediaLinX A/V what type of digital audio to expect.
- Gain - The Audio Gain drop-down for setting the audio input gain up or down to match that of other sources in the system. Select from ± 0, 3, or 6 dB amplification or attenuation of audio source.
- Power Sensor - Power Sensing is the ability to tell whether a source component is powered on or off. The MediaLinX can use one of three power sensing methods:

  - None. This method uses no power sensing.
  - Level. This method senses the source component's signal output level to determine if it is powered on or off.
  - LED. This method senses whether the LED on the source component's front panel is on or off to determine the power state.
  - Video Sync. This method senses video output from a source component such as a DVD player, TV, or VCR.

- Driver File - The new driver file for the video source. (Allows you to select the designated .lua driver file. The ViewPro Lua files are stored in the ClearOne StreamNet Dealer Setup directory (C:\ Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers).

  📄 **Note:**

  Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Browse Screen - If you are using a custom driver, checking this box turns on the Browse screen in the graphical user interface.
- Sync Threshold - Adjust the synchronization of the input signal to provide a cleaner picture.

- Compress Video - Compress video streams over the network using StreamNet MotionXT Video codec. Multiple bitrate options are available, and each bitrate is the maximum allowed.

  - 65Mbit/sec (Recommended for HD video)
  - 45Mbit/sec
  - 30 Mbit/sec
  - 15 Mbit/sec (Minimum recommended for SD video)

  Compressed streams can be played back on either VL100 or VL9100-CS.
- Low Latency - Tells the system to not buffer audio and video and use the lowest latency.
- Enable Service - Enables or disables functionality.

MediaLinX 1 MLAV

Information   Sources   Relay   Input

Source Name *	MediaLinX 1
Video Source Type	Tuner ▼
Video Input Type	Component ▼
Digital Audio Input Type*	None ▼
Gain	0dB ▼
Power Sensor	None ▼
Driver File	IR ▼
Browse Screen?	☐
Sync Threshold	Low ▼
Compress Video	☐
Low Latency	☐
Enable Service	☑

ID   Station Name   Station Number

Apply   Cancel

c) The third tab is for Relay settings.

Relay Assignments - Each of the relays can be set in three states: None, Normally Open and Normally Closed. These relays can be triggered to change state between Normally Open and Normally Closed to trigger an event with the connected devices (projector lifts, motorized screens, lighting, shades, etc...). These relays can be triggered by system macros (found in the *Macro* Builder pane) or via TCP/IP and/or serial control commands.

MediaLinX 1 MLAV

Information   Sources   Relay   Input

Relay Assignments

Relay 1   Normally Open ▼

Relay 2   [▼]

| None |
| Normally Open |
| Normally Closed |

Apply   Cancel

d) The fourth tab is for Input settings.

This tab allows you to choose a macro associated with each input state: High/Open and Low/Closed. Refer to the *Macro* section of the Features chapter for more detail.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

    1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.
The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring the MLAV9500-CS

This section outlines how to configure the MediaLinX MLAV9500-CS audiovisual devices in your project.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings. Default device information displays:

   • Current IP Address - The current IP address of the device.

   • Current Subnet Mask - The current subnet mask of the device.

- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.

📝 **Note:**

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
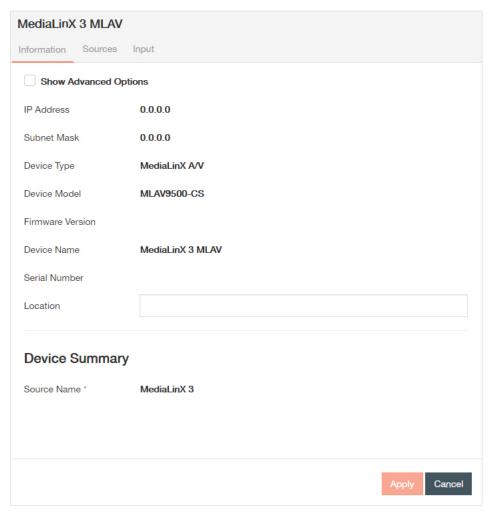- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.

- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

MediaLinX 3 MLAV

Information   Sources   Input

☐ **Show Advanced Options**

IP Address	**0.0.0.0**
Subnet Mask	**0.0.0.0**
Device Type	**MediaLinX A/V**
Device Model	**MLAV9500-CS**
Firmware Version	
Device Name	**MediaLinX 3 MLAV**
Serial Number	
Location	

Device Summary

Source Name *	**MediaLinX 3**

Apply   Cancel

b) The second tab is for Source settings.

- Source Name - The descriptive name entered by the installer when the device was added. This name appears in the graphical user interface. Edit or keep the default.

- Video Source Type - Use the dropdown list (using the down arrow key) to select what type of source this is. The source type brings up the appropriate controls for the source. There are several types of sources: a Tuner, CD player, DVD player, Digital Video Recorder, XM Tuner, Parasound® ZTuner, iPort, Sirius, Marantz ST7001, Marantz CC4001, Marantz IS201, MarantzNA7004, Sony EVI-HD1 Camera, Sony EVI-D70 Camera, Impress/MagicBox, ClearOne Anthology, a Generic Media Server, or a Generic Device.

  📝 **Note:**

  An audio source where the audio is stored on a hard disk. This allows StreamNet to take advantage of the metadata to access the songs stored on the server. Compatible media servers include:

  - Audio ReQuest® (all models)
  - Imerge SoundServer MKII®
  - Escient Fireball® (E-40, E-120, E2-40, E2-100, E2-160, E2-200, E2-300,DVDM-300, DVDM-552, MX-752, MX-531, MX111, AVX-552. AVX-331, or AVX-211 models only)
  - NetStreams' Streaming Music Manager.

- Anthology Server - Select an Anthology server.
- Digital Audio Input Type - Select either PCM, Bitstream, or None as the input type for the MediaLinX A/V to function properly. This tells the MediaLinX A/V what type of digital audio to expect.
- Video Input Type - HDMI by default.
- Audio Input Options - Select a HDMI, SPDIF, and/or Analog audio input option(s).
- Gain - The Audio Gain drop-down for setting the audio input gain up or down to match that of other sources in the system. Select from ± 0, 3, or 6 dB amplification or attenuation of audio source.
- Power Sensor - Power Sensing is the ability to tell whether a source component is powered on or off. The MediaLinX can use one of three power sensing methods:

  - None. This method uses no power sensing.
  - Level. This method senses the source component's signal output level to determine if it is powered on or off.
  - LED. This method senses whether the LED on the source component's front panel is on or off to determine the power state.
  - Video Sync. This method senses video output from a source component such as a DVD player, TV, or VCR.

- Driver File - The new driver file for the video source. (Allows you to select the designated .lua driver file. The ViewPro Lua files are stored in the ClearOne StreamNet Dealer Setup directory (C:\ Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers).

  📝 **Note:**

  Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Browse Screen - If you are using a custom driver, checking this box turns on the Browse screen in the graphical user interface.
- Sync Threshold - Adjust the synchronization of the input signal to provide a cleaner picture.
- Compress Video - Compress video streams over the network using StreamNet MotionXT Video codec.

- Multiple bitrate options are available, and each bitrate is the maximum allowed:

  - 65Mbit/sec (Recommended for HD video)
  - 45Mbit/sec
  - 30 Mbit/sec
  - 15 Mbit/sec (Minimum recommended for SD video)

  Compressed streams can be played back on either VL100 or VL9100-CS.

  - Optimization - Choose to optimize compression for Live Action or Cinema.
- Enable Service - Enables or disables functionality.

MediaLinX 3 MLAV

Information   Sources   Input

Source Name *	MediaLinX 3
Video Source Type	ClearOne Anthology ▼
Anthology Server	None ▼
	Be sure to add an Anthology server to your project, then return to this device and select it.
Digital Audio Input Type*	HDMI ▼
Video Input	**HDMI**
Audio Input Options*	HDMI ☑ SPDIF ☐ Analog ☑
Gain	0dB ▼
Power Sensor	None ▼
Driver File	IR ▼
Browse Screen?	☐
Sync Threshold	Low ▼

Apply   Cancel

c) The third tab is for Input settings.

Relay Assignments - Each of the relays can be set in three states: None, Normally Open and Normally Closed. These relays can be triggered to change state between Normally Open and Normally Closed to trigger an event with the connected devices (projector lifts, motorized screens, lighting, shades, etc...). These relays can be triggered by system macros (found in the *Macro* Builder pane) or via TCP/IP and/or serial control commands.

MediaLinX 3 MLAV

Information   Sources   Input

Input Assignment

Input 1

High/Open   None ▼

Low/Closed   None ▼

Please choose the macro associated with each input state.

Apply   Cancel

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

1. A green notification in the upper right corner confirms that the device has been successfully updated.

✓ **Device is updated!** ✕
Success!

2.
The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring ViewLinX Devices

This section outlines how to configure the ViewLinX devices in your project, excluding control interfaces (ViewLinX TouchLinX devices).

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings.

   - Current IP Address - The current IP address of the device.
   - Current Subnet Mask - The current subnet mask of the device.

- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.
- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.

Note:

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
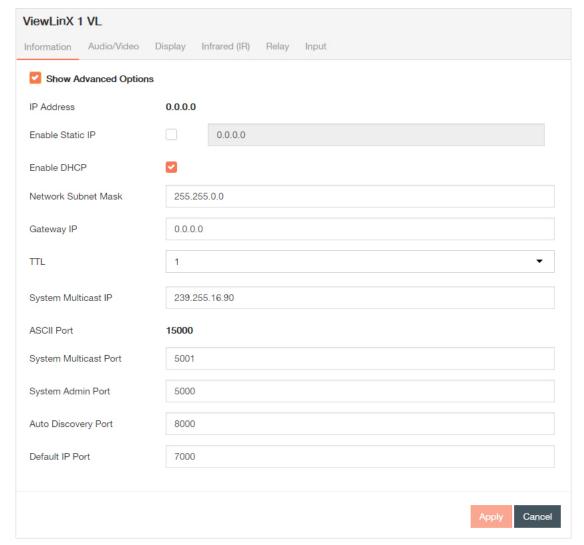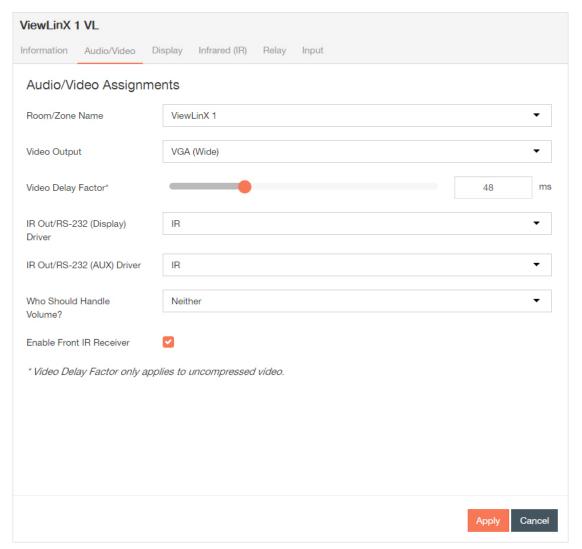- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.
- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.

- Multicast Port Range - Ports for the multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

ViewLinX 1 VL

Information   Audio/Video   Display   Infrared (IR)   Relay   Input

☑ Show Advanced Options

IP Address	**0.0.0.0**
Enable Static IP	☐ 0.0.0.0
Enable DHCP	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▼
System Multicast IP	239.255.16.90
ASCII Port	**15000**
System Multicast Port	5001
System Admin Port	5000
Auto Discovery Port	8000
Default IP Port	7000

Apply   Cancel

b) The second tab is for Audio and Video Assignment settings.

ViewLinX 1 VL

Information   Audio/Video   Display   Infrared (IR)   Relay   Input

Audio/Video Assignments

Room/Zone Name	ViewLinX 1 ▼
Video Output	VGA (Wide) ▼
Video Delay Factor*	——————⬤—————————— 48 ms
IR Out/RS-232 (Display) Driver	IR ▼
IR Out/RS-232 (AUX) Driver	IR ▼
Who Should Handle Volume?	Neither ▼
Enable Front IR Receiver	☑

* Video Delay Factor only applies to uncompressed video.

Apply   Cancel
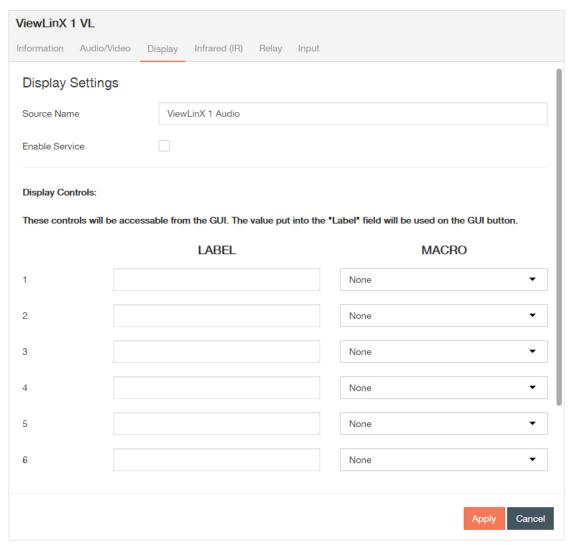
c) The third tab is for Display settings.

Allows the user to control the display. A button is assigned to a command or macro and the button can be given a custom label.

- Source Name - The descriptive name entered by the installer when the device was added. This name appears in the graphical user interface. Edit or keep the default.
- Enable Service - Enables or disables functionality.
- LABEL - Enter name of the button that executes the macro.
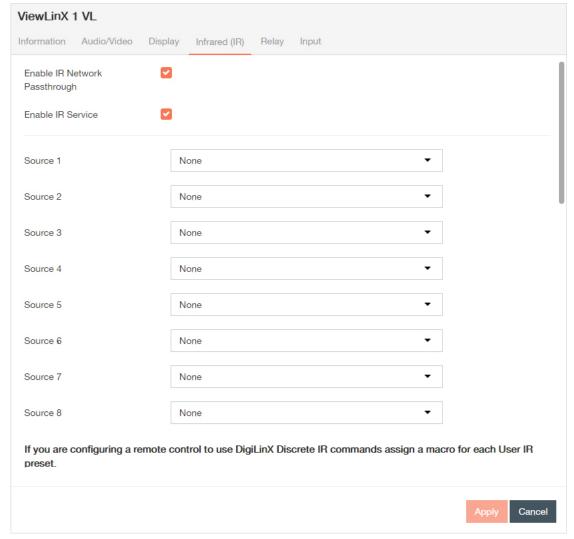
- Macro - Assign the appropriate macro. If you have not created the macros yet, you can come back and assign it later. Building a *Macro* is discussed in the Features chapter.

ViewLinX 1 VL

Information   Audio/Video   Display   Infrared (IR)   Relay   Input

Display Settings

Source Name   ViewLinX 1 Audio

Enable Service

Display Controls:

These controls will be accessable from the GUI. The value put into the "Label" field will be used on the GUI button.

	LABEL	MACRO
1		None
2		None
3		None
4		None
5		None
6		None

Apply   Cancel

d) The fourth tab is for Infrared (I/R) settings.

The IR tab allows you to configure how a device responds when it receives a source or macro IR command. By default, devices are configured to allow IR pass through the network to the currently selected source. Network IR must be disabled if you do not want IR to pass from the selected device. You can configure source and macro assignment.

- Enable Infrared Services - Enable a device to be remote controlled. Infrared is a wireless medium of remote control, which sends signals to a device via pulses, transmitted in the infrared light spectrum. Its use is restricted to equipment within line-of-sight or reflections off a wall or ceiling.
- Enable IR Network Passthrough - Enables IR network passthrough (default).

e) The third tab is for Relay settings.

Relay Assignments - Designate whether the relay is normally open and normally close the contacts of the relay on the GPIO Interface. This can be set in three states: None, Normally Open and Normally Closed. The relay can be triggered to change state between Normally Open and Normally Closed to trigger an event with the connected devices (projector lifts, motorized screens, lighting, shades, etc...). The relay can be triggered by system macros (found in the *Macro* Builder pane) or via TCP/IP and/or serial control commands.

ViewLinX 1 VL

Information   Audio/Video   Display   Infrared (IR)   Relay   Input

Relay Assignment

Enable Service   ☑

Relay 1

None
Normally Open
Normally Closed

Apply   Cancel

f)   The third tab is for Input settings.

This tab allows you to choose a macro associated with each input state: High/Open and Low/Closed. Refer to the *Macro* section of the Features chapter for more detail.

ViewLinX 1 VL

Information   Audio/Video   Display   Infrared (IR)   Relay   Input

Input Assignments

Input 1

High/Open   None ▾

Low/Closed   None ▾

Please choose the macro associated with each input state.

Apply   Cancel

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

   1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.

The in the status column of the device will become a until you send the updated configuration(s) again.

Status	
	Device has is on network, matched, configured, and configuration has been sent.
	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring MediaLinX Audio Devices

This section outlines how to configure the MediaLinX audio devices in your project.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

a) The first tab is for Information settings. Default device information displays:

   •   Current IP Address - The current IP address of the device.
   •   Current Subnet Mask - The current subnet mask of the device.
   •   Device Type - The type of StreamNet device that this is.

- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.
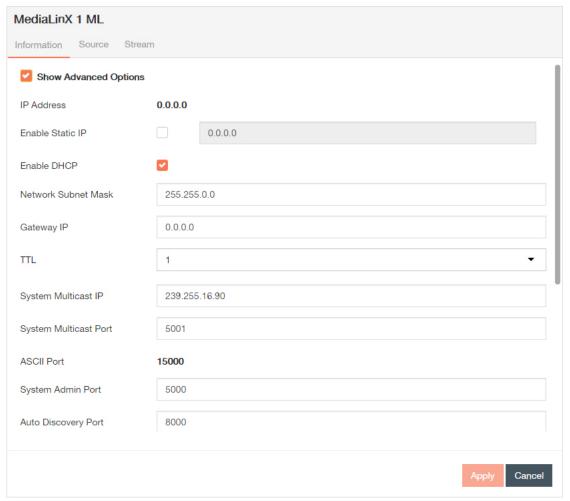
📝 **Note:**

ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.
- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the multicast IP Range.

- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

b) The second tab is for Source settings.

- Source Name - The descriptive name entered by the installer when the device was added. It appears as a selection on all user interfaces and is used to identify the device. Edit or keep the default.
- Source Type - The type of source connected to the VIEW device. (May be selected from CD player, DVD player, DVR, generic device, generic media server or cameras etc.)

    Note:

An audio source where the audio is stored on a hard disk. This allows StreamNet to take advantage of the metadata to access the songs stored on the server. Compatible media servers include:
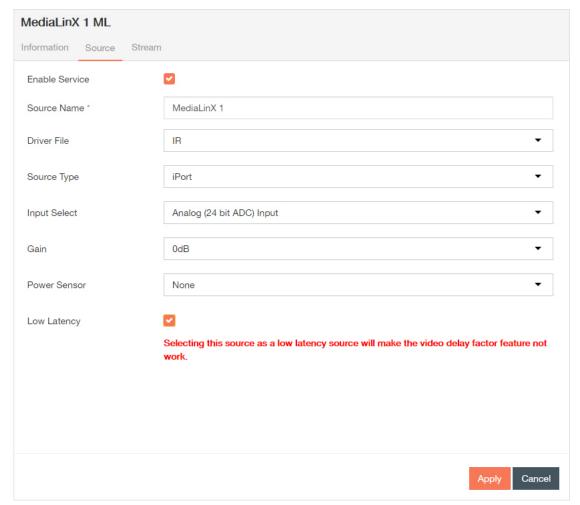
- Audio ReQuest® (all models)
- Imerge SoundServer MKII®
- Escient Fireball® (E-40, E-120, E2-40, E2-100, E2-160, E2-200, E2-300, DVDM-300, DVDM-552, MX-752, MX-531, MX111, AVX-552. AVX-331, or AVX-211 models only)
- NetStreams' Streaming Music Manager.

- Driver File - The new driver file for the video source. (Allows you to select the designated .lua driver file. The ViewPro Lua files are stored in the ClearOne StreamNet Dealer Setup directory (C:\ Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers).

📝 **Note:**

Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua Driver File found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. A replacement .lua file can also be created from a template that will allow customizing the VIEW Pro encoder/decoder to receive RS-232 commands instead of IR.VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders. Information about editing and using .lua files for RS-232 control is included in the VIEW Pro RS-232 Control section later in this manual.

- Input Select - Allows you to select what kind of input the MediaLinX should expect. Either Analog or S/PDIF.
- Gain - The Audio Gain drop-down for setting the audio input gain up or down to match that of other sources in the system. Select from ± 0, 3, or 6 dB amplification or attenuation of audio source.
- Power Sensor - Power Sensing is the ability to tell whether a source component is powered on or off. The MediaLinX can use one of three power sensing methods:

- None. This method uses no power sensing.
- Level. This method senses the source component's signal output level to determine if it is powered on or off.
- LED. This method senses whether the LED on the source component's front panel is on or off to determine the power state.
- Video Sync. This method senses video output from a source component such as a DVD player, TV, or VCR.

c) The third tab is for Stream settings.

- Stream Name - A display field used to identify the stream name. You can click in this field to update the stream name.
- Service Type - A display field used to indicate the service type.
- Enable Service - Enables or disables functionality.
- Media Server - The brand of media server. Lets you match a media server created in the project to the physical device. This is done to ensure that the IP address of the media server matches the IP address configured in the project.
- Media Port - The port that the media server connects to.
- Control Port - The port that the control source connects to.

- Directory Server Port - The port for directory server connection.

MediaLinX 1 ML

Information   Source   Stream

☑ **Show Advanced Options**

Stream Name *	Unassigned Stream 1
Service Type	**audio/source**
Enable Service	☐
Media Server	None ▾
Media Port	80
Control Port	80
Directory Server Port	8081

Apply   Cancel

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

   1. A green notification in the upper right corner confirms that the device has been successfully updated.

   ✓ **Device is updated!**   ✕
     Success!

2.

The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring SpeakerLinX Devices

This section outlines how to configure the SpeakerLinX devices in your project, excluding control interfaces (SpeakerLinX TouchLinX devices).

Configuring your devices to a project is the sixth step in the Wizard.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

> **Note:**
>
> If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings. Default device information displays:

      • Current IP Address - The current IP address of the device.

- Current Subnet Mask - The current subnet mask of the device.
- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.
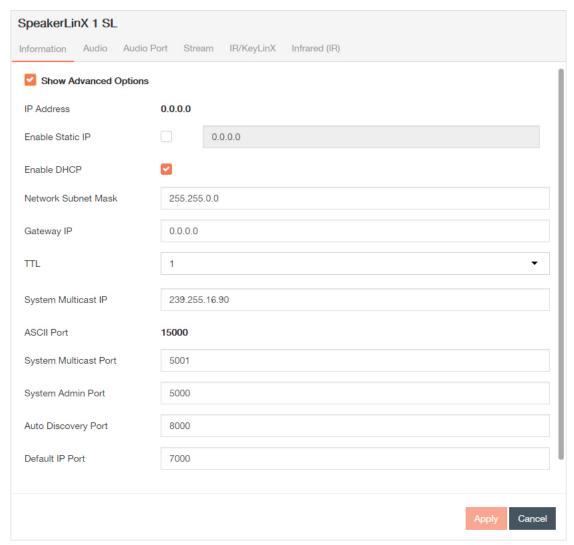
> **Note:**
>
> ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.

- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.

- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the Multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

SpeakerLinX 1 SL

| Information | Audio | Audio Port | Stream | IR/KeyLinX | Infrared (IR) |

☑ Show Advanced Options

IP Address	**0.0.0.0**
Enable Static IP	☐	0.0.0.0
Enable DHCP	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▼
System Multicast IP	239.255.16.90
ASCII Port	**15000**
System Multicast Port	5001
System Admin Port	5000
Auto Discovery Port	8000
Default IP Port	7000

Apply   Cancel

b) The second tab is for Audio settings.

- Room Name - The name of the room where the SpeakerLinX is located. This displays on all user interfaces.
- Service Type - A display field used to indicate the service type.
- Speaker Impedance - Allows dealer to change the impedance settings of the amplifier in the SpeakerLinX (default is 8 Ohms).
- Lineout Volume Level - Allows dealer to determine if the EIM Line out will be fixed (user cannot adjust volume from the TouchLinX) or variable (volume can be adjusted from the TouchLinX).
- Stereo Mode - Choose between stereo, and mono/summed.
- Volume Limit - Establishes a maximum volume level limit.
- Audio Defaults - Lets you adjust Balance, Volume Level, and Volume Limit.
- Default Graphic Equalizer - Lets you adjust the equalizer range for the SpeakerLinX.

SpeakerLinX 1 SL

Information   Audio   Audio Port   Stream   IR/KeyLinX   Infrared (IR)

Room/Zone Name	SpeakerLinX 1 ▼
Service Type	**audio/renderer**
Speaker Impedance	8 ohm ▼
Lineout Vol Level	Variable ▼
Stereo Mode	Stereo ▼

Audio Defaults

50	30	100

Balance   Vol. Level   Vol. Limit

Default Graphic EQ

0	dB	0	dB	0	dB	0	dB

80Hz   400Hz   2KHz   8KHz

Apply   Cancel
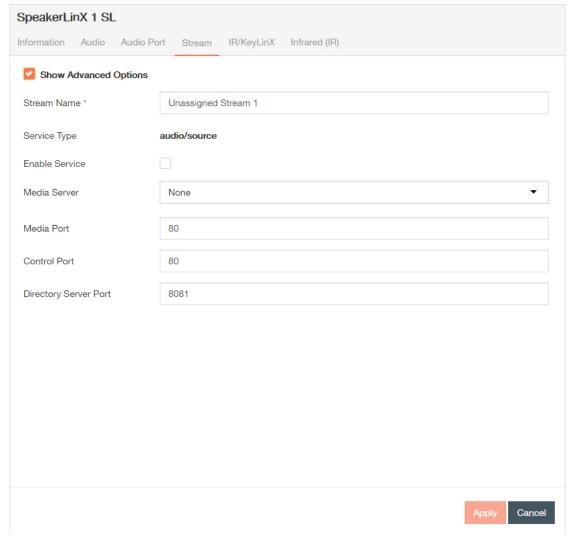
c) The third tab is for Audio port settings.

- Service Type (Local or Streaming) - Used to indicate the service type. Selecting Local allows a legacy source to be played only in that room. Selecting Streaming allows the local source to be played throughout the home.
- Local Source (Enabled or Disabled) - Local will allow a legacy source to be played only in that room. Streaming will allow the local source to be played throughout the home. If streaming is enabled the SpeakerLinX will not be available to host a media server stream. If an Audio

Port is connected to the SpeakerLinX, make sure that service is enabled, otherwise it will not work. If no Audio Port is connected, the service should be disabled. If you want to add an Audio Port later, you can enable the service at that time.
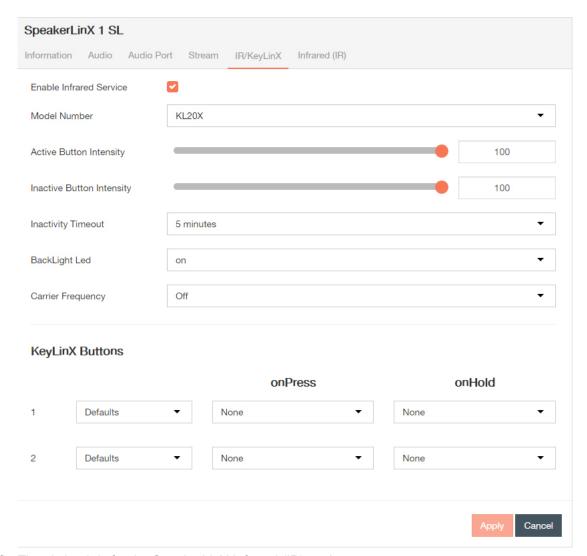
d) The fourth tab is for Stream settings.

- Stream Name - A display field used to identify the stream name. You can click in this field to update the stream name.
- Service Type - A display field used to indicate the service type.
- Enable Service - Enables or disables functionality.

- Media Server - The brand of media server. Lets you match a media server created in the project to the physical device. This is done to ensure that the IP address of the media server matches the IP address configured in the project.
- Media Port - The port that the media server connects to.
- Control Port - The port that the control source connects to.
- Directory Server Port - The port for directory server connection.

SpeakerLinX 1 SL

Information   Audio   Audio Port   Stream   IR/KeyLinX   Infrared (IR)

☑ **Show Advanced Options**

Stream Name *	Unassigned Stream 1
Service Type	**audio/source**
Enable Service	☐
Media Server	None ▼
Media Port	80
Control Port	80
Directory Server Port	8081

Apply   Cancel
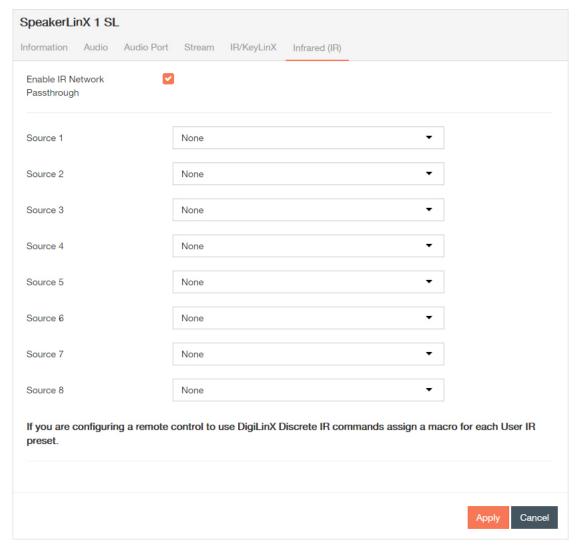
e) The fifth tab is for KeyLinX-specific IR settings.

- Enable Service - Enables or disables functionality.
- Model Number - Select the model number of the KeyLinX, IRLinX, or KeyLinX and IRLinX from the drop-down list.
- Active Button Intensity - How bright the backlighting of the buttons on the KeyLinX are when in an active state.
- Inactive Button Intensity - How bright the backlighting of the buttons on the KeyLinX are when KeyLinX is inactive.
- Inactive Timeout - How long after the last button was pressed before the KeyLinX becomes inactive and the button lights change to the Inactive levels.
- BackLight LED - Allows you to disable the backlight.
- Carrier Frequency - Choose the IR frequency to be used. Selections are 30, 33, 36, 37, 38, 40, and 50.
- KeyLinX Buttons - You can designate which button is assigned to what source. For each KeyLinX button, use the drop-down list to designate what source that button selects.

f) The sixth tab is for the SpeakerLinX Infrared (IR) settings.

Enable IR Network Passthrough - Enables IR network passthrough (default).

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

    1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.
The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring the TouchLinX TL380

This section outlines how to configure the TouchLinX TL380 control interface devices in your project.

Configuring your devices to a project is the sixth step in the Wizard.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings. Default device information displays:

   • Current IP Address - The current IP address of the device.

- Current Subnet Mask - The current subnet mask of the device.
- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.
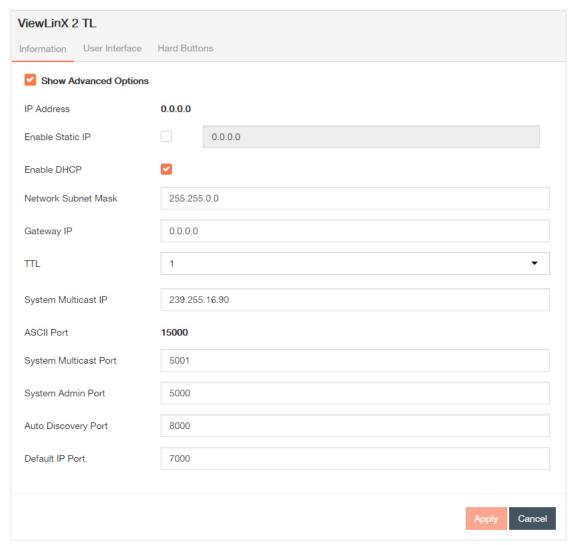
> **Note:**
>
> ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.
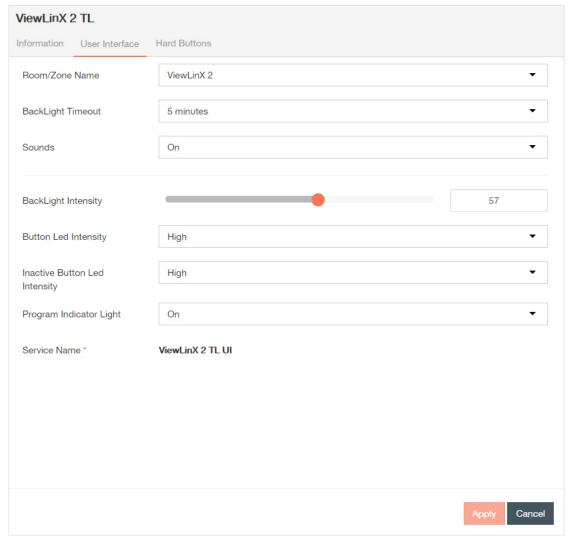
- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.

- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

ViewLinX 2 TL

Information   User Interface   Hard Buttons

☑ Show Advanced Options

IP Address	**0.0.0.0**
Enable Static IP	☐ 0.0.0.0
Enable DHCP	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▾
System Multicast IP	239.255.16.90
ASCII Port	**15000**
System Multicast Port	5001
System Admin Port	5000
Auto Discovery Port	8000
Default IP Port	7000

Apply   Cancel

b) The second tab is for User Interface settings.

- Room Name - The name of the room where the TouchLinX resides.
- BackLight Timeout - This allows you to select a time frame for the backlight of the TouchLinX to go dark.
- Sounds - This is a toggle switch. Select On if you want feedback (like clicks) when you press a button.
- BackLight Intensity - Adjusts the brightness of the TouchLinX window.
- Button Led Intensity - Sets the lights for the active hard buttons on the TouchLinX to high, low, or off.
- Inactive Button Led Intensity - Sets the lights for the inactive hard buttons on the TouchLinX to high, low, or off.
- Program Indicator Light - Controls whether the program indicator light is on or off.
- Service Name A display field used to identify the device name.

ViewLinX 2 TL

Information   User Interface   Hard Buttons

Room/Zone Name	ViewLinX 2 ▼
BackLight Timeout	5 minutes ▼
Sounds	On ▼
BackLight Intensity	[slider] 57
Button Led Intensity	High ▼
Inactive Button Led Intensity	High ▼
Program Indicator Light	On ▼
Service Name *	**ViewLinX 2 TL UI**

Apply   Cancel

c) The third tab is for Hard Button settings.

   1. Select the Hard Buttons.

ViewLinX 2 TL

Information   User Interface   Hard Buttons

Select the Hard button you want to assign from the drop down box. Then set the options for that button.

Please Select a Hard
Button

| None |
| Hard Button 1 |

Apply   Cancel

2. Select Hard Button 1 from the Hard Button field.

3. Enable or disable the Switch to Lighting Control Panel option:

- If the option is enabled and no phantom button is assigned to Hard Button 1:When you select the hard button, you are able to view the lighting control menu on the TouchLinX without any lighting changes being made.

- If the option is not enabled and you have assigned a phantom button to Hard Button 1:When you select the hard button, the lighting control menu does not display on the TouchLinX and lighting changes are made to the room.

- If the option is enabled and you have assigned a phantom button to Hard Button 1:

  When you select the hard button, the lighting control menu displays on the TouchLinX and lighting changes are made to the room.

4. Use the drop-down list beneath Select the Button you want to assign to the Hard Button to select the phantom button you want the hard button to emulate.

5. Select Apply.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

    1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.
The ✅ in the status column of the device will become a ⚠️ until you send the updated configuration(s) again.

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠️	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring the TouchLinX TL430 or TL700

This section outlines how to configure the TouchLinX TL430 or TL700 control interface devices in your project. Setting configurations are the same for the TouchLinX TL430 and TL700.

Configuring your devices to a project is the sixth step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

Note:

If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. Click on the first device that you want to configure.

The settings populate in the right-hand pane.

3. Select and enter device details.

   a) The first tab is for Information settings.

      • Current IP Address - The current IP address of the device.

- Current Subnet Mask - The current subnet mask of the device.
- Device Type - The type of StreamNet device that this is.
- Device Model - The model of the Device Type.
- Firmware Version - What firmware version is currently running on the device.
- Device Name - Descriptive name the installer assigned to the device when creating the project.
- Serial Number - Displays the device serial number.
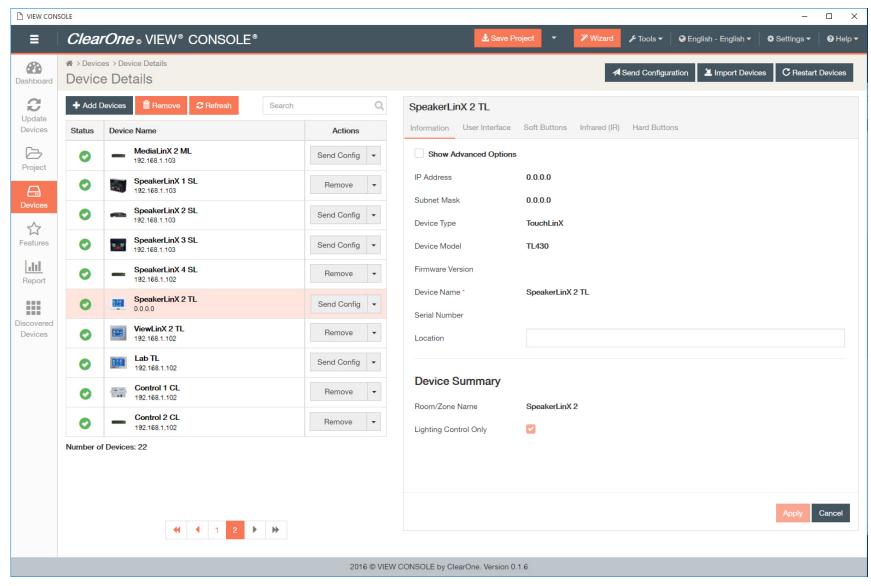- Location - A comment field for noting the location of the device. If you ever need to return to the installation for service or upgrading devices, you have access to this information in the project file.

Click the Show Advanced Options check box, and device system distribution options display:

- IP Address - The device IP address is displayed. Each StreamNet device must have an IP address. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices. The device may obtain this address in any of several ways: Static IP, Auto IP or DHCP.
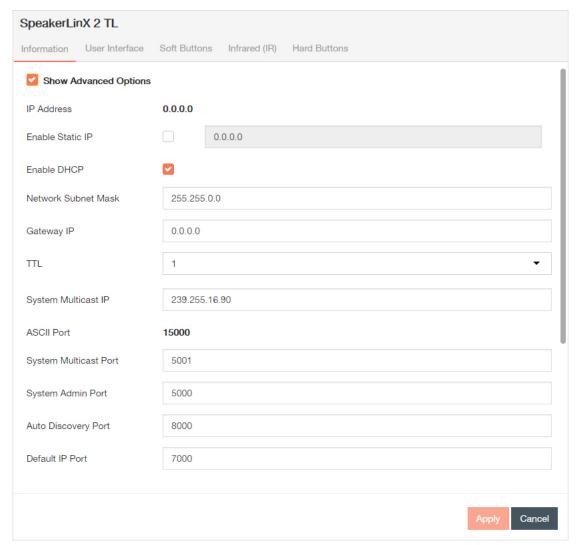
> **Note:**
>
> ClearOne strongly recommends against changing the following individual device settings. For a system to work, each device must also be configured with this setting and the configuration must be pushed to each hardware device. Any devices not configured properly would no longer be visible to the rest of the devices or to the VIEW CONSOLE software.
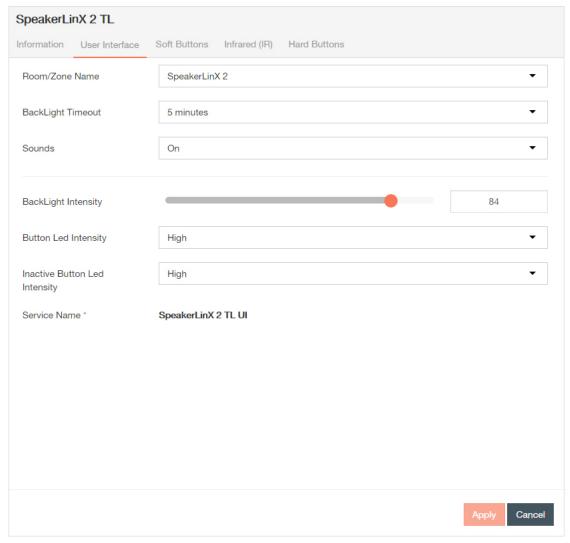
- Enable Static IP - With a Static IP address, the device will assume that the assigned address is valid. Checking this check box allows entry of a static IP address for the device. By default, this setting for VIEW devices is unchecked. Make sure you are using the same addressing scheme across StreamNet devices, the home network, and static devices.
- Enable DHCP - By default, VIEW devices find IP addresses automatically via Auto IP, not DHCP. To enable DHCP, check this box.
- Network Subnet Mask - Allows setting the subnet for the device.
- Gateway IP - Allows setting a specific gateway node to serve as an access point to another network. Some devices on the StreamNet network may require access to the internet, like the digital media server. These devices require additional IP settings like the Gateway IP.
- TTL- This sets the number of routers your stream can go through for UDP Unicast and Unicast access methods.
- System Multicast IP - The IP address for the system multicast feature. For each StreamNet system there is a single multicast address used by all of the devices for device discovery, ASCII message routing, time synchronization, and other system level tasks; this multicast address is called the "StreamNet System Multicast Address" and is configured into the device by the StreamNet set up program.
- ASCII Port - The port for ASCII messaging. Any StreamNet ASCII control message may be sent using TCP to the IP address of any StreamNet device at port number 15000. Responses from the StreamNet system will be returned on the TCP connection which initiated the request. See chapter on ASCII Protocol in the StreamNet Integration and Programmer's Guide.
- System Multicast Port - The port for system multicast traffic.
- System Admin Port - The management port for the system admin.
- Auto Discovery Port - The port for auto discovery requests.
- Default IP Port - The default port for the default IP address.
- Auto IP Address Range - The pool of addresses the Auto IP function uses to assign IP addresses.

- Multicast IP Range - Multicast addresses assigned dynamically at run time by the StreamNet system master device. The assigned addresses are chosen from a range of addresses configured into the device by the StreamNet set up program.
- Multicast Port Range - Ports for the multicast IP Range.
- Debug Multicast Address - Destination for multicast debug data.
- Debug Multicast Port - The port for multicast debug data traffic.

b) The second tab is for User Interface settings.

- Room Name - The name of the room where the TouchLinX resides.
- BackLight Timeout - This allows you to select a time frame for the backlight of the TouchLinX to go dark.
- Sounds - This is a toggle switch. Select On if you want feedback (like clicks) when you press a button.
- BackLight Intensity - Adjusts the brightness of the TouchLinX window.
- Button Led Intensity - Sets the lights for the active hard buttons on the TouchLinX to high, low, or off.
- Inactive Button Led Intensity - Sets the lights for the inactive hard buttons on the TouchLinX to high, low, or off.
- Program Indicator Light - Controls whether the program indicator light is on or off.
- Service Name A display field used to identify the device name.

SpeakerLinX 2 TL

Information | User Interface | Soft Buttons | Infrared (IR) | Hard Buttons

Room/Zone Name	SpeakerLinX 2 ▾
BackLight Timeout	5 minutes ▾
Sounds	On ▾
BackLight Intensity	[slider] 84
Button Led Intensity	High ▾
Inactive Button Led Intensity	High ▾
Service Name *	**SpeakerLinX 2 TL UI**

Apply   Cancel

c) The third tab is for Soft Button settings.

- Label - Assign a label for the macro that will display in the GUI for Audio, Mute, Volume Up, and Volume Down.
- Macro - This allows you to select macro to go with the soft button and the label.

SpeakerLinX 2 TL

Information   User Interface   Soft Buttons   Infrared (IR)   Hard Buttons

Choose the Macro you wish to assign to each soft button

Audio	Custom	☐
	Label	
	Macro	None ▾

Mute	Custom	✔
	Label	Mute Macro1|
	Macro	None ▾

Volume Up	Custom	☐
	Label	
	Macro	None ▾

Apply   Cancel

d) The fourth tab is for Infrared (IR) settings.

The IR tab allows you to configure how a device responds when it receives a source or macro IR command. By default, devices are configured to allow IR pass through the network to the currently selected source. Network IR must be disabled if you do not want IR to pass from the selected device. You can configure source and macro assignment.

- Enable Infrared Services - Enable a device to be remote controlled. Infrared is a wireless medium of remote control, which sends signals to a device via pulses, transmitted in the infrared light spectrum. Its use is restricted to equipment within line-of-sight or reflections off a wall or ceiling.
- Enable IR Network Passthrough - Enables IR network passthrough (default).

SpeakerLinX 2 TL

Information   User Interface   Soft Buttons   Infrared (IR)   Hard Buttons

Enable IR Network Passthrough	✓
Enable IR Service	✓
Source 1	None ▾
Source 2	None ▾
Source 3	None ▾
Source 4	None ▾
Source 5	None ▾
Source 6	None ▾
Source 7	None ▾
Source 8	None ▾

If you are configuring a remote control to use DigiLinX Discrete IR commands assign a macro for each User IR preset.

Apply   Cancel

e) The third tab is for Hard Button settings.

1. Select the Hard Buttons.

SpeakerLinX 2 TL

Information   User Interface   Soft Buttons   Infrared (IR)   Hard Buttons

Select the Hard button you want to assign from the drop down box. Then set the options for that button.

Please Select a Hard
Button | none   ▾ |

Switch to Lighting Control   ☐
Menu

Select the Button you want to assign to the Hard Button

| None   ▾ |

Apply   Cancel

2. Select Hard Button 1 from the Hard Button field.

3. Enable or disable the Switch to Lighting Control Panel option:

- If the option is enabled and no phantom button is assigned to Hard Button 1:When you select the hard button, you are able to view the lighting control menu on the TouchLinX without any lighting changes being made.

- If the option is not enabled and you have assigned a phantom button to Hard Button 1:When you select the hard button, the lighting control menu does not display on the TouchLinX and lighting changes are made to the room.

- If the option is enabled and you have assigned a phantom button to Hard Button 1:

  When you select the hard button, the lighting control menu displays on the TouchLinX and lighting changes are made to the room.

4. Use the drop-down list beneath Select the Button you want to assign to the Hard Button to select the phantom button you want the hard button to emulate.

5. Select Apply.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

1. A green notification in the upper right corner confirms that the device has been successfully updated.

2.

The in the status column of the device will become a until you send the updated configuration(s) again.

Status	
	Device has is on network, matched, configured, and configuration has been sent.
	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Configuring ControLinX Devices

This section outlines how to configure your ControLinX devices in your project.

Configuring your devices to a project is the sixth step in the Wizard. Before editing a ControLinX, verify that you have at least one SpeakerLinX added to your project.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

The Devices screen displays.

> **Note:**
>
> If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.
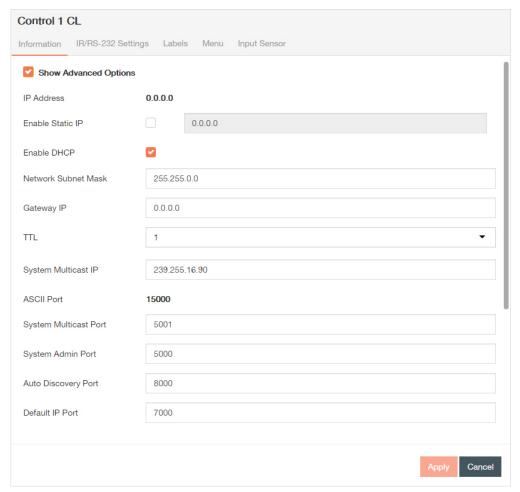
2. Click on the first device that you want to configure.
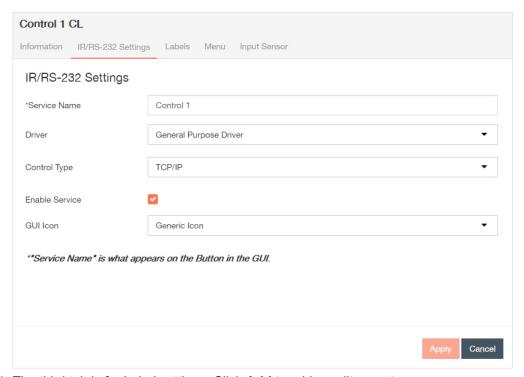
The settings will populate in the right-hand pane.
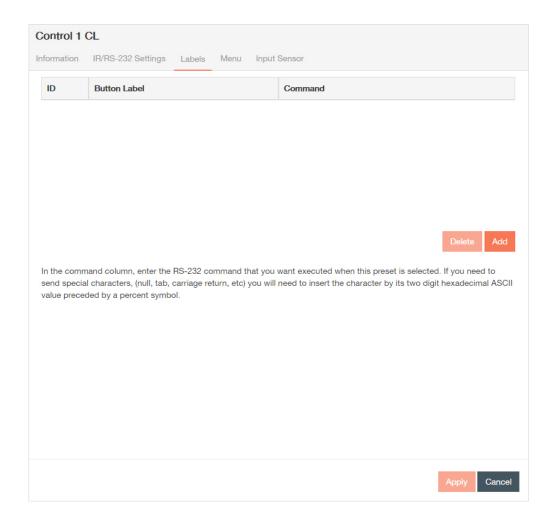
3. Select and enter device details.
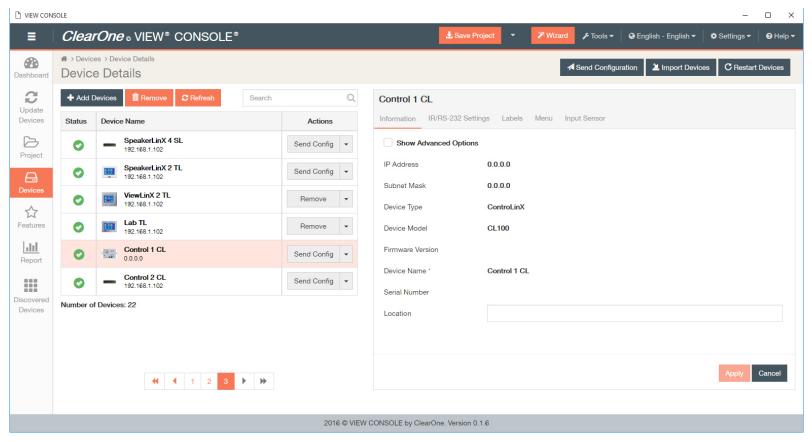
   a) The first tab is for Information settings.

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

☑ **Show Advanced Options**

IP Address	**0.0.0.0**
Enable Static IP	☐ 0.0.0.0
Enable DHCP	☑
Network Subnet Mask	255.255.0.0
Gateway IP	0.0.0.0
TTL	1 ▼
System Multicast IP	239.255.16.90
ASCII Port	**15000**
System Multicast Port	5001
System Admin Port	5000
Auto Discovery Port	8000
Default IP Port	7000

Apply   Cancel
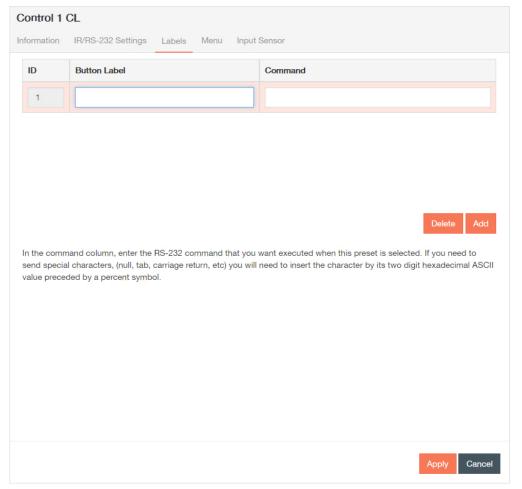
b) The second tab is for IR/RS-232 settings.

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

IR/RS-232 Settings

*Service Name	Control 1
Driver	General Purpose Driver ▾
Control Type	TCP/IP ▾
Enable Service	✔
GUI Icon	Generic Icon ▾

*"*Service Name*" is what appears on the Button in the GUI.*

Apply   Cancel
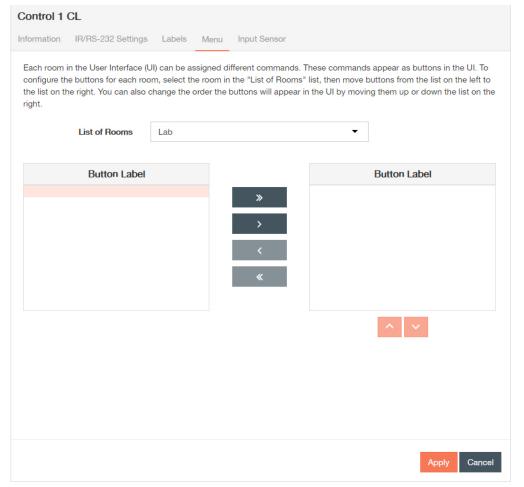
c) The third tab is for Label settings. Click **Add** to add or edit presets.

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

ID	Button Label	Command

Delete   Add

In the command column, enter the RS-232 command that you want executed when this preset is selected. If you need to send special characters, (null, tab, carriage return, etc) you will need to insert the character by its two digit hexadecimal ASCII value preceded by a percent symbol.

Apply   Cancel

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

ID	Button Label	Command
1		

Delete   Add

In the command column, enter the RS-232 command that you want executed when this preset is selected. If you need to send special characters, (null, tab, carriage return, etc) you will need to insert the character by its two digit hexadecimal ASCII value preceded by a percent symbol.

Apply   Cancel

d) The fourth tab is for Menu settings.

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

Each room in the User Interface (UI) can be assigned different commands. These commands appear as buttons in the UI. To configure the buttons for each room, select the room in the "List of Rooms" list, then move buttons from the list on the left to the list on the right. You can also change the order the buttons will appear in the UI by moving them up or down the list on the right.

List of Rooms   Lab ▾

Button Label		Button Label
	»	
	›	
	‹	
	«	

∧ ∨

Apply   Cancel

e)   The fifth tab is for Input Sensor settings.

Control 1 CL

Information   IR/RS-232 Settings   Labels   Menu   Input Sensor

Input Sensor Assignment

High/Open   None   ▼

Low/CLosed   Mute 15 seconds   ▼

Signal Toggles   Mute 10 seconds   ▼

Apply   Cancel

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the devices you want to update.

   1. A green notification in the upper right corner confirms that the device has been successfully updated.

   ✓ **Device is updated!**   ✕
     Success!

   2.

   The ✓ in the status column of the device will become a ⚠ until you send the updated configuration(s) again.

Status	
✓	Device has is on network, matched, configured, and configuration has been sent.
!	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
✗	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

Send Device Configurations

This section outlines how to send configurations for the StreamNet products and legacy devices in your project.

Sending your device configurations is the last, and seventh step in the Wizard and basic setup process.

1. If not in Wizard mode, manually select **Devices** in the left-hand sidebar.

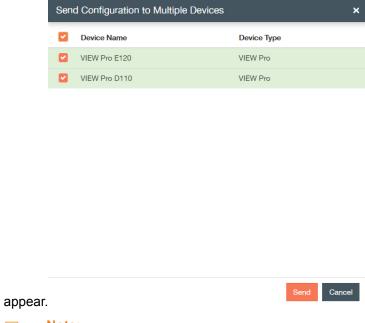   The Devices screen will display.

> **Note:**
>
> If you have navigated to the Devices page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

2. You can send one device configuration at a time by manually clicking on **Send Config** under "Actions" in the left pane, or you can send configurations for multiple devices by clicking **Send Configuration** in the upper right corner.
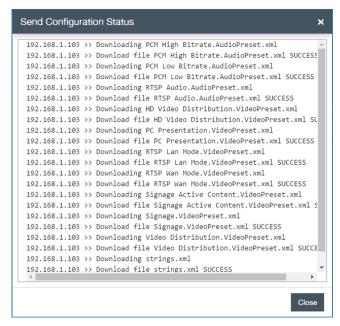
If sending multiple configurations, the window for you to select available device configurations from will

appear.

Note:

You <u>must</u> manually send the configuration for the VIEW Pro D310 decoder.

3. Check the boxes of the devices you want to send configurations for, or select all devices by checking the check box at the very top (next to Device Name), and click **Send**.

   1. Using either method, the Send Configuration Status window will appear.

Send Configuration Status ✕

```
192.168.1.103 >> Downloading PCM High Bitrate.AudioPreset.xml
192.168.1.103 >> Download file PCM High Bitrate.AudioPreset.xml SUCCESS
192.168.1.103 >> Downloading PCM Low Bitrate.AudioPreset.xml
192.168.1.103 >> Download file PCM Low Bitrate.AudioPreset.xml SUCCESS
192.168.1.103 >> Downloading RTSP Audio.AudioPreset.xml
192.168.1.103 >> Download file RTSP Audio.AudioPreset.xml SUCCESS
192.168.1.103 >> Downloading HD Video Distribution.VideoPreset.xml
192.168.1.103 >> Download file HD Video Distribution.VideoPreset.xml SU
192.168.1.103 >> Downloading PC Presentation.VideoPreset.xml
192.168.1.103 >> Download file PC Presentation.VideoPreset.xml SUCCESS
192.168.1.103 >> Downloading RTSP Lan Mode.VideoPreset.xml
192.168.1.103 >> Download file RTSP Lan Mode.VideoPreset.xml SUCCESS
192.168.1.103 >> Downloading RTSP Wan Mode.VideoPreset.xml
192.168.1.103 >> Download file RTSP Wan Mode.VideoPreset.xml SUCCESS
192.168.1.103 >> Downloading Signage Active Content.VideoPreset.xml
192.168.1.103 >> Download file Signage Active Content.VideoPreset.xml S
192.168.1.103 >> Downloading Signage.VideoPreset.xml
192.168.1.103 >> Download file Signage.VideoPreset.xml SUCCESS
192.168.1.103 >> Downloading Video Distribution.VideoPreset.xml
192.168.1.103 >> Download file Video Distribution.VideoPreset.xml SUCCE
192.168.1.103 >> Downloading strings.xml
192.168.1.103 >> Download file strings.xml SUCCESS
```

Close

2.

If the configuration is successfully sent by the software, the ⚠ in the status column of the device will become a ✅ .

Status	
✅	Device has is on network, matched, configured, and configuration has been sent.
⚠	1. Device has been added to project and matched to a device, but has not yet received a configuration. 2. Device configuration has been changed and applied since the last send. 3. Device has been invalidated (from the Tools drop down).
❌	1. Device has been added to project, but not matched to a device. 2. Device has been matched (possibly configured), but has yet to be discovered upon opening of saved project. 3. Device is part of project, but has been removed from network.

📝 **Note:**

Successful transmittal of configuration from the software does not reflect a complete update by the receiving hardware. Hardware updates may take up to 10 minutes to complete after the software has successfully sent a configuration.

RS-232 Controls

This section covers some concepts before you can configure and use .lua files for RS-232 control of your VIEW Pro devices in the VIEW CONSOLE.

The VIEW Pro has two DB9 Serial ports available on both Encoder and Decoder. The function and operation of the ports is defined in a .lua file used as a driver and implemented through StreamNet VIEW CONSOLE. These ports communicate RS-232 commands and can be used in the following scenarios:

1. Input and/or Output Control.
2. Source Control.
3. Display Control.

The VIEW Pro .lua files are stored in the ClearOne StreamNet Dealer Setup directory:(C:\Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers)If both Serial ports are to be used, then the Serial Comm Port number will need to be specified in each .lua File with a "1" or a "2" (port = "comm://default;baud=9600;bits=8;parity=0;stop=1").

LUA File Driver Templates

Driver templates created from .lua files allow the installer to create drivers that can send RS-232 commands to a source. These commands are one-way only. They are NOT capable of receiving messages from the source. This is the same level of control as using IR, but with a RS-232connection. One-way driver templates are configured by modifying a supplied .lua file. These instructions will guide you through this process and assume you are a trained StreamNet Installer and have a working knowledge of Windows.

What you need:

- E120
- D110, D210
- DB9 Serial cable
- RS-232 controlled source
- DB9 Gender-bender (depends on source)
- Null Modem Cable or Adapter (depends on source)

Preparing the New One-Way RS-232 Driver File

Driver templates can be found in <StreamNet Application Suite>\ViewPro>\Drivers. You will need to copy and rename the appropriate driver template into <StreamNet Application Suite>\ ViewPro>\Drivers. If the Drivers folder does not already exist go ahead and create the folder andcopy the .lua file into it. Then rename the file. This will allow you to select the driver in VIEW CONSOLE and leave you a backup copy of the original template.

If you are creating a one way RS-232 file for a DVD you would:

- Locate the Driver Template directory (i.e. C:\Program Files (x86)\ClearOne\StreamNet Application Suite\viewPro\drivers)

- Copy the DVDTEMPLATE.LUA file into the Drivers folder that you created
- Rename the DVDTEMPLATE.LUA In this example, we will call it TESTDVD.LUA

Preparing the Encoder/Decoder

The next step is to configure the Encoder/Decoder device.Add the Encoder/Decoder as you normally would. Do NOT choose a source type that is tied to a specific manufacturer or product model. If you are in doubt choose the source type you would use if this were and IR device. For this example, we would choose DVD.

1. Once the device is added select the Sources tab for the Encoder/Decoder. Change the Driver file from IR to your newly created driver. For this example, we would change the driver file from IR to DVDTemplate.lua.
2. Now Apply your changes. The Encoder/Decoder is now configured to use your one-way Driver file.
3. So far all you have applied is a renamed file. Now you need to modify the driver file to support your source.

VIEW Pro and VIEW Legacy Interoperability

This section outlines:

- How to configure and use .lua files for RS-232 control of your VIEW Pro devices in the VIEW CONSOLE
- Interoperability

Control options for VIEW Pro devices using VIEW CONSOLE is facilitated by the .lua file found in the C:\Program Files x86)\ClearOne\StreamNet Application Suite\viewPro\drivers directory. VIEW Pro has two DB9 Serial ports available on both Encoders and Decoders.

RS-232: Modifying the One-Way Driver File

1. To modify a Driver Template you will need to use a text editor, like Notepad (included in Windows). Open Notepad.
2. Next you'll need the RS-232 Protocol for the source. This is normally found on the manufacturer's website. This document will tell you the communication settings, pin connections, and the RS-232 commands.
3. In the RS-232 Protocol section of the .lua file, locate the communication settings. Normally these settings will include: Baud rate, Data Bit, Stop Bit, and Parity. Once you find them you will need to verify that these commands match those used in the driver file.
   a) To do this, open the file in your text editor.
   b) Do a text search for: baud=
   c) You are looking for this line: port = "comm://default;baud=9600;bits=8;parity=0;stop=1",
   d) Verify that the baud, bits, parity, and stop values in the driver file match the settings listed in the RS-232 Protocol. Most devices use Baud=9600, Data bits=8, Parity=0, and Stop bits=1.
   e) Now locate the Command table in the driver file.
   f) Do a text search for: local CmdTable =
   g) Below the local CmdTable = text are the available commands where you can enter RS-232 commands. For each command you will enter the command between the quotation marks.

h) For example: To enter the RS-232 command for TUNE UP:

i) Locate the TUNE UP command line: ['TUNE UP'] = "",

j) Add the appropriate RS-232 command for the source to do a TUNE UP between the quotes: ['TUNE UP'] = "W 1 6 1",

k) Note that in most RS-232 Protocols you are required to put a Carriage Return to indicate an end of command. Use %0D to indicate a Carriage Return: ['TUNE UP'] = "W 1 6 1%0D",

Your table should begin looking like this:

l) Once you have completed your changes, save the file.

m) From VIEW CONSOLE, send the configuration to your Encoder/Decoder.

The StreamNet GUI will now send the RS-232 command to the source via the DB9 port instead of the IR.

Interoperability: Control Sharing

There are several third-party devices that can work with a VIEW or VIEW PRO system. Each should be installed and set up using the manufacturer's software before configuration with the VIEW CONSOLE software. These additional products include:

- **Panasonic® IP Cameras**
- **IP Speakers**
- **Media Servers**
- **Lutron® RadioRA®**
- **Lutron® HomeWorks®**
- **Aprilaire® HVAC system**
- **GE® Concord™**
- **Vantage™ Lighting system**
- **Sonance® iPort™**
- **Devices connected to the system through use of NetStreams' General Purpose Driver.**

📝 **Note:**

RS-232 connections for General Purpose devices are one-way. Two-way drivers are programmed by the installer (refer to Writing StreamNet Device Drivers available on the Resource Library section of the ClearOne website).

📝 **Note:**

If any devices use an IP address, note the address for use later in these procedures.

From a command and control standpoint, VIEW legacy and VIEW Pro devices all appear and act the same; that is, a TouchLinX Touch Panel, Virtual Control, and VIEW Virtual Matrix (VVM) can all be used to control both types of products. Currently, command and control, and audio streams are seamless between the products. For instance, a TouchLinX can control source selection for VIEW Pro and StreamNet devices.The VIEW Virtual Matrix software (VVM) is a program interface that can be run on a PC or laptop running Microsoft Windows 7. Unlike the room-centric based StreamNet virtual control software GUI that is created by a dealer with the StreamNet Dealer Setup software, VVM Is a system-centric control software GUI. This makes it much easier for you to control large systems, or control many rooms on a single screen. In VVM the sources and destinations are differentiated by color for VIEW legacy and VIEW Pro.

- **Light Blue Color = VIEW Legacy Devices**
- **Light Green Color = VIEW Pro Devices**

4. In StreamNet, Static Menus are menus that appear for selection in a particular room. Static Menus can be created using VIEW Pro sources in the same manner as the legacy VIEW products. Refer to Chapter 6 of the manual for "Static Menus." This explains Static Menus in detail.

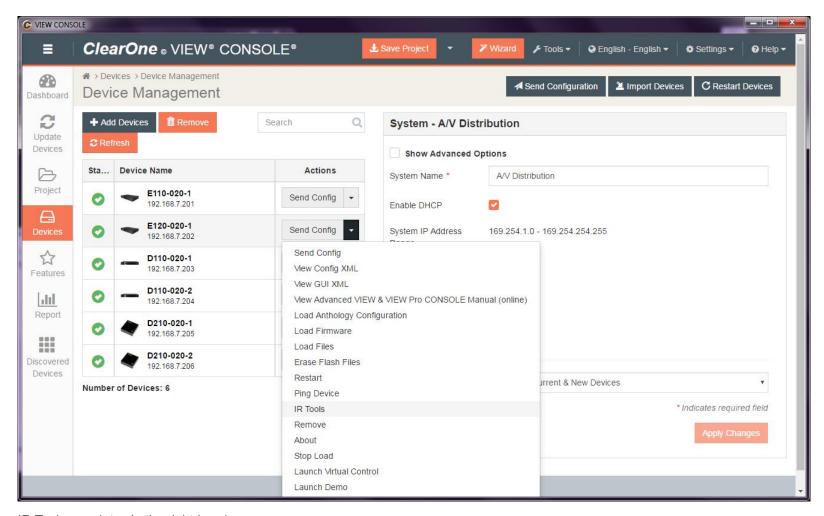**Audio Streaming Interoperability**

A VIEW Pro Decoder can receive audio sourced from VIEW MLA100/101/9101/4000, MLAV300/9300/9500, audio ports enabled for global selection, also iPOD Dock, and VL100/9100/9300 reverse audio.Conversely, StreamNet Devices can play audio streams from a VIEW Pro Encoder. At this time, video cannot be shared across the Products because they are using different compression schemes.

5. Bridging Audio between VIEW Pro and StreamNet is a Licensed Feature. See your ClearOne business contact for additional information.
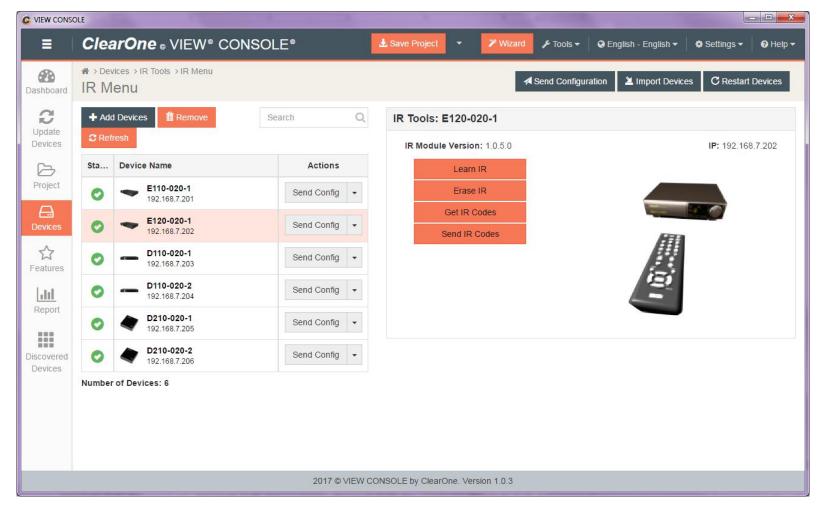
IR Learning and Control

The accessory kits for the IR Emitter and IR Receiver allow the use of these devices with the VIEW Pro products. For example, an IR Emitter can be placed over the integrated IR Receiver of a display so signals from the VIEW Pro can be used to control the display. An IR Receiver unit can be used to receive and relay IR commands to a device placed out of the line of sight of the IR control device.

6. Select your device and then open the drop-down menu. Choose IR Tools.

IR Tools populates in the right-hand pane:
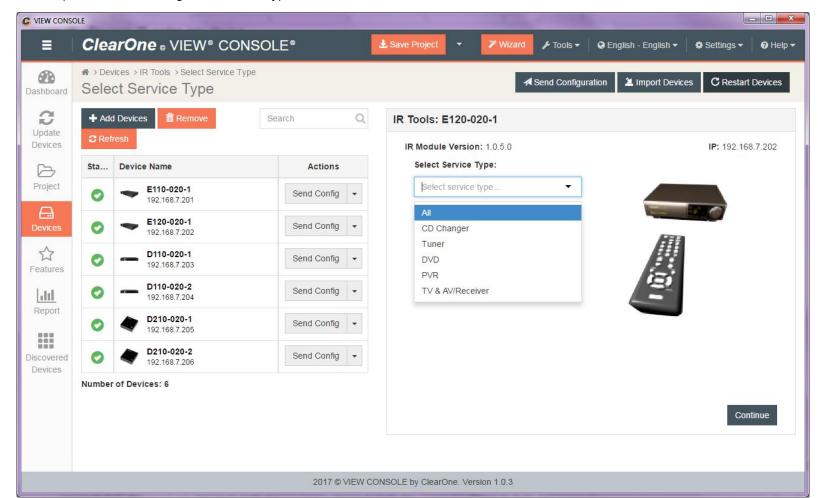
You have 4 options to choose from:

- Learn IR - Program IR codes into device
- Erase IR - Erase previously stored IR Codes from device
- Get IR Codes - Download and save IR code file from device
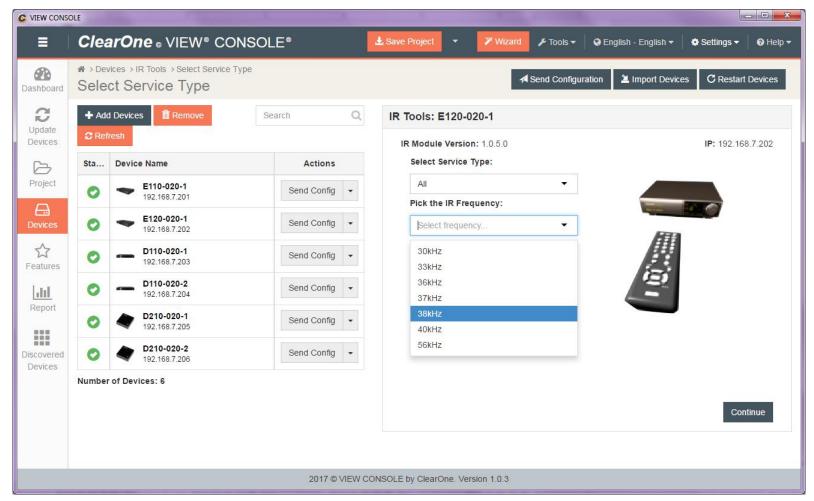- Send IR Codes - Load IR Codes from file and upload to device

Learn IR

7. Select Learn IR.

The drop-down menu changes to Service Type.
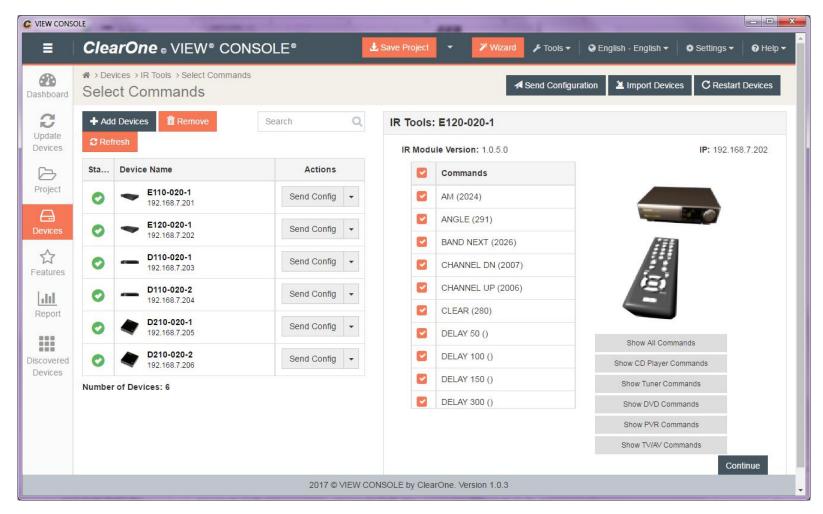

8. Set the type of device to control, and click **Continue**.

This enables some default commands per device type, such as no volume up or down on a DVD player, or no Play/Pause/Stop on a TV).

The drop-down menu changes to IR Frequency.

9. Set the IR signal carrier frequency, and click **Continue**.
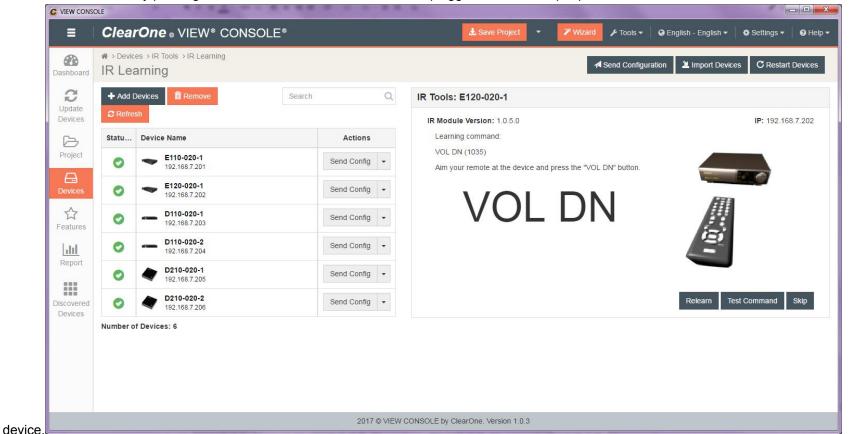
    38MHz is a standard frequency, but can be different based on the manufacturer, etc.

    The IR Tools pane specifies which commands to learn.

> 📝 **Note:**
>
> The list with the checkboxes on the left in the IR Tools pane is of commands available based on either a choice in the previous screen, or selecting a choice in the list to the right. Check and uncheck commands as required. You may choose to learn only a few basic commands, or all commands for a particular device depending on project requirements.
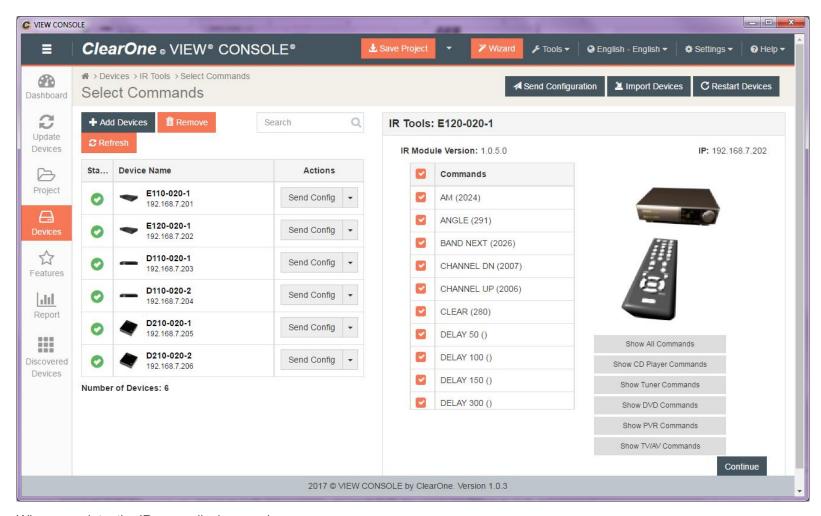
10. Learn each command by pointing the remote at the IR receiver, which is plugged into the IR input port on the

device.
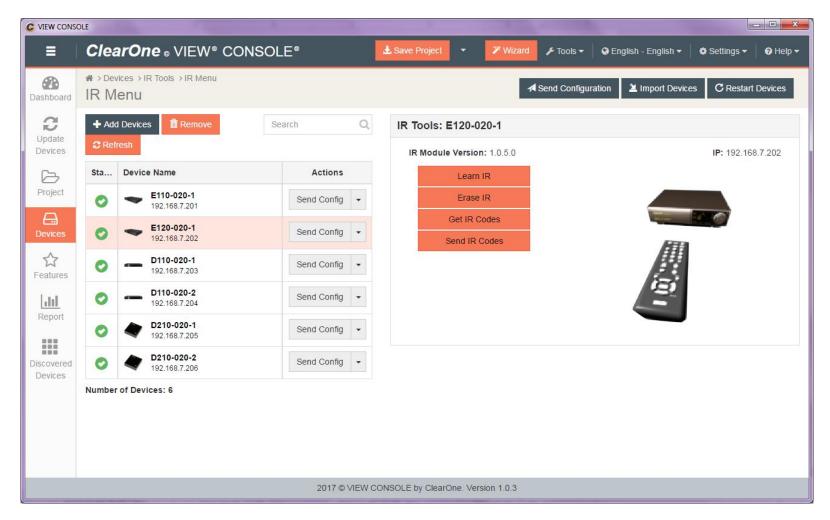
Once all commands have been learned, the next screen confirms that all commands have been learned and offers a chance to verify commands.

11. Verify commands.

The learned commands show up in the Commands list with checkboxes. When a command is highlighted, the learned IR signal is sent to the IR emitter connected to the IR out port of the ClearOne device, and the emitter is positioned over the 3rd party device IR receiver.
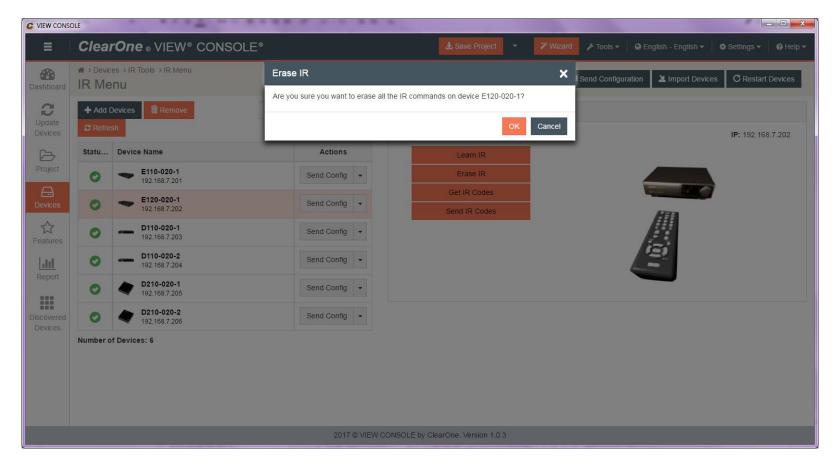
When complete, the IR menu displays again.

Erase IR

12. Select Erase IR.

A choice dialog will ask to confirm if you really want to erase all IR data on the device.

Get IR

13. Select Get IR Codes.

A window to save IR data from the device as a .NIR file for use later will open.

Send IR

14. Select Send IR Codes.

A window to load a .NIR file from the local drive and upload all IR codes to the device will open.

Chapter 6

Features

Topics:

- *Group Management*
- *Subscriber Management*
- *Skin Setup*
- *Lockout*
- *Intercom Management*
- *Static Menus*
- *About Macros*
- *Macro*
- *Favorites*

This chapter outlines how to adjust system features for the StreamNet products and legacy devices in your projects.

System features are:

1. Group Management
2. Subscriber Management
3. Skin Setup
4. Lockout PIN Assignment
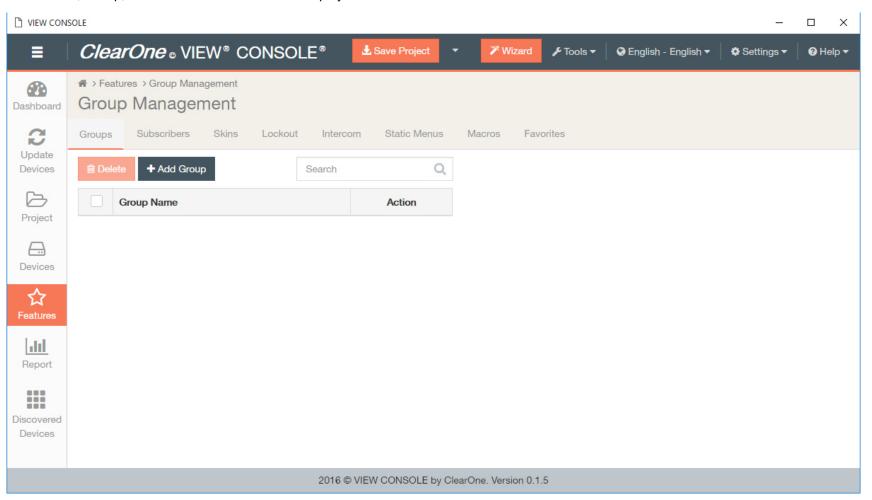5. Intercom Management
6. Static Menus
7. Macros
8. Favorites

Group Management

This section outlines how to create and manage groups in your project.

A group is a collection of rooms or services (like security, video list, or players) that are connected to each other within a given context. Groups enable easy control of multiple rooms with one command. The group performs commands as one. You can create groups of rooms for easy onetouch control by creating a static menu. See section titled Static Menus for steps on building a static menu.
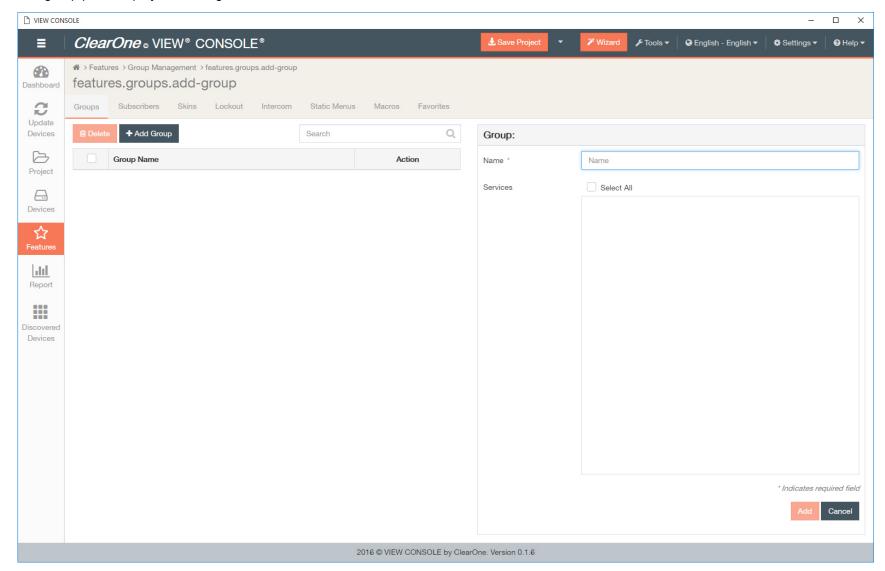
1. Click on **Features** in the left-hand sidebar.

   The first tab, Group, on the main Features screen displays.
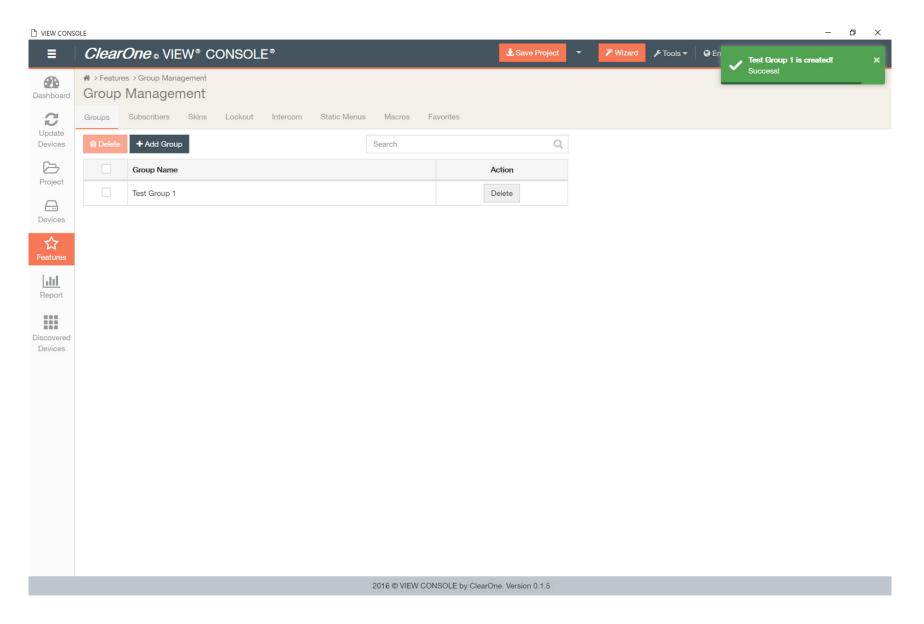
2. To add a group, click **Add Group**.

The group pane displays on the right.

3. Enter and select group details.

Group: Test Group 1

Name *

Test Group 1

Services

☐ Select All

- ☑ Encoder Relay
- ☐ DVDTest
- ☐ Debs
- ☐ Decoder Relay
- ☐ Lab Player
- ☐ Lab UI
- ☑ Device 3 Relay
- ☐ Video Source C
- ☐ Device 3 Audio Stream 1
- ☑ Device 3 Audio Stream 2
- ☐ Device 4 Player
- ☐ Device 4 UI
- ☐ Device 5 Player
- ☑ Device 5 UI
- ☑ MediaLinX 1
- ☐ MediaLinX 2
- ☐ MediaLinX 3

Indicates required field

Add   Cancel

Your group is created.
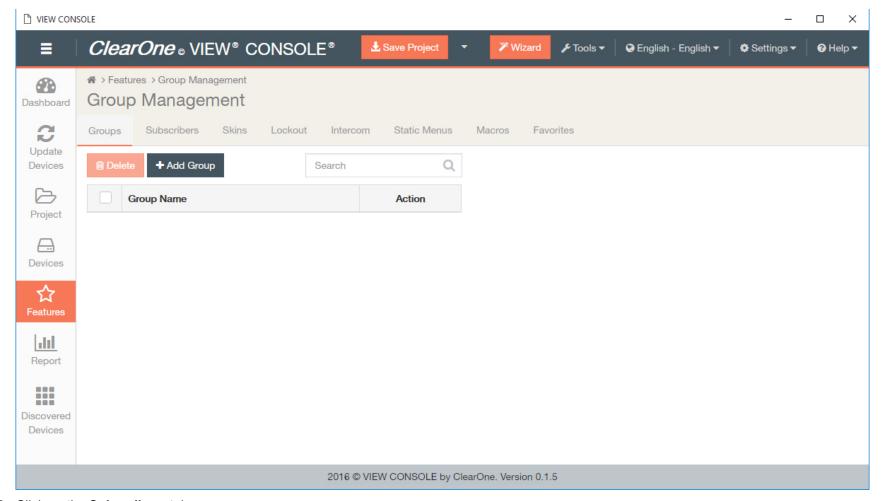
Subscriber Management

This section outlines how to use the subscribers feature in the VIEW CONSOLE software.

A subscriber refers to external control systems, such as Crestron® or AMX® systems. When an external controller subscribes to one of the StreamNet services, it means that the control system can receive information regarding that service. For instance, a Crestron controller subscribing to the native service of a SpeakerLinX can now receive all metadata and song progress that is available through that service. This enables the control system to offer feedback and enable better control of the music.

Before you can change any of the settings for a VIEW device, you must create a project.
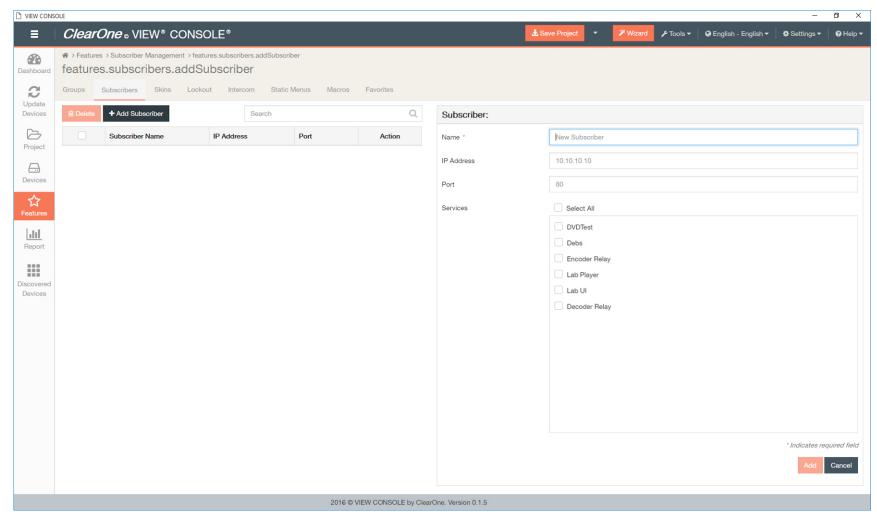
1. Click on **Features** in the left-hand sidebar.

   Main Features screen displays, on default Groups tab.

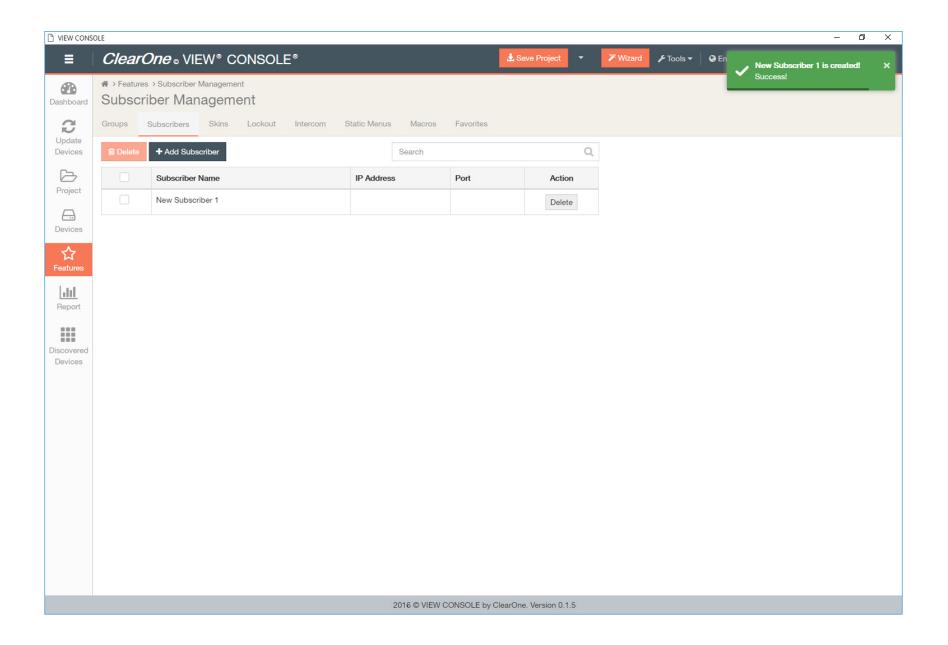2. Click on the **Subscribers** tab.

Subscribers area displays.

3. Enter and select subscriber details:
   a) the name of the new subscriber (such as Crestron),
   b) the subscriber IP address (of the device),
   c) the subscriber port (the port the device is connected to),
   d) and the services you want the control system to receive information from.

Subscriber: New Subscriber 1

Name *	New Subscriber 1
IP Address	10.10.10.10
Port	80

Services   ☐ Select All

☑ Lab Player
☐ Lab UI
☐ Decoder Relay
☐ Video Source C
☑ Device 3 Relay
☐ Device 4 Player
☐ Device 4 UI
☐ Device 5 Player
☑ Device 5 UI
☑ MediaLinX 1
☐ MediaLinX 2
☐ MediaLinX 3
☑ ViewLinX 1 Player
☐ ViewLinX 1 UI

* Indicates required field

Add   **Cancel**

4. Click **Add**.

Subscriber is created.

VIEW CONSOLE

ClearOne ® VIEW® CONSOLE®

⬇ Save Project   ▾   ✏ Wizard   🔧 Tools ▾   🌐 En

✓ New Subscriber 1 is created! ✕
Success!

🏠 > Features > Subscriber Management

Subscriber Management

Groups   Subscribers   Skins   Lockout   Intercom   Static Menus   Macros   Favorites

🗑 Delete   ＋ Add Subscriber

Search 🔍

	Subscriber Name	IP Address	Port	Action
☐	New Subscriber 1			Delete

Dashboard

Update Devices

Project

Devices

Features
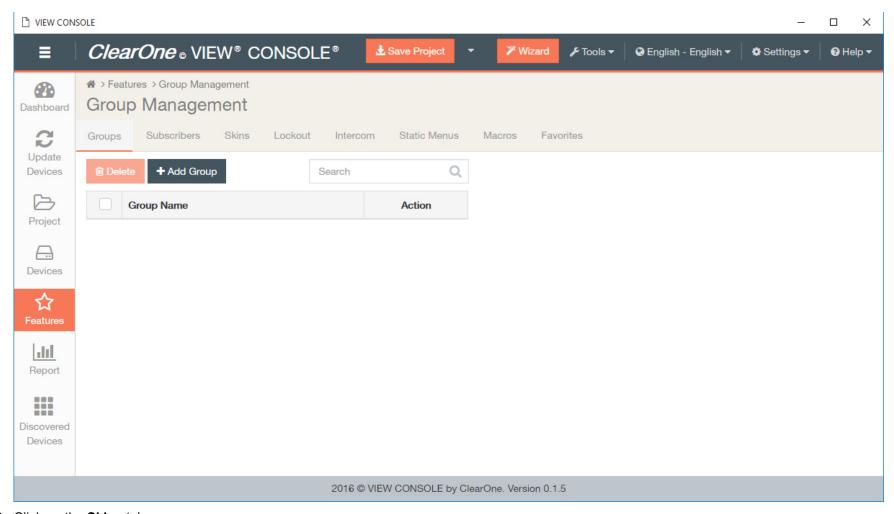
Report

Discovered Devices

Skin Setup

A skin allows you to change the appearance of the graphic interface. This allows you to pick and choose a look that fits the room. There are two kinds of skins available: Standard and Designer Skins.A Standard skin provides the installer with a certain look and the ability to adjust the colors of the selected skin.Designer skins have a pre-determined look and lack the ability to do any customization. This section shows you how to apply skins to your interface.

You must complete the basic setup process, or have an existing project loaded to make changes to the skins for your rooms.
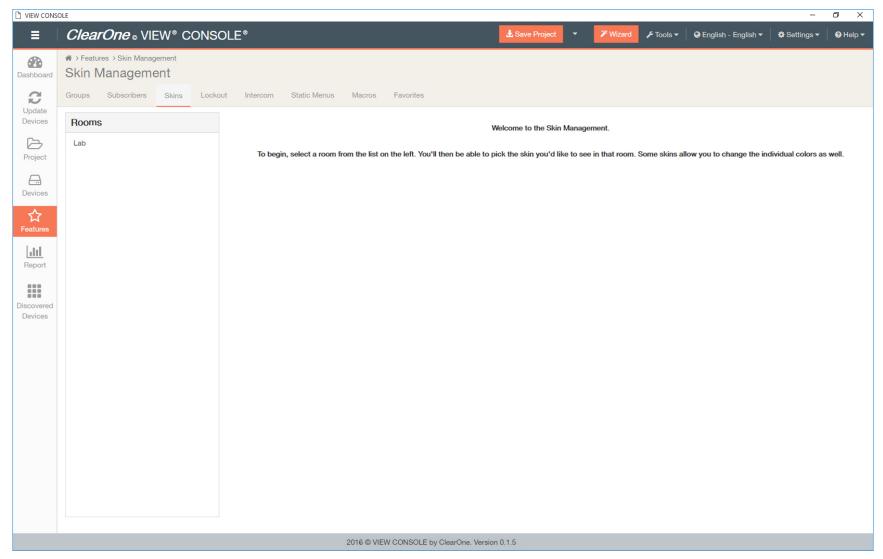
1. Click on **Features** in the left-hand sidebar.

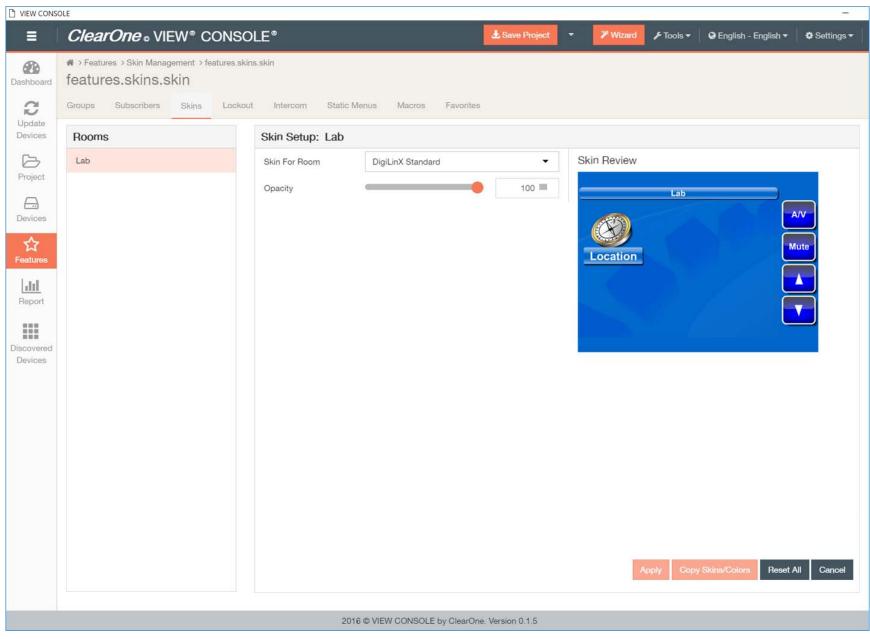   Main Features screen displays, on default Groups tab.

VIEW CONSOLE

ClearOne ® VIEW® CONSOLE®   ⬇ Save Project ▾   🎇 Wizard   🔧 Tools ▾   🌐 English - English ▾   ⚙ Settings ▾   ❓ Help ▾

Dashboard

Update Devices

Project

Devices

Features

Report

Discovered Devices

🏠 > Features > Group Management

Group Management

| Groups | Subscribers | Skins | Lockout | Intercom | Static Menus | Macros | Favorites |

🗑 Delete   ➕ Add Group   Search 🔍

☐	Group Name	Action

2. Click on the **Skins** tab.
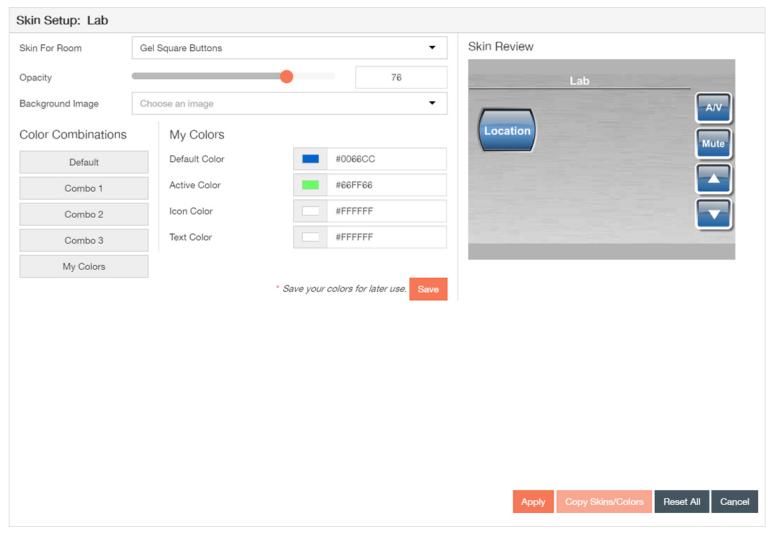
   Skins area displays.
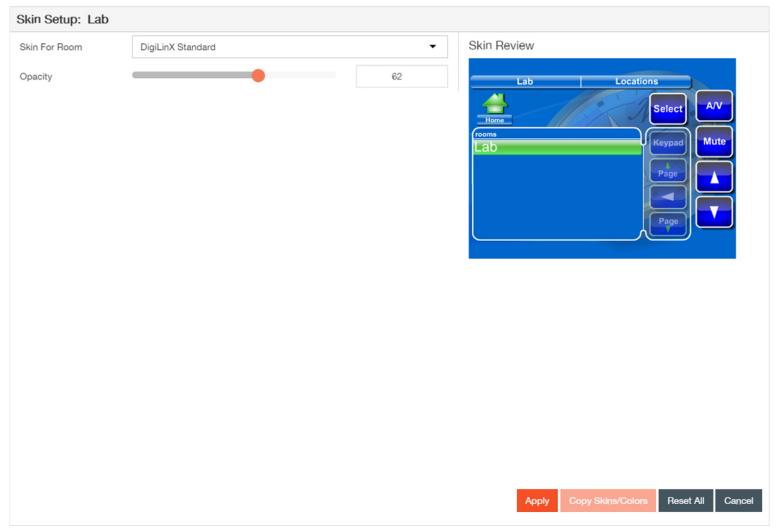
3. Select a room.

The Skin Setup pane displays on the right.

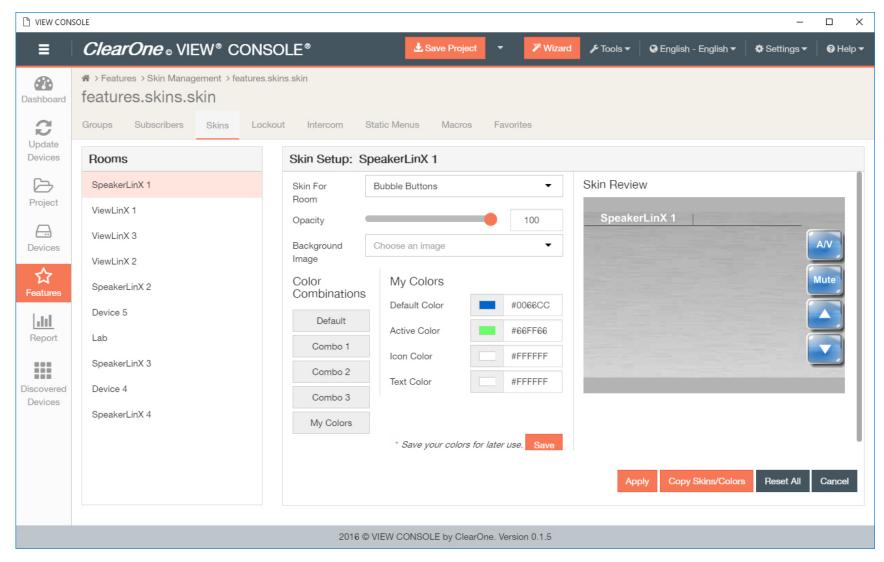**4.** Choose the skin and adjust attributes as you prefer.

• Some skins allow you to change all but the Background Color setting.

Skin Setup: Lab

Skin For Room	Gel Square Buttons ▼	Skin Review

Opacity ———————————————— 76

Background Image   Choose an image ▼

Color Combinations

| Default |
| Combo 1 |
| Combo 2 |
| Combo 3 |
| My Colors |

My Colors

Default Color	■	#0066CC
Active Color	■	#66FF66
Icon Color	☐	#FFFFFF
Text Color	☐	#FFFFFF

* *Save your colors for later use.* Save

Lab

A/V
Location
Mute
▲
▼

Apply   Copy Skins/Colors   Reset All   Cancel

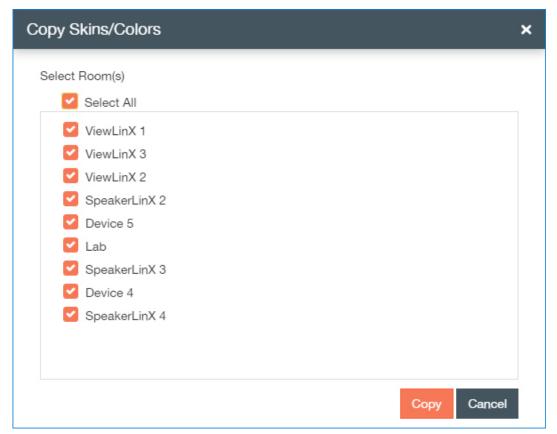• Some skins allow you to change only the Opacity setting.

- Some skins allow you to change everything but the Opacity and Background Color settings.
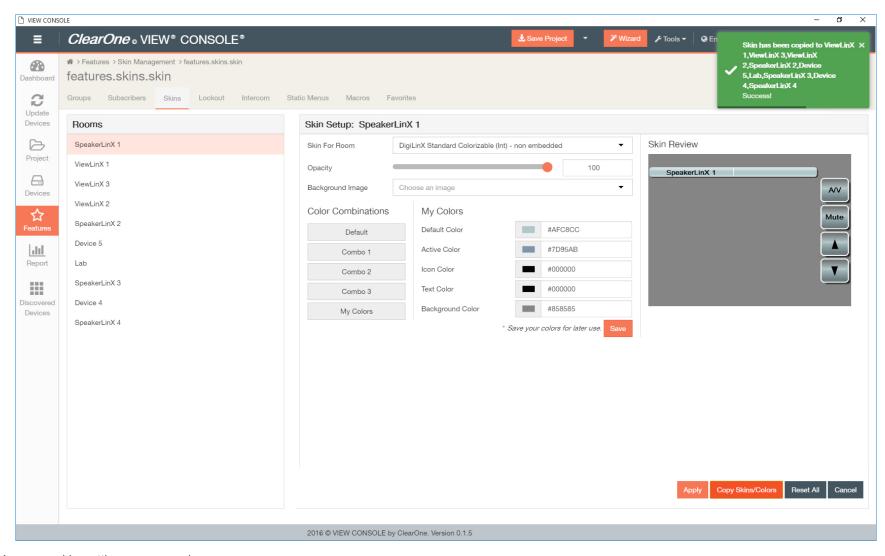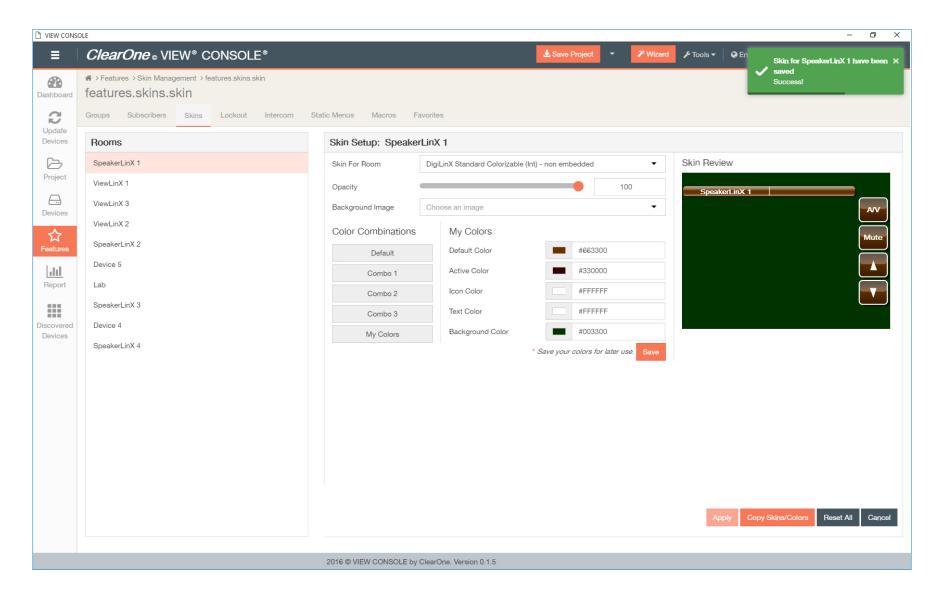
Note:

You choose to copy skins/colors from room to room by click on **Copy Skins/Color** in the lower right corner.

- And some skins allow you to change the full range of settings.

Your new skin settings are saved.

Lockout
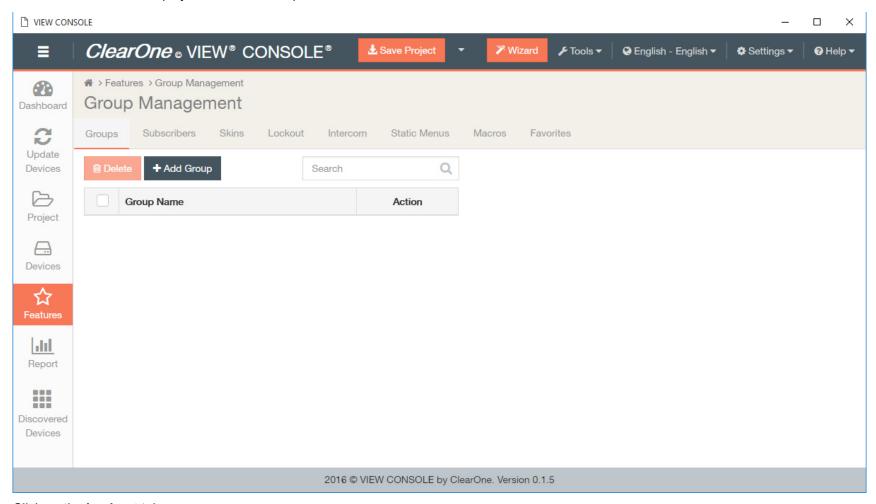
This section outlines how to add security by assigning PINs for access to rooms in the Lockout management feature.

You must complete the basic setup process, or have an existing project loaded to assign PINs to your rooms.
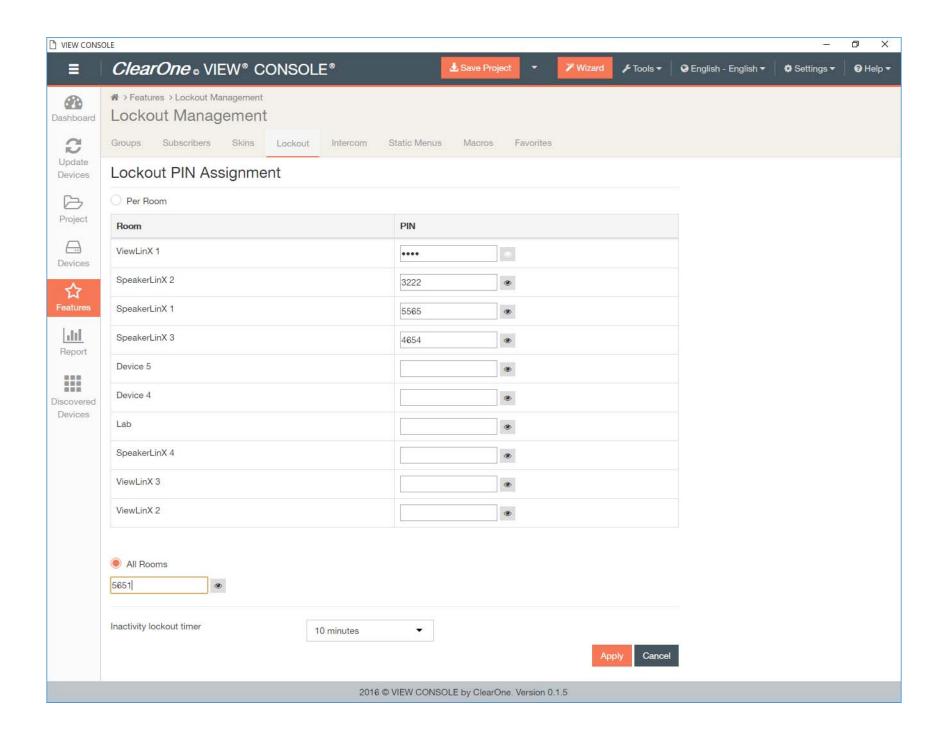
1. Click on **Features** in the left-hand sidebar.

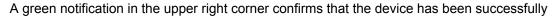   Main Features screen displays, on default Groups tab.

2. Click on the **Lockout** tab.

   Lockout area displays.

🗋 VIEW CONSOLE

≡ **ClearOne** ⊙ VIEW® CONSOLE®   ⬇ Save Project ▼   ⚡ Wizard   🔧 Tools ▾   ⊕ English - English ▾   ⚙ Settings ▾   ❓ Help ▾

🕐 Dashboard

🔄 Update Devices

📂 Project

💾 Devices

⭐ Features

📊 Report

▦ Discovered Devices

🏠 > Features > Lockout Management

Lockout Management

Groups   Subscribers   Skins   **Lockout**   Intercom   Static Menus   Macros   Favorites

Lockout PIN Assignment

◯ Per Room

Room	PIN	
ViewLinX 1	••••	👁
SpeakerLinX 2	3222	👁
SpeakerLinX 1	5565	👁
SpeakerLinX 3	4654	👁
Device 5		👁
Device 4		👁
Lab		👁
SpeakerLinX 4		👁
ViewLinX 3		👁
ViewLinX 2		👁

🔘 All Rooms

5651   👁

Inactivity lockout timer   10 minutes   ▼
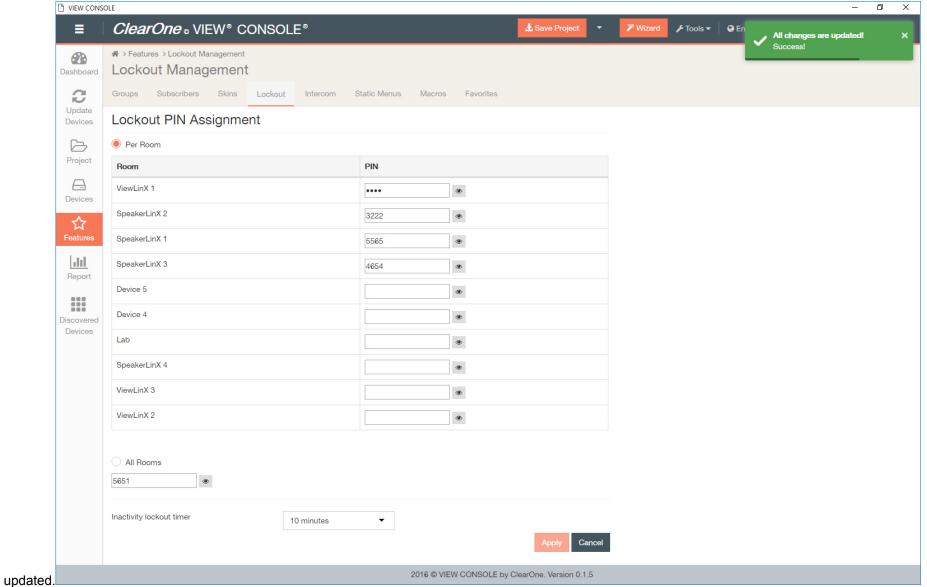
Apply   Cancel

3. Enter PINs to be assigned.

   Click on the eye icon next to the PIN form box to change visibility of the PIN.

   Your PINs are assigned, and access is restricted to these PINs.

A green notification in the upper right corner confirms that the device has been successfully
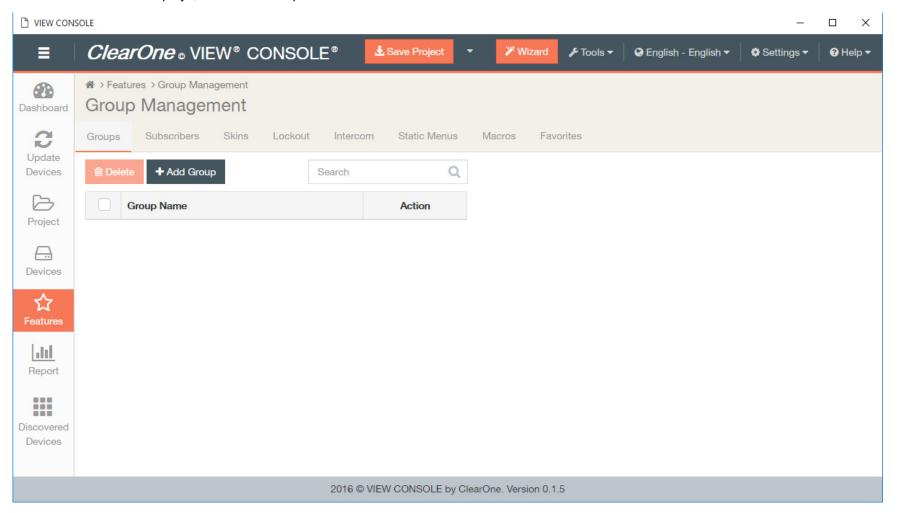

updated.

Intercom Management

This section outlines how to use the Intercom management feature. The Intercom feature enables you to set up rules for your TouchLinX and SpeakerLinX devices from room to room, using the Talk/Mute button on a TouchLinX, or the Talk button on a KeyLinX keypad.
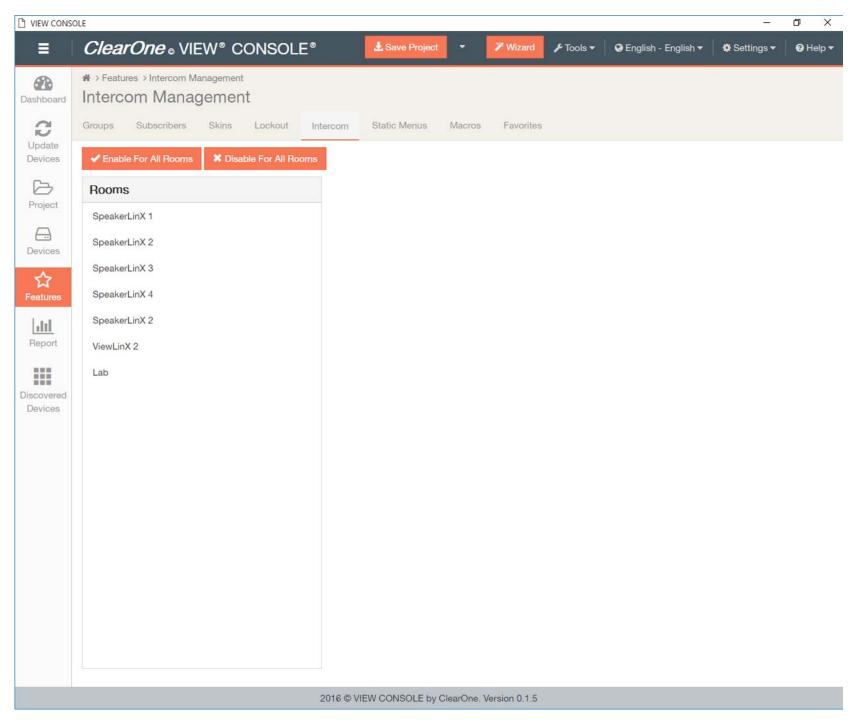
You must complete the basic setup process, or have an existing project loaded to make changes to the Intercom setting for your rooms.

1. Click on **Features** in the left-hand sidebar.

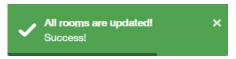   Main Features screen displays, on default Groups tab.

2. Click on the **Intercom** tab.
Intercom area displays.

VIEW CONSOLE

ClearOne © VIEW® CONSOLE®

⬇ Save Project   ▾   ✎ Wizard   🔧 Tools ▾   🌐 English - English ▾   ⚙ Settings ▾   ❓ Help ▾

🏠 > Features > Intercom Management

Intercom Management

Groups   Subscribers   Skins   Lockout   Intercom   Static Menus   Macros   Favorites

✔ Enable For All Rooms   ✖ Disable For All Rooms

Rooms

SpeakerLinX 1

SpeakerLinX 2

SpeakerLinX 3

SpeakerLinX 4

SpeakerLinX 2

ViewLinX 2

Lab

Dashboard

Update Devices

Project

Devices

Features

Report

Discovered Devices

3. Select the room(s) you want to adjust Intercom settings for, or you can also enable or disable the intercom feature for all rooms from this screen.

    a) If you are choosing to enable or disable the intercom feature for all rooms, click **Enable For All Rooms** or **Disable For All Rooms**.
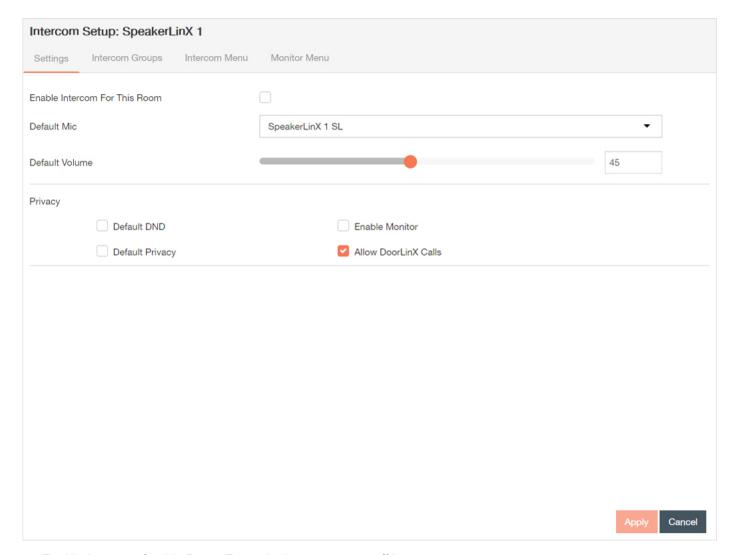
    A green notification in the upper right corner confirms that the device has been successfully updated.

    b) If you are choosing a room to adjust settings for, select a room.

    The Intercom Setup panel displays on the right.

    • The first tab is for Intercom Settings.

Intercom Setup: SpeakerLinX 1

Settings   Intercom Groups   Intercom Menu   Monitor Menu

Enable Intercom For This Room   ☐

Default Mic   SpeakerLinX 1 SL   ▾

Default Volume   ●   45

Privacy

☐ Default DND   ☐ Enable Monitor

☐ Default Privacy   ☑ Allow DoorLinX Calls

Apply   Cancel

- Enable Intercom for this Room Turns the intercom on or off in a room.
- Default Mic Lets you choose which device's microphone to use.
- Default Volume Allows you to adjust the intercom volume level.
- Privacy includes the following options:
  - Default DnD - when the system is restarted, means that the room is accepting no incoming intercom calls.

Note:

:You can change this setting from the TouchLinX by pressing DnD on or off. If a KL200 is involved and DnD is on, the DND light on the KL200 will light up.
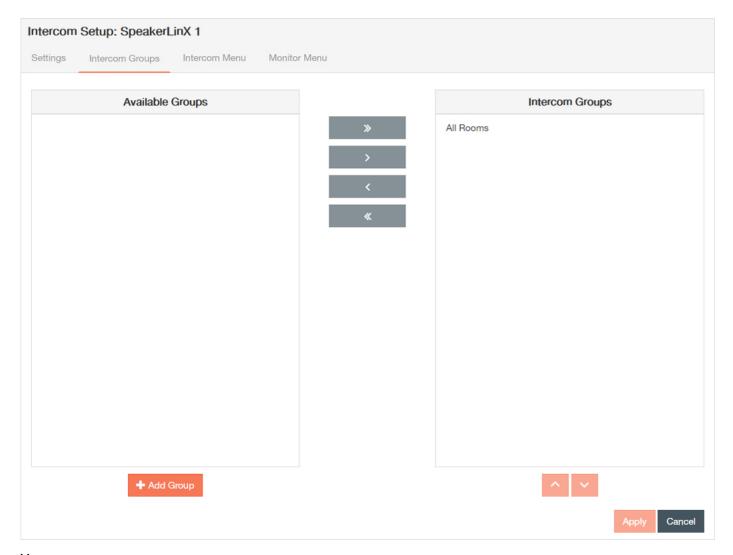
- Default Privacy - when the system is restarted, the room cannot be monitored.

Note:

You can change this setting from the TouchLinX by pressing Privacy on or off. If a KL200 is involved and Default Privacy is on, the DND light on the KL200 will light up.

- Enable Monitor - when selected, you are able to monitor that room
- Allow DoorLinX Calls - when selected, it allows DoorLinX calls.

- The second tab (Intercom Groups) shows the intercom groups associated with a selected room.
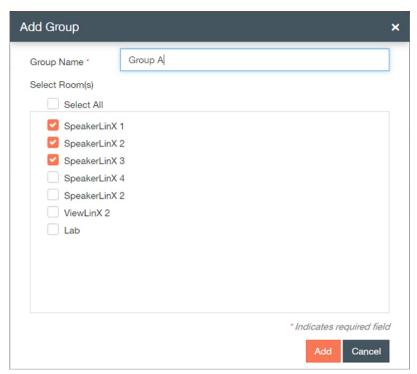
On the left side are the Available Groups (groups you can choose from to build this menu). The Intercom Groups show you which groups are currently activated for that room.
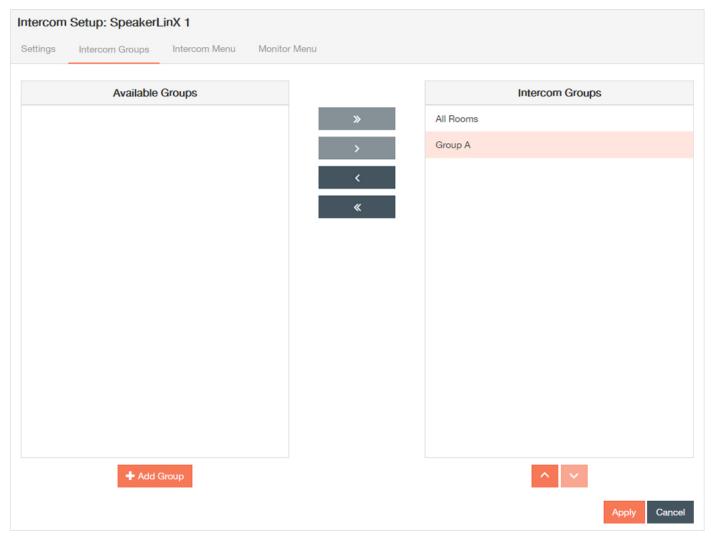
You can:

- Select a room in Available Groups, click the right arrow, and move it to the right column so that the intercom group is enabled for that room.
- Select a room that is currently being monitored in the Intercom Groups column and click the left arrow to move it to the Available Groups so that the intercom group is disabled for that room.
- Move room names up and down in the Intercom Groups column using the up and down arrow keys.
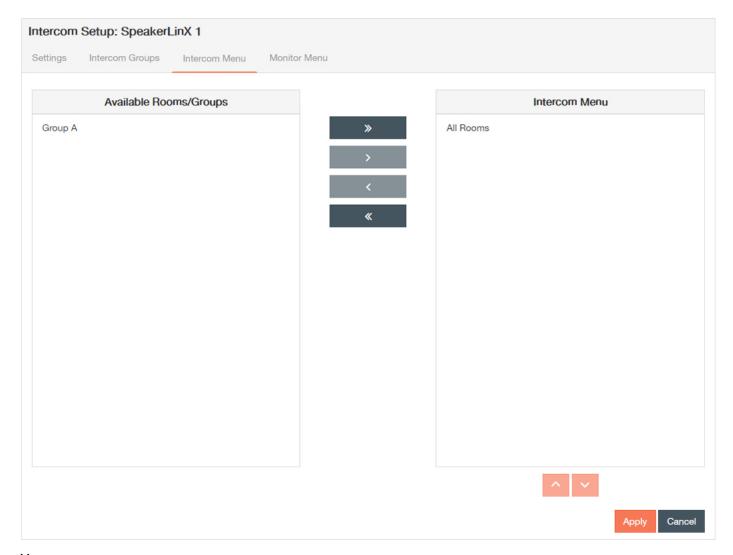
- You can also create groups from here by clicking **Add Group**.

Intercom Setup: SpeakerLinX 1

Settings   Intercom Groups   Intercom Menu   Monitor Menu

Available Groups	Intercom Groups
	All Rooms
	Group A

» > < «

+ Add Group

∧ ∨

Apply   Cancel

- The third tab is for Intercom Menu settings. From the Intercom Menu, you can create a menu of rooms and groups for which the selected room can establish an intercom session.

  On the left side are the Available Rooms/Groups (rooms you can choose from to build this menu). The Intercom Menu column shows you what the menu for the GUI will look like.

Intercom Setup: SpeakerLinX 1

Settings   Intercom Groups   Intercom Menu   Monitor Menu

Available Rooms/Groups		Intercom Menu
Group A	» › ‹ «	All Rooms

Apply   Cancel

You can:

- Select a room or group in Available Audiences, click the right arrow, and move it to the right column so that the intercom is enabled for that room.
- Select a room or group that is currently being monitored in the Intercom Menu column and click the left arrow to move it to the Available Audiences so that the intercom is disabled for that room.
- Move room names up and down in the Intercom Menu column using the up anddown arrow keys.

• The fourth tab is for Monitor Menu. The Monitor Menu allows you to create a list of rooms that the selected room is allowed to monitor.

To create the menu of rooms:

• Select the room from the Available Rooms then click the right arrow to move it into the Monitor Menu column so that the room is monitored.

• Select the room from the Monitor Menu column and then click the left arrow to move it into the Available Rooms to Monitor list so that the room is not monitored.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the rooms you want to update.
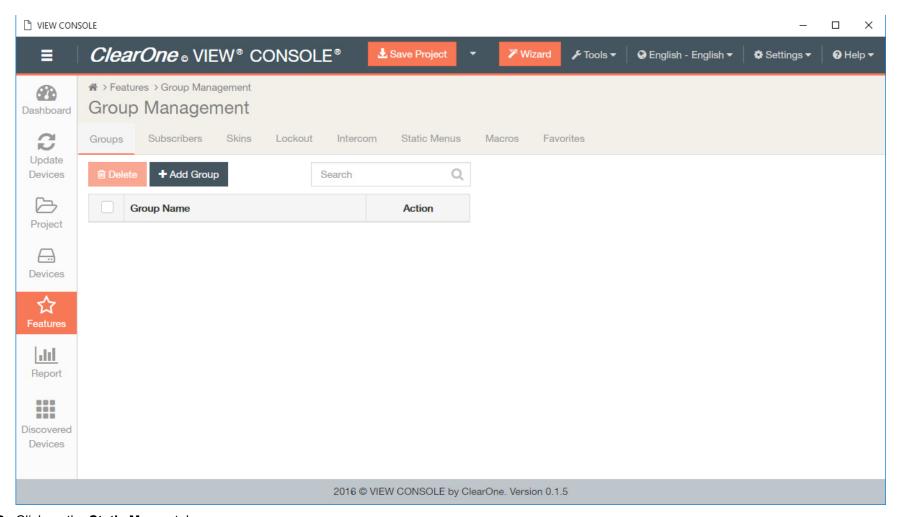
Static Menus

The StreamNet system defaults to all sources and all rooms to appear on all user interfaces throughout the house. If the installer wants to limit the available sources or rooms from the user interface menu in the room that a SpeakerLinX or TouchLinX is installed in, a static user menu must be created. Static menus are menus that appear for selection in that room. This section shows you how to alter static menu information.

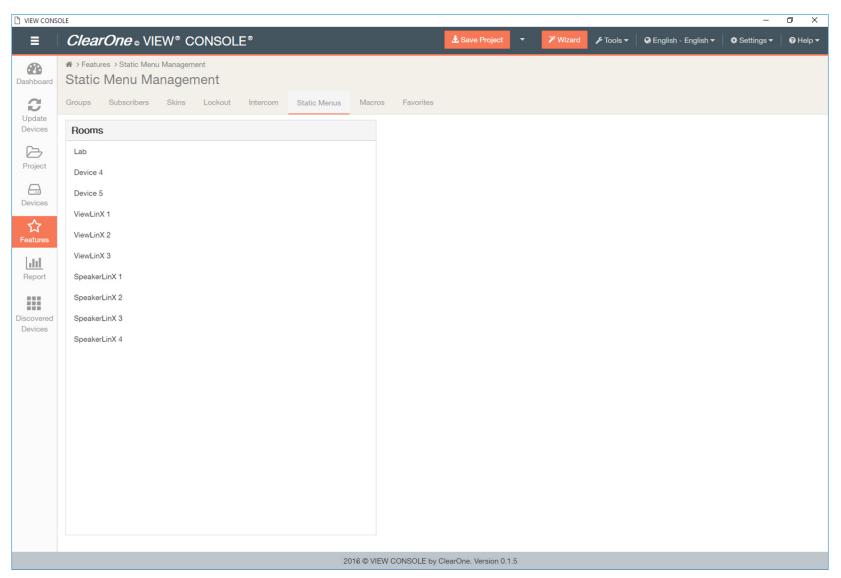click on Static Menus in the left window pane as shown in

1. Click on **Features** in the left-hand sidebar.

   Main Features screen displays, on default Groups tab.

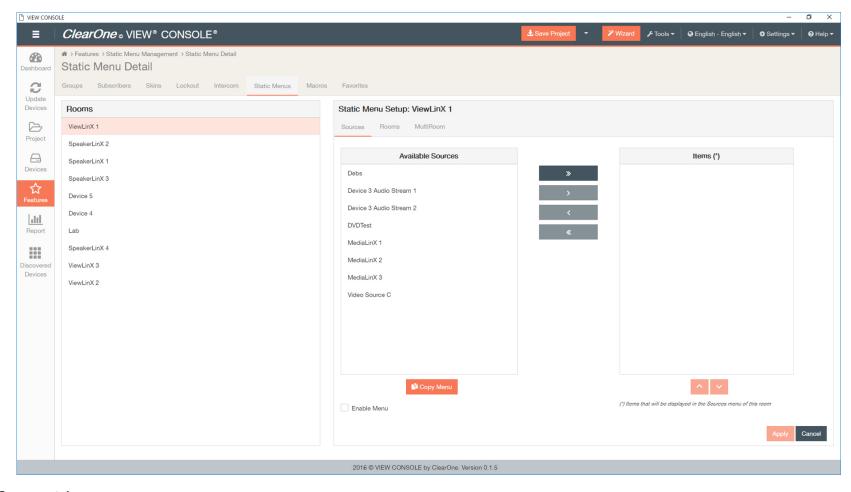2. Click on the **Static Menus** tab.
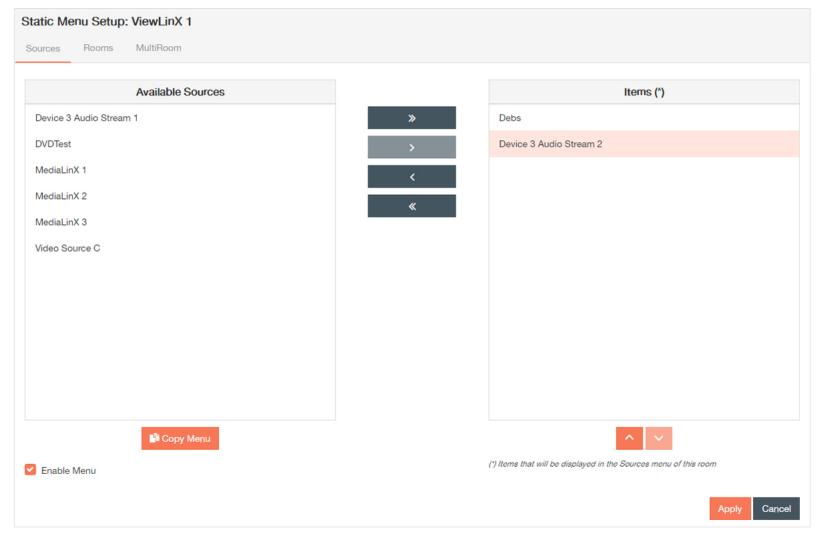
   The Static Menus area displays.

3. Select a room to configure.

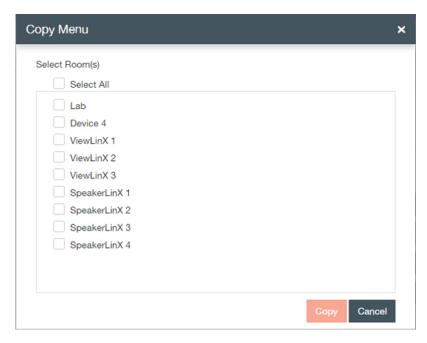   Static Menu Setup populates in a right -hand pane.

Sources tab

4. Select from the list of Available Sources using the right arrow key to move them into the list of Items that will be displayed in the Sources menu of this room. You can also perform the following actions from this screen:

Static Menu Setup: ViewLinX 1

Sources   Rooms   MultiRoom

Available Sources

Device 3 Audio Stream 1

DVDTest

MediaLinX 1

MediaLinX 2

MediaLinX 3

Video Source C

Copy Menu

☑ Enable Menu

Items (*)

Debs

Device 3 Audio Stream 2

(*) Items that will be displayed in the Sources menu of this room

Apply   Cancel

a) Enable or disable the menu for this room by clicking on the Enable Menu check box.

b) Copy the menu for this room by clicking Copy Menu.

The Copy Menu window displays. Click the check boxes for the sources you would like to copy, and click Copy.

Rooms Tab

5. Select the Rooms tab.

   The Rooms screen displays.
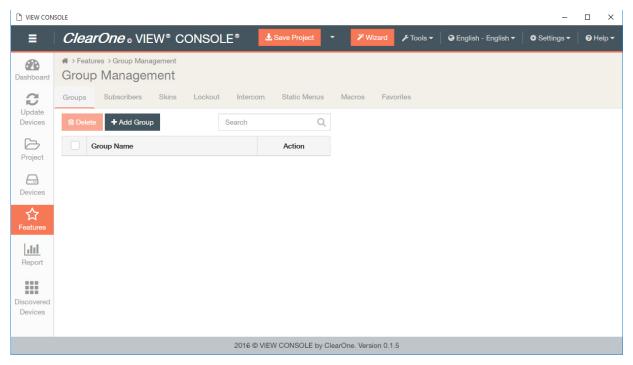
6.

7.

8. Step text.

9.

10. Step text.

11. Step text.

12. Step text.

13. Step text.

14. Step text.

15. Step text.

Rooms

The first thing you should do upon startup of the VIEW CONSOLE software, is update your devices.

1. Click on **Features** in the left-hand sidebar.
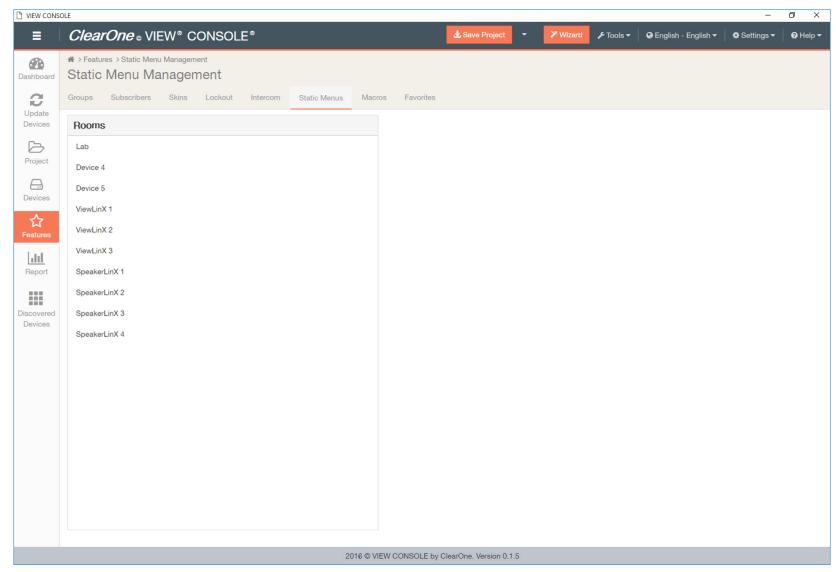
    You will be brought to the first tab on the main Features screen, Groups.
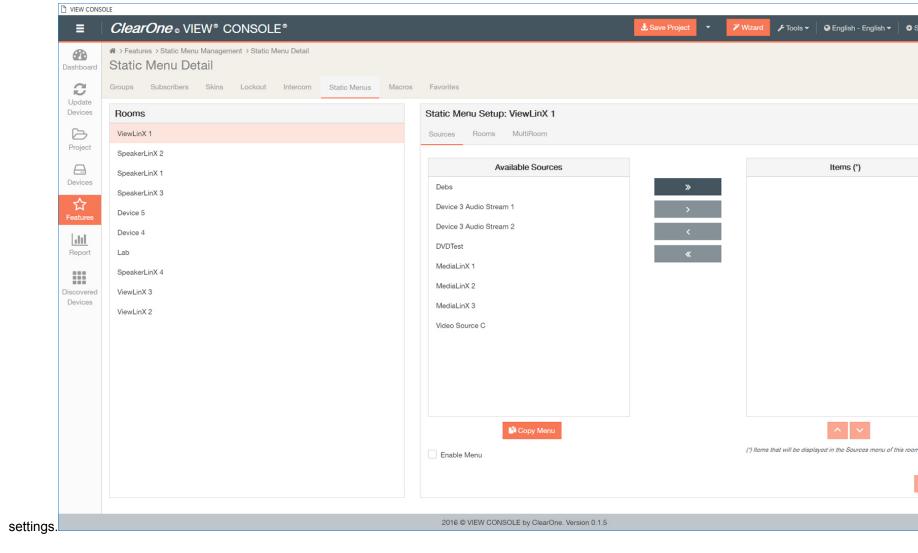
2. Click on the **Static Menus** tab.
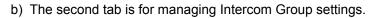
    You will be brought to the Static Menus screen.
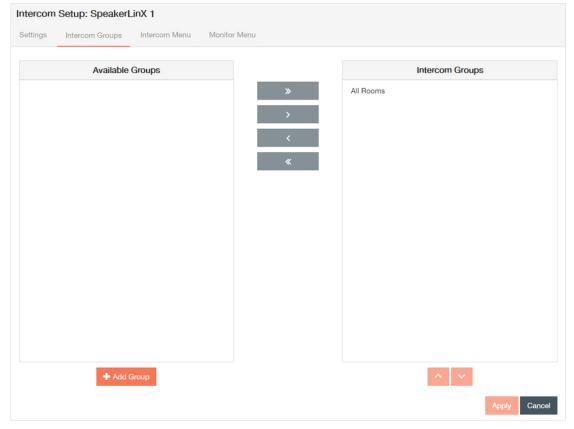
3. Select a Room to adjust settings for.
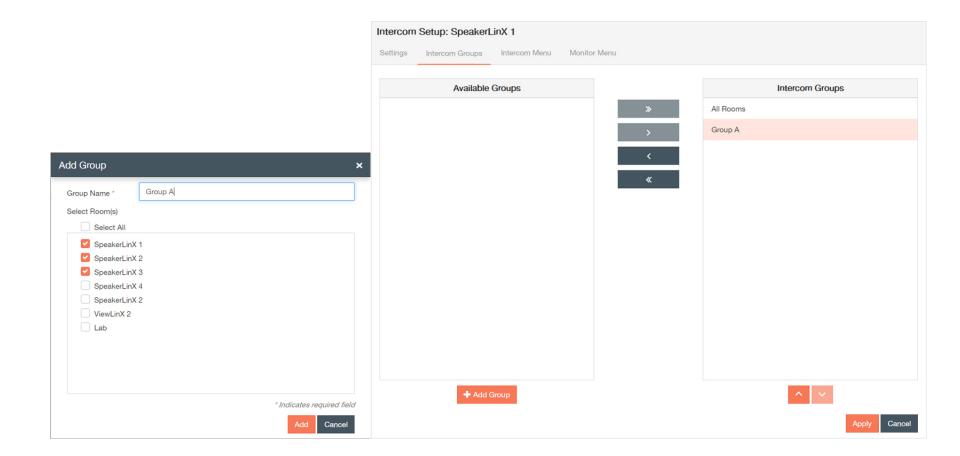
a) The Intercom Setup panel will appear on the right. The first tab is for Source

settings.

b) The second tab is for managing Intercom Group settings.

You can also create groups from here by clicking **Add Group**.

Intercom Setup: SpeakerLinX 1

Settings   Intercom Groups   Intercom Menu   Monitor Menu

Available Groups

Intercom Groups

All Rooms

Group A

»

›

‹

«

+ Add Group

^   ⌄

Apply   Cancel

Add Group   ✕

Group Name *   Group A|

Select Room(s)

☐ Select All

☑ SpeakerLinX 1
☑ SpeakerLinX 2
☑ SpeakerLinX 3
☐ SpeakerLinX 4
☐ SpeakerLinX 2
☐ ViewLinX 2
☐ Lab

* Indicates required field

Add   Cancel

c)

Intercom Setup: SpeakerLinX 1

Settings   Intercom Groups   Intercom Menu   Monitor Menu

Available Rooms/Groups

Group A

»
›
‹
«

Intercom Menu

All Rooms

Apply   Cancel

The third tab is for Intercom Menu settings.

d)

The fourth tab is for Monitor Menus settings.

4. Select **Apply** each time you make changes on a tab, and repeat steps 2-3 for all of the rooms you want to update.

Sources

The first thing you should do upon startup of the VIEW CONSOLE software, is update your devices.

Updating Devices is also the first step you will take when using the Wizard.

1. Click on **Update Devices** in the left-hand sidebar.

   You will be brought to the Update Devices Screen.

2. Select the "Firmware Version" you would like to send to the device(s) from the drop-down menu.

3. Place a check next to the devices you would like to send the update to.

4. Click the **Update Devices** button to update all selected devices, or click the **Update** button for each individual device.

If you have Debug Mode enabled, Erase Flash Files, Include Firmware, and Concurrency will be additional parameters you can include and set in the update.

📝 **Note:**

If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

The status of your device(s) should change to "Pending", and progress through different stages (Calculating, Sending, Receiving, etc.) of update until it is complete.

📝 **Note:**

VIEW Pro devices may continue to update for a few minutes after update in software has completed.

Update Log

5. Select **Log** to review any current updates you've made.

The update log will record any current updates you are making, but will not save them.

To save the log, you can copy and paste the text.

MultiRoom

The first thing you should do upon startup of the VIEW CONSOLE software, is update your devices.

Updating Devices is also the first step you will take when using the Wizard.

1. Click on **Update Devices** in the left-hand sidebar.

You will be brought to the Update Devices Screen.

2. Select the "Firmware Version" you would like to send to the device(s) from the drop-down menu.

3. Place a check next to the devices you would like to send the update to.

4. Click the **Update Devices** button to update all selected devices, or click the **Update** button for each individual device.

If you have Debug Mode enabled, Erase Flash Files, Include Firmware, and Concurrency will be additional parameters you can include and set in the update.

📝 **Note:**

If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

The status of your device(s) should change to "Pending", and progress through different stages (Calculating, Sending, Receiving, etc.) of update until it is complete.

📝 **Note:**

VIEW Pro devices may continue to update for a few minutes after update in software has completed.

Update Log

5. Select **Log** to review any current updates you've made.

   The update log will record any current updates you are making, but will not save them.

   To save the log, you can copy and paste the text.

MultiRoom Add

The first thing you should do upon startup of the VIEW CONSOLE software, is update your devices.

Updating Devices is also the first step you will take when using the Wizard.

1. Click on **Update Devices** in the left-hand sidebar.

   You will be brought to the Update Devices Screen.

2. Select the "Firmware Version" you would like to send to the device(s) from the drop-down menu.

3. Place a check next to the devices you would like to send the update to.

4. Click the **Update Devices** button to update all selected devices, or click the **Update** button for each individual device.

   If you have Debug Mode enabled, Erase Flash Files, Include Firmware, and Concurrency will be additional parameters you can include and set in the update.

   📝 **Note:**

   If you have navigated to this page using the Wizard, the pop-up for the Wizard will remain in the lower left corner until closed, or setup is complete.

   The status of your device(s) should change to "Pending", and progress through different stages (Calculating, Sending, Receiving, etc.) of update until it is complete.

   📝 **Note:**

   VIEW Pro devices may continue to update for a few minutes after update in software has completed.

Update Log

5. Select **Log** to review any current updates you've made.

   The update log will record any current updates you are making, but will not save them.

   To save the log, you can copy and paste the text.

About Macros

This section outlines some important information, pre-requisites, and guidelines to importing, exporting, and building macros in the VIEW CONSOLE.A macro is a single instruction that expands automatically into a set of instructions to perform a particular task. Macros contain multiple actions you want to perform in sequence. A macro can be as simple as turning on the XM radio and switching to a favorite station or as complicated as turning on the light in one room, turning off the lights and playing three separate CDs on a timer in three other rooms, and turning on the intercom in the nursery.Macros can be generic (apply to current room), specific (apply to a certain room), or global (apply to every room).

Basic Process

Before you write any macro, verify your entire StreamNet system is functional, including any integrated components. This includes properly naming all rooms, devices, and streams, matching devices, and learning all IR codes.If you cannot control a source from a TouchLinX, you will not be able to successfully write or test macros.To write a macro, start by selecting a general category and then drilling-down to get to the exact function you want to set. The six categories group similar functions.

In the VIEW CONSOLE, it can be imported or exported as a NSM file. You must complete the basic setup process, or have an existing project loaded to use the Macros feature.

- Audio/Video Player Services: Contains actions applying to a SpeakerLinX. Controls selecting the source to play, where to distribute the audio, and adjusting audio settings such as the equalizer.
- Control Services: Contains actions for relays and sensors as well as IR and RS-232 controlled devices, like presses and releases for lighting buttons.
- Intercom Services: Contains actions applying to the intercom functions of the StreamNet system.
- Room Services: Contains actions that apply to an entire room and all of its devices.
- Source Services: Contains actions applying to networked devices connected to a MediaLinX and native audio devices connected to the SwitchLinX like a media server.
- User Interface Services: Contains actions applying to the StreamNet GUI such as TouchLinX.

After you select a Category, the Services drop-down list shows components you can manipulate in that category. The available Services are unique to each project and the names of the services are those you used when building the project. A service may contain other services. If this is the case you are presented with a Sub-service drop-down list.After you have defined exactly what you want to control, enter the action, any needed parameter, and any needed delays.

Guidelines

Macros are unique to each project, depending on the product configuration and customer needs. You should, therefore, expect to spend time tweaking the macros to ensure the exact result is achieved. There are, however, some general principles to aid you.Sending a macro action when the device is already in that state does not change the state. For example, if the macro sends the command to turn on the amplifier of a SpeakerLinX that is already on, the amplifier simply stays on. Macros should not be dependent on knowing the status of the device.If you create macros with a media server and want to select a specific artist to play, you need to type in the artist's name. Macros handle case sensitivity the same as presets. To avoid any problems with the artist not being recognized, enter the artist information exactly as it appears on a TouchLinX.The

Advanced View shows the code of the macro step. You can change the code in the advanced view, including adjusting settings not available in the Basic view. If you do change the code, that step shows the modified code, even in the Basic view.If you rename a SpeakerLinX room or any service, the information does not update in all places. If you rename a room, select the new name on relevant devices such as the TouchLinX (on the User Interface tab). When you add a macro to a favorite, you may see both the original service name and the new service room name. Select the updated name; if only the original name appears, manually enter the correct name in the Advanced View. If you change a name in the project after creating macros, you must manually update the macros with the new information.The information you enter on the Labels tab of a ControLinX appears in the Macro Builder. For example, the Sub-service field shows either Lutron RadioRA Phantom Buttons or the text you entered on the Labels tab.If you have created groups as discussed in Groups in Chapter 8 that contain audio players, you can use these groups to create MultiRoom sessions in macros. MultiRoom sessions allow you to send commands to all audio player services in the group and links the rooms. When linked, a change from one TouchLinX applies to all rooms. You must first add a step selecting the desired group in the Services list and then add another step selecting the now-available group MultiRoom.When writing a macro there is a test function that runs the macro. If you have already tested a macro and need to edit the macro and retest it, reset the system to a state that can test all steps of the macro.

Macro

This section outlines how to import, export, and build macros in the VIEW CONSOLE.

Every function (called a service) on a StreamNet device can be included in a macro. Services are simply logical constructs for device functions. A single StreamNet device may host multiple services. A macro can contain 900 bytes, which is approximately 20 steps. The macro editor prevents you from creating a macro that is too long.
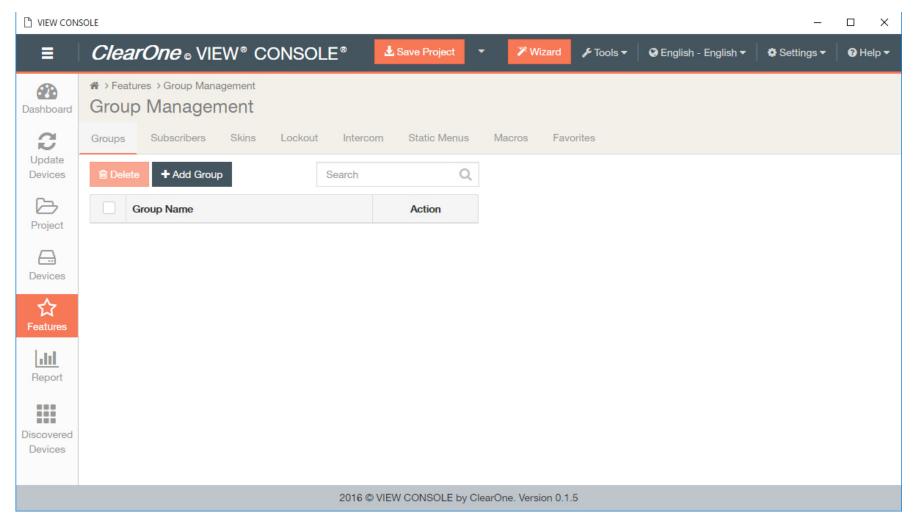
📝 **Note:**

If you change the name of a room or source after you create a macro, be sure to double check the macros you created.
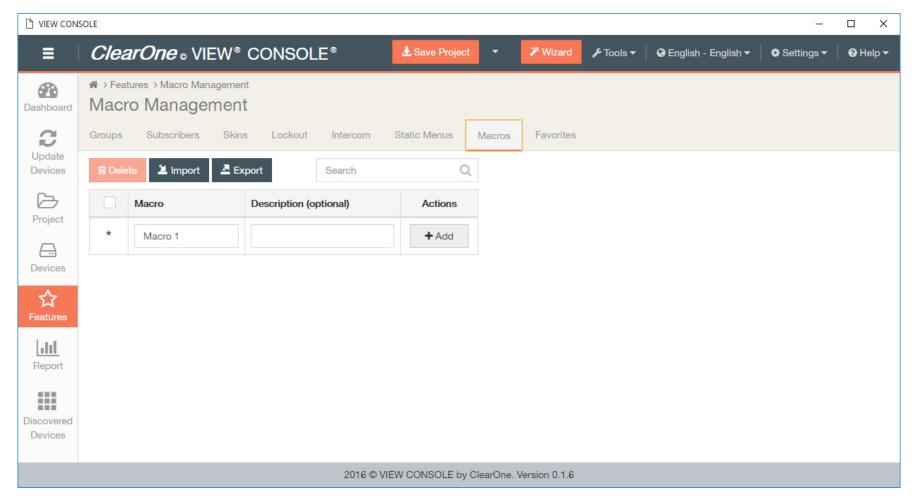
1. Click on **Features** in the left-hand sidebar.

   Main Features screen displays, on default Groups tab.

2. Click on the **Macros** tab.

The Macro area displays.
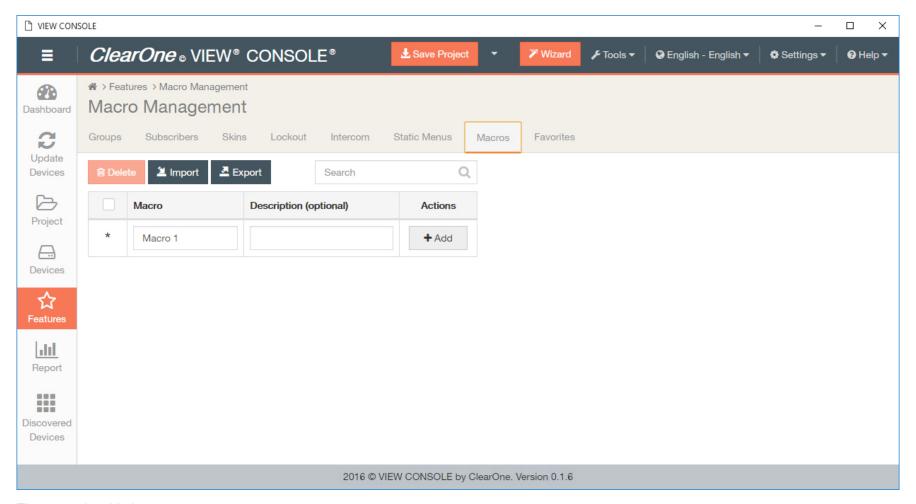
Import or Export Macros

3. Import your NSM macros file(s), or export them using the **Import** and **Export** buttons.
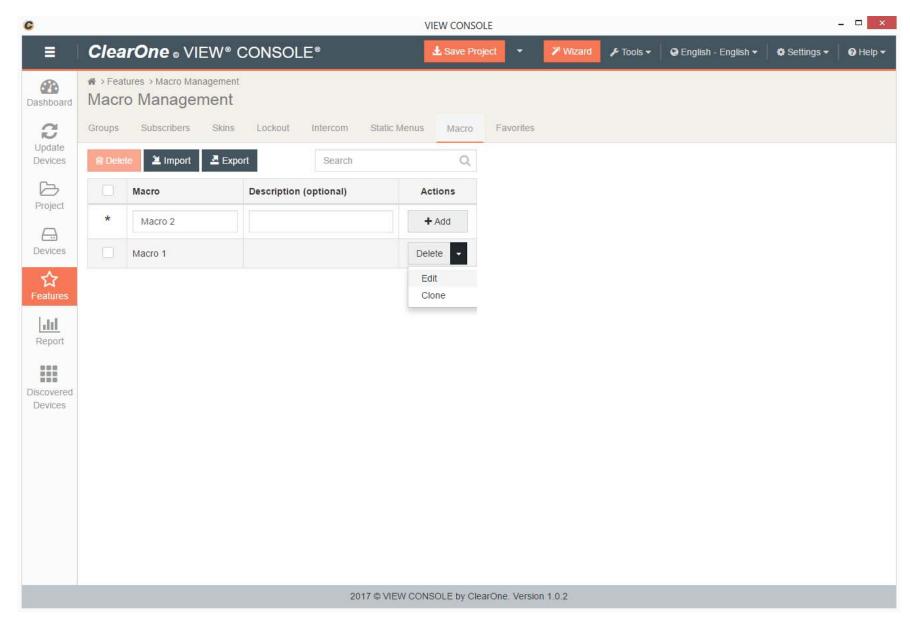
Sample Macro (imported or exported): <?xml version="1.0" encoding="UTF-8" standalone="yes"?><macros xmlns="uri://clearone.com/macro/ model/schema/model/1.1"><macro desc="SAM" name="D1"><steps><step label="Change Source of D310-1 Player to SAM" data="#@D310-1 Player#SRC_SEL {{SAM}}"/></steps></macro><macro desc="LG" name="D2"><steps><step label="Change Source of D310-1 Player to LG" data="#@D310-1 Player#SRC_SEL {{LG}}"/></steps></macro></macros>

Build Macros

4. Enter a name for your macro over the existing text in the Macro field, and enter a description (optional). Click Add.
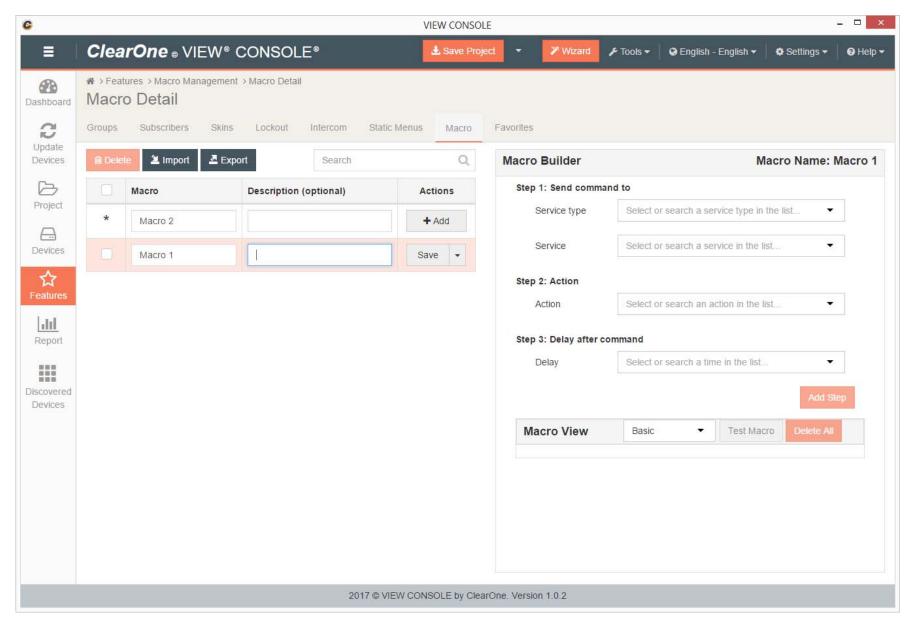
The macro is added.
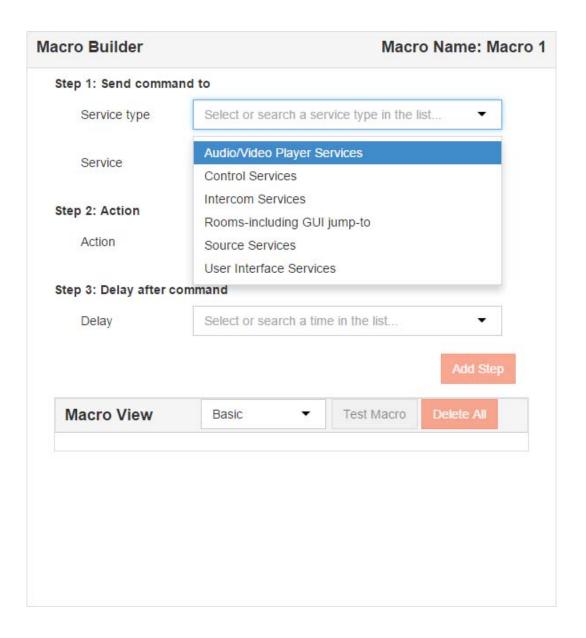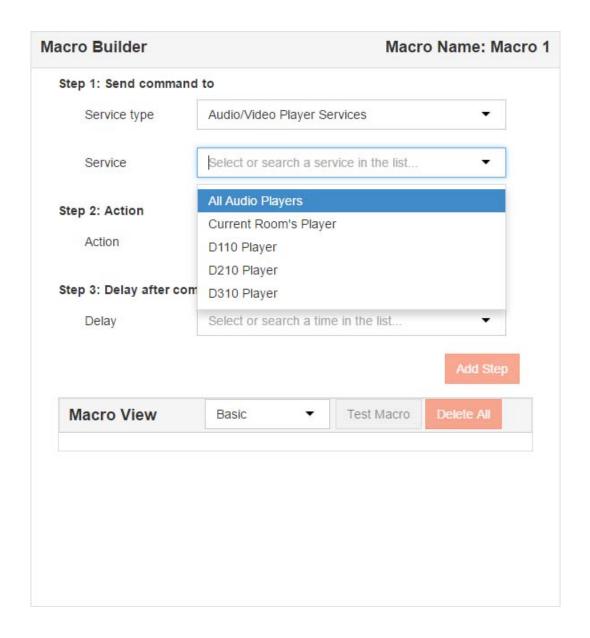
5. Click the drop-down arrow under the Actions column, and select Edit.
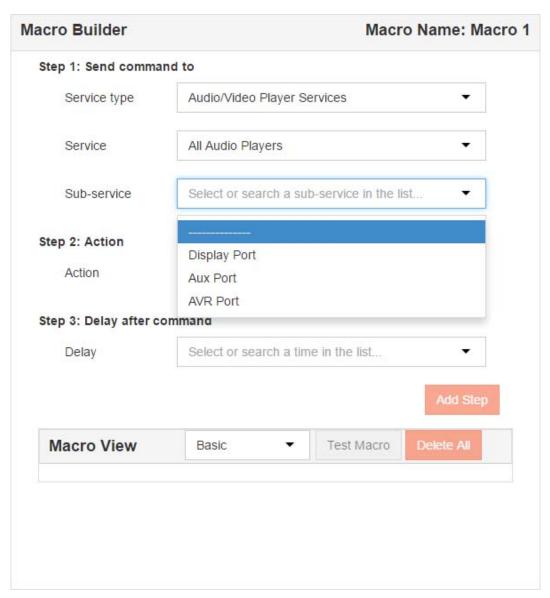
    The Macro Builder populates in the right-hand pane.
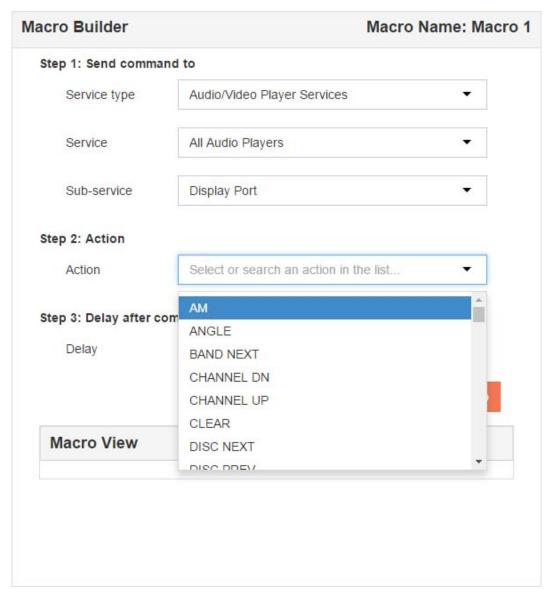
6. Select the Category, Service, and, if enabled and needed, Sub-service. This indicates which component should perform the action.

Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type | Select or search a service type in the list... ▼ |

| Audio/Video Player Services |
| Control Services |
| Intercom Services |
| Rooms-including GUI jump-to |
| Source Services |
| User Interface Services |

Service

Step 2: Action

Action

Step 3: Delay after command

Delay | Select or search a time in the list... ▼ |

[Add Step]

Macro View | Basic ▼ | [Test Macro]   [Delete All]

Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type   Audio/Video Player Services ▼

Service   Select or search a service in the list... ▼

Step 2: Action
                    All Audio Players
                    Current Room's Player
Action   D110 Player
                    D210 Player
Step 3: Delay after com   D310 Player

Delay   Select or search a time in the list... ▼

                                                    Add Step

Macro View   Basic ▼   Test Macro   Delete All

Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type   Audio/Video Player Services   ▼

Service   All Audio Players   ▼

Sub-service   Select or search a sub-service in the list...   ▼

——————————

Display Port

Aux Port

AVR Port

Step 2: Action

Action

Step 3: Delay after command

Delay   Select or search a time in the list...   ▼

Add Step

Macro View   Basic   ▼   Test Macro   Delete All

7. Select the first Action you want to take and, if enabled and needed, the Parameter. Most macros have multiple actions. The macro must account for not knowing the current source or the state of that source.

Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type | Audio/Video Player Services ▼ |

Service | All Audio Players ▼ |
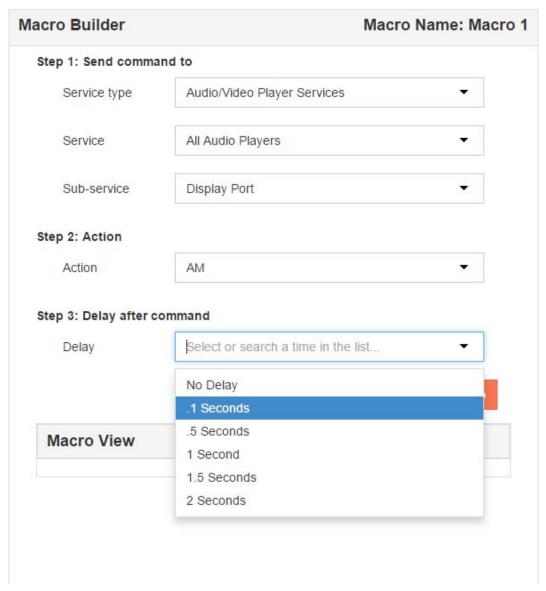
Sub-service | Display Port ▼ |

Step 2: Action

Action | Select or search an action in the list... ▼ |

| AM |
| ANGLE |
| BAND NEXT |
Step 3: Delay after com | CHANNEL DN |
| CHANNEL UP |
Delay | CLEAR |
| DISC NEXT |
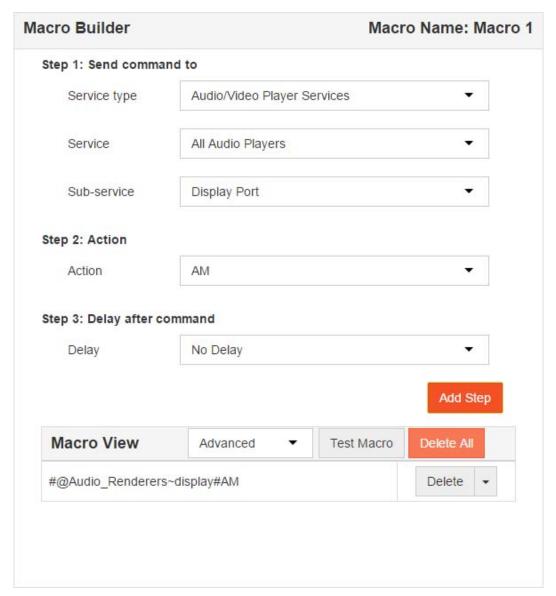**Macro View** | DISC PREV |

8. Select the Delay After Command, if any. When changing or powering sources, allow time for the action to happen. When sending IR commands, set a .5 second delay between each command, including between numbers.
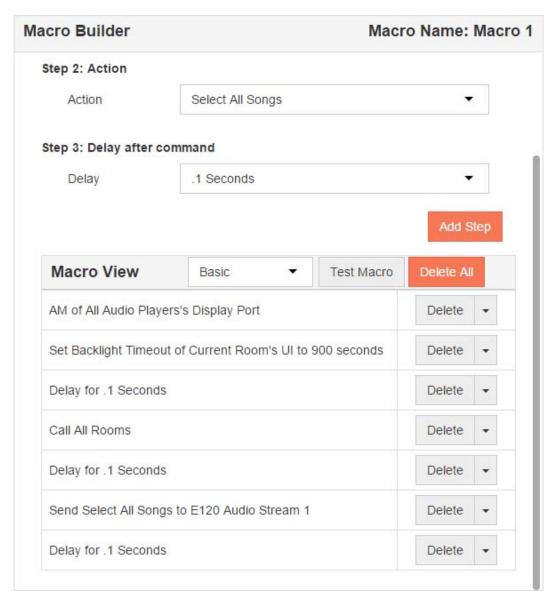
Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type   Audio/Video Player Services   ▼

Service   All Audio Players   ▼

Sub-service   Display Port   ▼

Step 2: Action

Action   AM   ▼

Step 3: Delay after command

Delay   Select or search a time in the list...   ▼

                      No Delay
                      .1 Seconds
                      .5 Seconds
Macro View   1 Second
                      1.5 Seconds
                      2 Seconds

9. Click Add Step.

The actions selected appear in the Macro View.

Macro Builder   **Macro Name: Macro 1**

Step 1: Send command to

Service type	Audio/Video Player Services ▼
Service	All Audio Players ▼
Sub-service	Display Port ▼

Step 2: Action

Action	AM ▼

Step 3: Delay after command

Delay	No Delay ▼

Add Step

Macro View	Advanced ▼	Test Macro	Delete All
#@Audio_Renderers~display#AM			Delete ▼
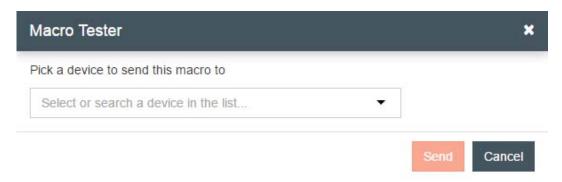
10. Repeat steps 4 through 9 until the macro is complete.

A description of the entire macro appears in the Macro Builder.

Macro Builder   **Macro Name: Macro 1**

Step 2: Action

Action   Select All Songs   ▼

Step 3: Delay after command

Delay   .1 Seconds   ▼

Add Step

Macro View	Basic ▼	Test Macro	Delete All
AM of All Audio Players's Display Port		Delete	▼
Set Backlight Timeout of Current Room's UI to 900 seconds		Delete	▼
Delay for .1 Seconds		Delete	▼
Call All Rooms		Delete	▼
Delay for .1 Seconds		Delete	▼
Send Select All Songs to E120 Audio Stream 1		Delete	▼
Delay for .1 Seconds		Delete	▼

11. Click Test Macro.

The Macro Tester displays.

12. Select a device from the drop-down list and click Send.

Depending on the macro, select the appropriate options. Any StreamNet device is able to test the macro.

The macro sends the commands. Click Close to return to the Macro Builder screen.

If the macro did not execute as expected, edit the macro and retest. The Move Up, Move Down, Delete, and Clear All buttons help you rearrange or delete steps when editing a macro.

13. Click Save in the Macro area in the left-hand pane.

Favorites
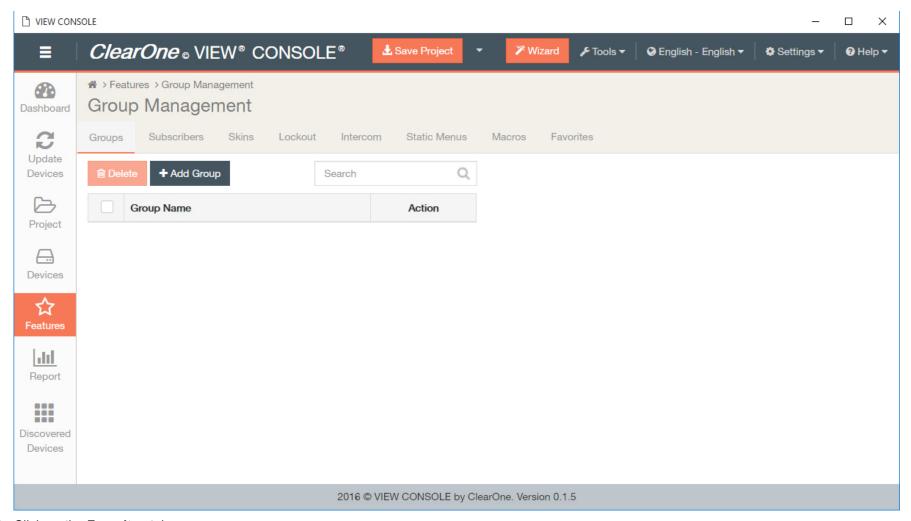
This section outlines how to use the Favorites feature to assign macros commands as favorite GUI buttons.

The Favorites function can allow you to manage controls and navigate the software more efficiently. You must complete the basic setup process, or have an existing project loaded to use the Favorites feature.

Favorites are buttons that appear on the GUI and execute a macro you created. You cannot create a Favorite until you have created macros and consumers cannot access the macros without Favorites. Favorites are room specific; each room can have a unique selection of Favorites. You can also copy a Favorite to other rooms or even all rooms. A macro must be linked to a Favorite before it can be used.
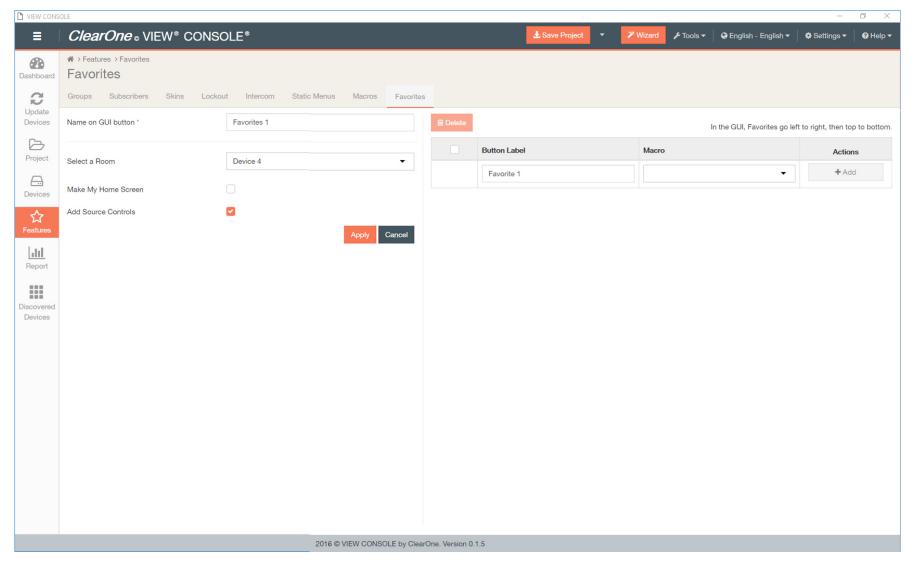
1. Click on **Features** in the left-hand sidebar.

Main Features screen displays, on default Groups tab.

2. Click on the **Favorites** tab.

   Favorites area displays.

3. Enter text over the existing text in the Name on GUI button field, in the right-hand pane.

   Take into account how many characters can appear on the GUI given the skin used. This text appears on the Home screen and takes you to the Favorites you create.

4. From the Select a Room drop-down list, select the room where you want to access the Favorite.

5. If you want to make the Favorites screen your home screen on this room's GUI, click the Make My Home Screen checkbox.

6. Enter the text for the Button Label over the existing text in the first row and select the macro to execute for the button in the right-hand pane, and click **Add**. This button executes a macro.

7. Save the project and send the configuration to the devices. See section *Send Device Configurations* in the Devices Chapter for complete instructions.

Chapter 7

Report

Topics:

- *Report*

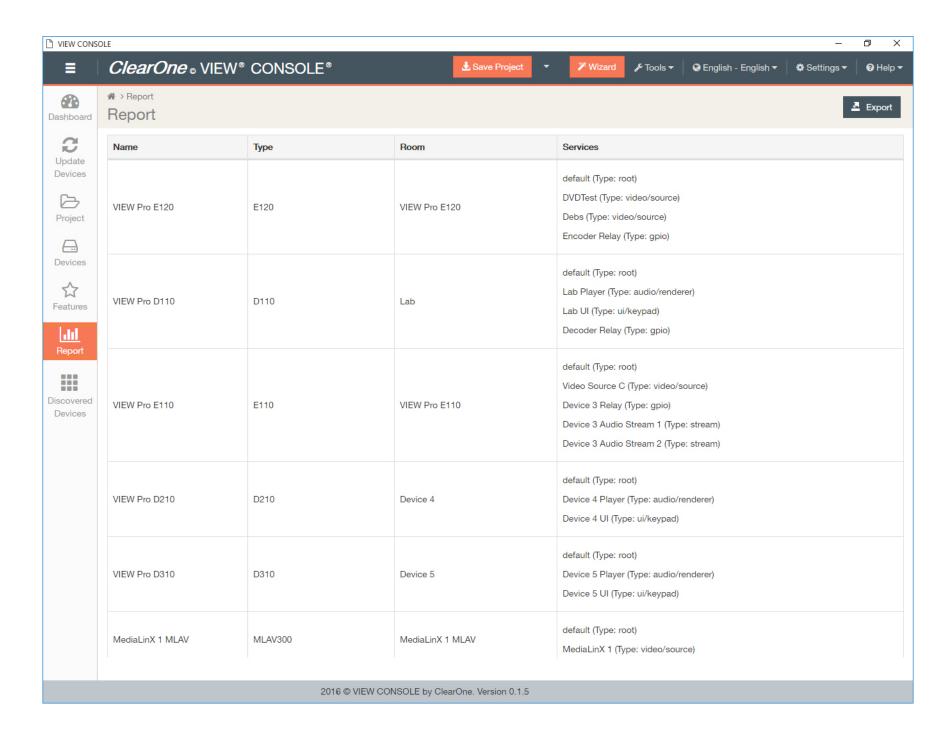This chapter contains information about using the VIEW CONSOLE reporting features.

Report

This section contains information about using the VIEW CONSOLE reporting features.

The Report feature of the VIEW CONSOLE allows you to export a summary of all rooms and devices and their configuration details.

1. Click on **Report** in the left-hand sidebar.

   Report screen displays.

Name	Type	Room	Services
VIEW Pro E120	E120	VIEW Pro E120	default (Type: root) DVDTest (Type: video/source) Debs (Type: video/source) Encoder Relay (Type: gpio)
VIEW Pro D110	D110	Lab	default (Type: root) Lab Player (Type: audio/renderer) Lab UI (Type: ui/keypad) Decoder Relay (Type: gpio)
VIEW Pro E110	E110	VIEW Pro E110	default (Type: root) Video Source C (Type: video/source) Device 3 Relay (Type: gpio) Device 3 Audio Stream 1 (Type: stream) Device 3 Audio Stream 2 (Type: stream)
VIEW Pro D210	D210	Device 4	default (Type: root) Device 4 Player (Type: audio/renderer) Device 4 UI (Type: ui/keypad)
VIEW Pro D310	D310	Device 5	default (Type: root) Device 5 Player (Type: audio/renderer) Device 5 UI (Type: ui/keypad)
MediaLinX 1 MLAV	MLAV300	MediaLinX 1 MLAV	default (Type: root) MediaLinX 1 (Type: video/source)

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2. Click the **Export** button in the upper right corner to export a CSV report.

Chapter 8

Discovered Devices

Topics:
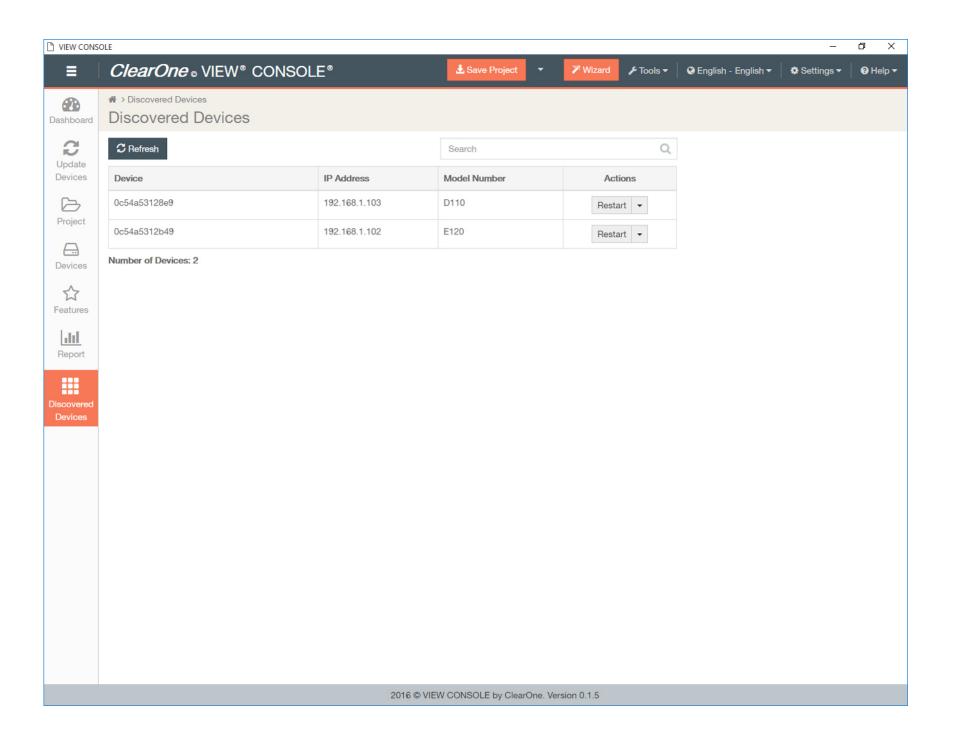
- *Discovered Devices*

This chapter outlines how to view and modify your unmatched StreamNet products and legacy devices in your projects.

Discovered Devices

Click on **Discovered Devices** in the left-hand sidebar.

The Discovered Devices screen displays.

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⬇ Save Project   ▾   ✎ Wizard   🔧 Tools ▾   🌐 English - English ▾   ⚙ Settings ▾   ❓ Help ▾

🏠 > Discovered Devices

Discovered Devices

Dashboard

Update Devices

Project

Devices

Features

Report

Discovered Devices

⟳ Refresh

Search 🔍

Device	IP Address	Model Number	Actions
0c54a53128e9	192.168.1.103	D110	Restart ▾
0c54a5312b49	192.168.1.102	E120	Restart ▾

Number of Devices: 2

Note:

If devices are already part of a loaded project, they should not be visible under the Discover Devices section. You can click on **Restart** under the Actions column to try to bring the device(s) back onto the network as matched to the project.

Chapter 9

Actions

Topics:

- *Actions*
- *Stop Load*
- *Socket Generic*

You can perform different actions for individual devices in the Actions column under the Devices and Discovered Devices tiles in the left-hand sidebar. Some Actions are also quick access to tools and resources.

Chapter Outline:

1. Actions (Overview)

   - Stop Load (detailed)
   - Socket Generic (detailed)

Actions

This section outlines how to utilize the functions in the Actions column under both the Devices and Discovered Devices tiles.
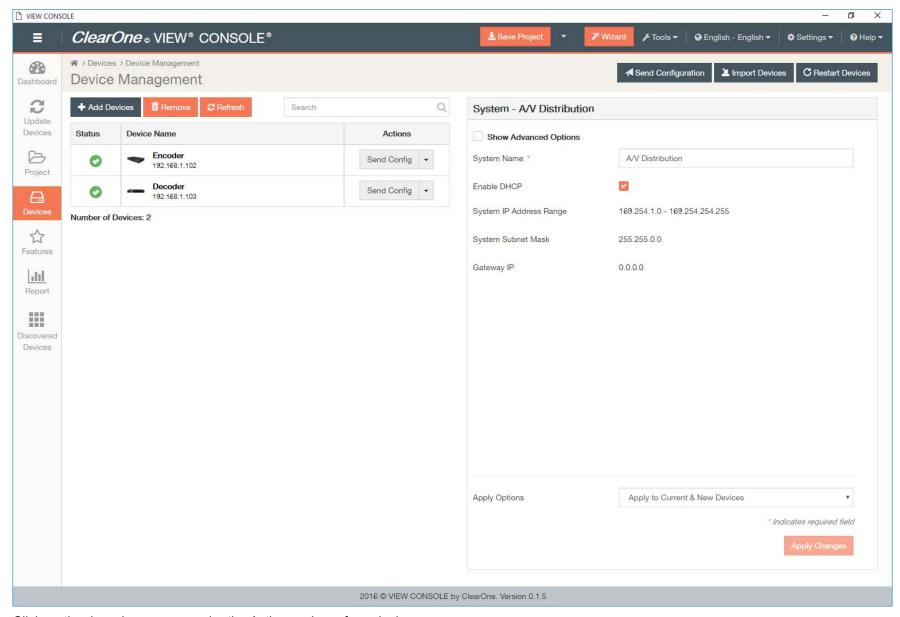
There are three different sets of Actions available. Two of the sets of Actions are available under the Devices tile. The Actions available for devices will depend on whether a device has been matched.

A single set of Actions is available for devices under the Discovered Devices tile.
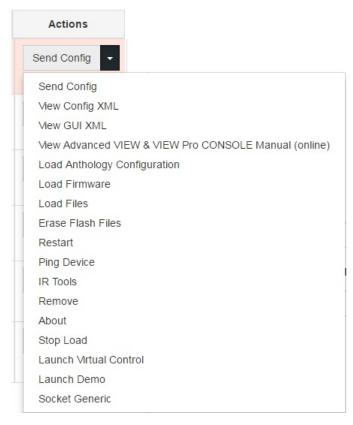
Devices Actions

1. Click on Devices in the left-hand sidebar.

   The Devices screen displays.

2. Click on the drop-down arrow under the Actions column for a device.

1. If the device is matched, the drop-down lists a full set of Actions:

Actions
Send Config ▼

Send Config
View Config XML
View GUI XML
View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
Load Anthology Configuration
Load Firmware
Load Files
Erase Flash Files
Restart
Ping Device
IR Tools
Remove
About
Stop Load
Launch Virtual Control
Launch Demo
Socket Generic

- *Sendconfig* - Send the configuration file to the physical hardware for this individual device.
- View Config XML - View the current_config.xml for this individual device for troubleshooting and/or verification purposes.
- View GUI XML - View the gui.xml for this individual device for troubleshooting and/or verification purposes.
- View Advanced VIEW & VIEW Pro CONSOLE Manual (online) - Redirects you to the Advanced VIEW & VIEW Pro CONSOLE Manual in a web browser.
- Load Anthology Configuration - Redirects you to a web browser to upload your ClearOne Anthology media server configuration file.
- Load Firmware - Manually load a firmware version for this individual device.
- Load Files - When a file upload is required in the device configuration process (e.g. for the User-Defined Logo feature under decoder Display Output settings), upload the file using this function.
- Erase Flash Files - Erases previous configuration files on the selected device(s). Only available in Debug Mode. For more information on operating modes, see *Operating Modes*.
- Restart - Restart the device for troubleshooting and/or verification purposes.
- Ping Device - Ping the device for troubleshooting and/or verification purposes.

- IR Tools - Access *IR Learning and Control* for the IR Emitter and IR Receiver accessory kits.
- Remove - Remove the device from the project.
- About - Indicates what files are loaded onto this device, version numbers of those files (if applicable), and the Machine Access Control address of the device.
- *Stop Load* - This tool is useful if you are unable to locate devices because the configuration is corrupted. Helps resolve this issue by loading a temporary factory-built file that sets the IP address to a temporary 10.15.x.x IP address and uses the default version of firmware for the StreamNet device. This allows you to send a new configuration or re-upload the latest firmware.
- Launch *Virtual Control* - Launch the virtual control interface. A virtual replica interface of the TouchLinX controller.
- Launch Demo - Launch a demo of the *Virtual Control* that does actually execute, but only simulates actions.
- *Socket Generic* - Manually send commands to a device for troubleshooting purposes. These are commands that devices are already sending to each other within the VIEW or VIEW Pro system.

2. If the device is not matched yet, the drop-down lists a limited set of Actions:

Sta...	Device Name	Actions
✖	E120 0.0.0.0	Match ▼

Match
Remove
Stop Load
Launch Demo

Number of Devices: 1
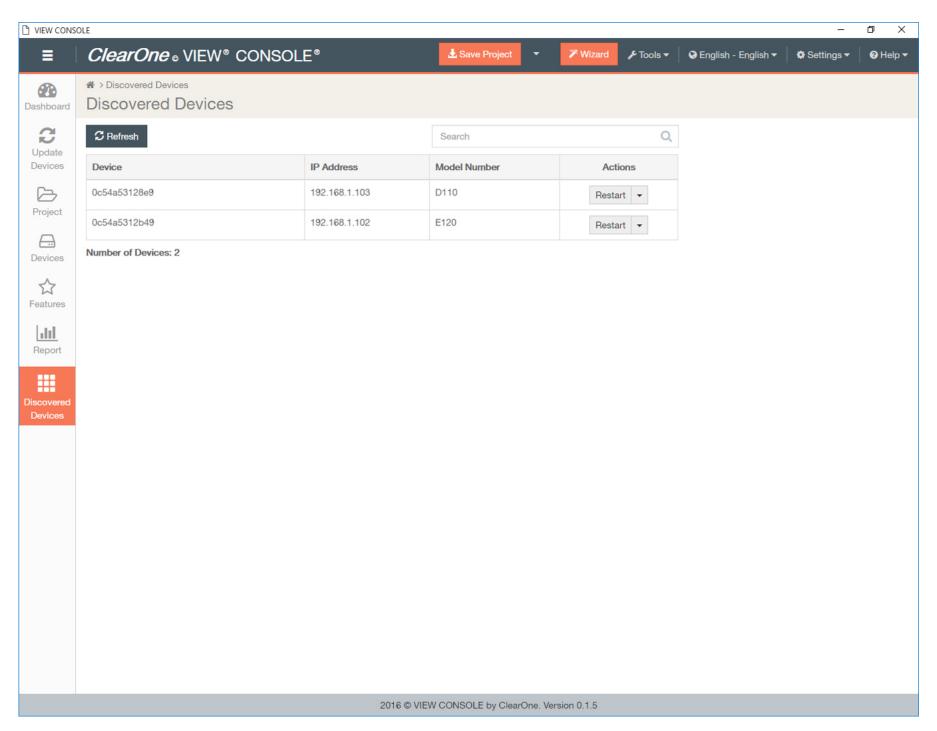
- Match - Pair the device to the corresponding device discovered on the StreamNet network.
- Remove - Remove the device from the project.
- *Stop Load* - This tool is useful if you are unable to locate devices because the configuration is corrupted. Helps resolve this issue by loading a temporary factory-built file that sets the IP address to a temporary 10.15.x.x IP address and uses the default version of firmware for the StreamNet device. This allows you to send a new configuration or re-upload the latest firmware.
- Launch Demo - Launch a demo of the *Virtual Control* that does actually execute, but only simulates actions.
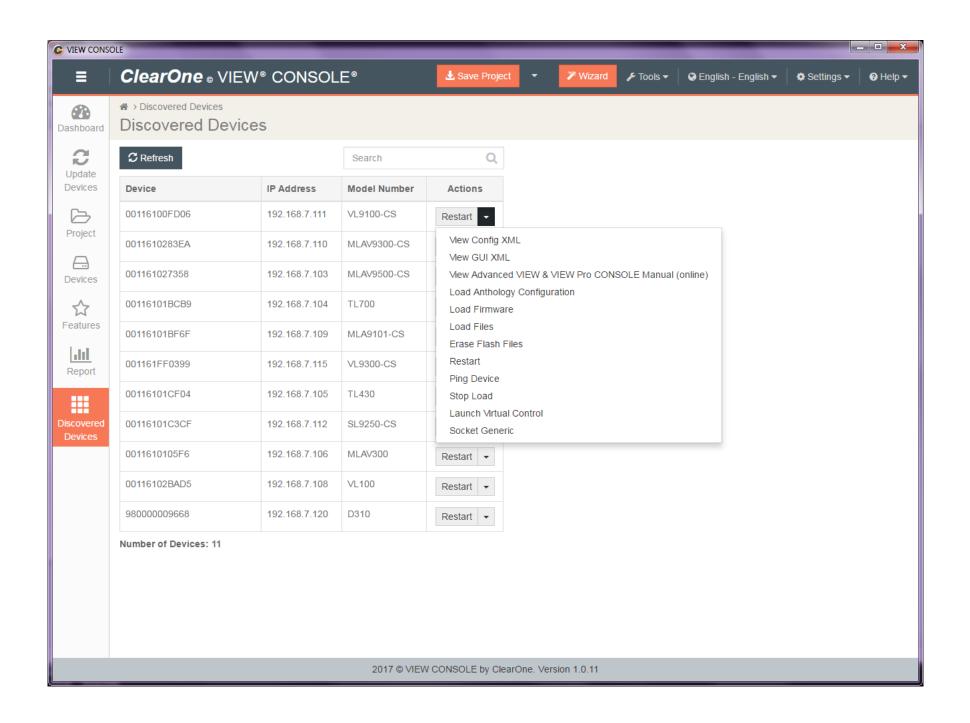
Discovered Devices Actions

3. Click on Discovered Devices in the left-hand sidebar.

The Discovered Devices screen displays.

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🏠 > Discovered Devices

Discovered Devices

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Device	IP Address	Model Number	Actions
0c54a53128e9	192.168.1.103	D110	Restart ▾
0c54a5312b49	192.168.1.102	E120	Restart ▾

Number of Devices: 2

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4. Click on the drop-down arrow under the Actions column for a device.

The drop-down lists a set of Actions:

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🏠 › Discovered Devices

Discovered Devices

🔄 Refresh

Search 🔍

Device	IP Address	Model Number	Actions
00116100FD06	192.168.7.111	VL9100-CS	Restart ▼
0011610283EA	192.168.7.110	MLAV9300-CS	
001161027358	192.168.7.103	MLAV9500-CS	
00116101BCB9	192.168.7.104	TL700	
00116101BF6F	192.168.7.109	MLA9101-CS	
001161FF0399	192.168.7.115	VL9300-CS	
00116101CF04	192.168.7.105	TL430	
00116101C3CF	192.168.7.112	SL9250-CS	
0011610105F6	192.168.7.106	MLAV300	Restart ▼
00116102BAD5	192.168.7.108	VL100	Restart ▼
980000009668	192.168.7.120	D310	Restart ▼

Dropdown menu:
- View Config XML
- View GUI XML
- View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
- Load Anthology Configuration
- Load Firmware
- Load Files
- Erase Flash Files
- Restart
- Ping Device
- Stop Load
- Launch Virtual Control
- Socket Generic

Number of Devices: 11

Sidebar:
- Dashboard
- Update Devices
- Project
- Devices
- Features
- Report
- Discovered Devices

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1. • View Config XML - View the current_config.xml for this individual device for troubleshooting and/or verification purposes.

   • View GUI XML - View the gui.xml for this individual device for troubleshooting and/or verification purposes.

   Sample XML file:

   • View Advanced VIEW & VIEW Pro CONSOLE Manual (online) - Redirects you to the Advanced VIEW & VIEW Pro CONSOLE Manual in a web browser.

- Load Anthology Configuration - Redirects you to a web browser to upload your ClearOne Anthology media server configuration file.
- Load Firmware - Manually load a firmware version for this individual device.
- Load Files - When a file upload is required in the device configuration process (e.g. for the User-Defined Logo feature under decoder Display Output settings), upload the file using this function.
- Erase Flash Files - Erases previous configuration files on the selected device(s). Only available in Debug Mode. For more information on operating modes, see *Operating Modes*.
- Restart - Restart the device for troubleshooting and/or verification purposes.
- Ping Device - Ping the device for troubleshooting and/or verification purposes.
- *Stop Load* - This tool is useful if you are unable to locate devices because the configuration is corrupted. Helps resolve this issue by loading a temporary factory-built file that sets the IP address to a temporary 10.15.x.x IP address and uses the default version of firmware for the StreamNet device. This allows you to send a new configuration or re-upload the latest firmware.
- Launch *Virtual Control* - Launch the virtual control interface. A virtual replica interface of the TouchLinX controller.
- *Socket Generic* - Manually send commands to a device for troubleshooting purposes. These are commands that devices are already sending to each other within the VIEW or VIEW Pro system.
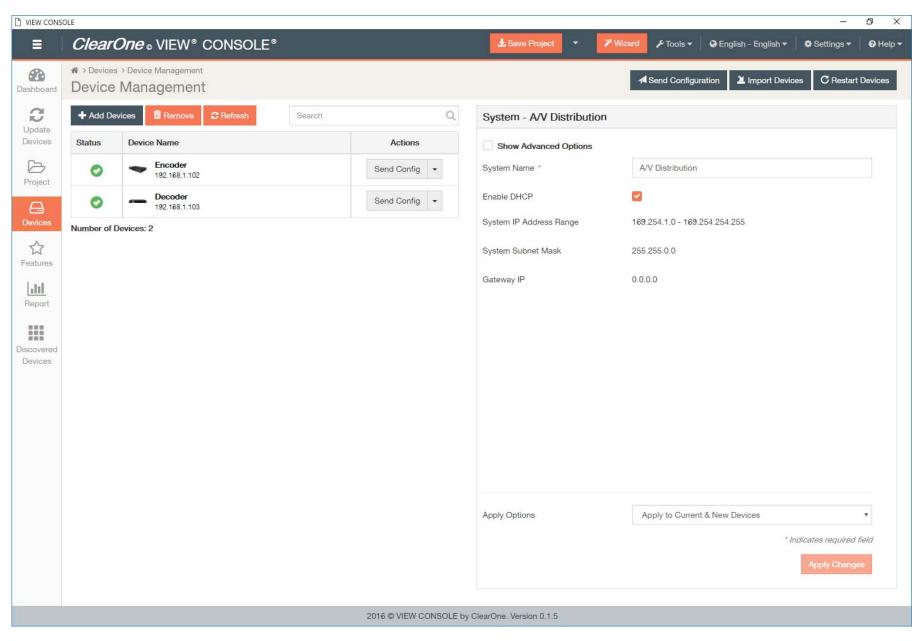
Stop Load

This section outlines how to troubleshoot using the Stop Load feature. This tool is useful if you are unable to locate devices because the configuration is corrupted. Stop Load helps resolve this issue by loading a temporary factory-built file that sets the IP address to a temporary 10.15.x.x IP address and uses the default version of firmware for the StreamNet device. This allows you to send a new configuration or re-upload the latest firmware.

The Stop Load feature can be accessed for individual devices in the Action column under the Devices and Discovered Devices tiles, or can be performed for all devices when accessed from the Tools menu in the top Menu bar.

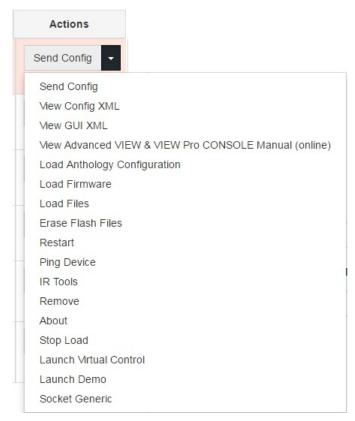1. Click on Devices in the left-hand sidebar.
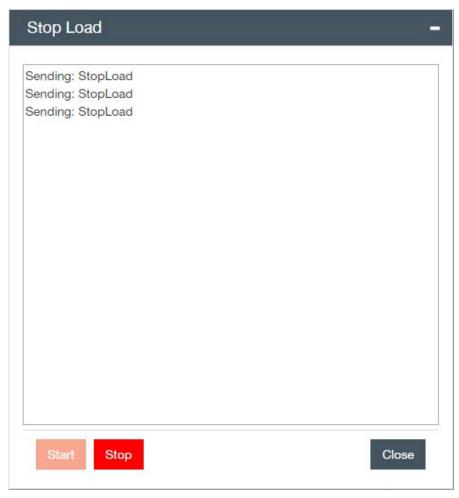
   The Devices screen displays.

Phase I Troubleshooting

2. Click on the drop-down arrow under the Actions column for a device.

If the device is matched, the drop-down lists a set of Actions:

Actions
Send Config ▼

Send Config
View Config XML
View GUI XML
View Advanced VIEW & VIEW Pro CONSOLE Manual (online)
Load Anthology Configuration
Load Firmware
Load Files
Erase Flash Files
Restart
Ping Device
IR Tools
Remove
About
Stop Load
Launch Virtual Control
Launch Demo
Socket Generic

3. Select Stop Load.

The Stop Load process window displays, and begins the Stop Load process.

4. Unplug and replug power to the device that StreamNet is not recognizing.

5. Let the Stop Load commands fill the page. Wait two to five minutes for the device to completely reboot.

6. Click Stop.

7. Click Close to close the Stop Load process window.

8. Test whether the device was successfully re-initiated with Stop Load:

   a) Navigate to the Devices screen.

   b) Click the drop-down arrow under the Actions column for the device you are troubleshooting.

   c) Select About.

d) A Test and Load window displays. In the data returned, you should see a line that shows: programName=TestAndLoad

e) Close the Test and Load window.

f) Send the configuration.

g) If the issue is resolved, stop here. If not, continue to Troubleshooting Phase 2.

Phase II Troubleshooting

9. Remove the device from the project.

10. Save the project.

11. Send the configuration.

12. Add the device back to the project. A new configuration is built for the device.

13. Send the configuration.
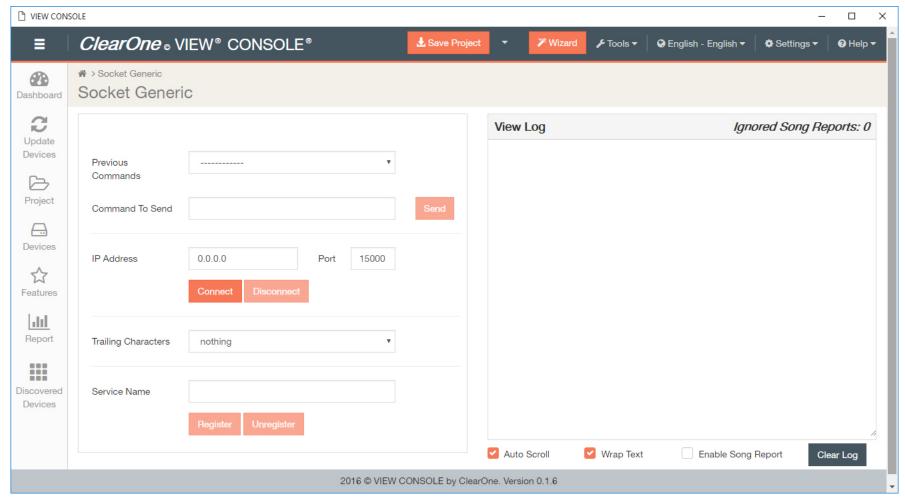
Socket Generic

This section outlines how to utilize the Socket Generic feature. Socket Generic is an advanced dealer tool, and sends commands directly to a designated IP address and port.

Socket Generic can be accessed in the Actions column under the Devices and Discovered Devices left-hand tiles, or in the Tools menu in the top Menu bar.

1. Open the tool from any of the locations discussed above.

The Socket Generic screen displays.

2. Enter field information.

   a) Previous Commands: Select a previous command if there are any that you have already run in the current VIEW CONSOLE session.

   Commands are saved only for the duration of your current session. When you close out of VIEW CONSOLE, no commands are saved.

   b) Command to Send: Refer to the StreamNet Command guides available in the ClearOne Resource Library for more information.

   c) IP Address: The IP address of the device you are sending a command to.

   d) Port: The port you are sending your command through.

   e) Trailing Characters: If you are sending command to a non-Streamnet device, some third party devices require trailing characters for commands.

f) Service Name: Allows you to monitor a particular service. Each device has several services (xxx Player, xxx UI, xxx Root, etc.). Registering to a particular service in Socket Generic lets the you look at only the messages passing between that service and the other devices on the network. Unregistering from the service when finished is strongly recommended.

View Log

3. Socket Generic activity is logged for the duration of your current session. When you close out of VIEW CONSOLE, logs are not saved.

   a) Checking the Auto Scroll box enables automatic scrolling to most recent activity.
   b) Checking the Wrap Text box enables text to wrap, instead of displaying in single, long strings.
   c) Enabling Song Report displays lists of songs played by media servers in the log. Unchecking filters this information out, which may be helpful when troubleshooting. If filtered, the Ignored Song Reports ticker in the upper right-hand corner displays the number of reports/lists that have been filtered.
   d) Clear Log allows you to clear the current Socket Generic log.

Chapter 10

Tools

Topics:

- *About Tools*
- *Tools*
- *NetDebug Tool*

This chapter outlines how to utilize the applications in the Tools menu.

About Tools

The VIEW CONSOLE software package includes a set of easy-to-use advanced configuration tools to help with GUI customization, diagnostics and control capabilities of your VIEW or VIEW Pro system.
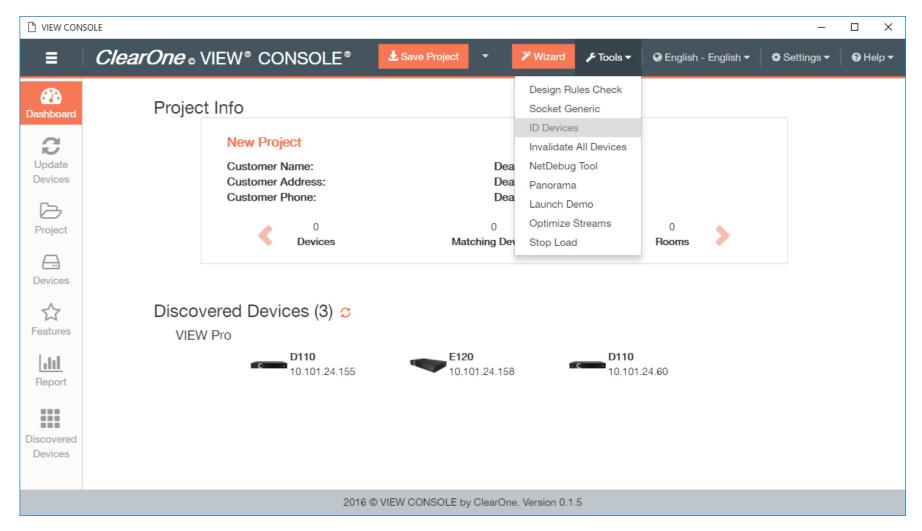
Chapter Outline:

1. Tools (Overview)

   • NetDebug Tool

Tools

VIEW CONSOLE and other proprietary ClearOne tools can help streamline a StreamNet system setup and management.

1. Click on **Tools** in the top Menu bar.

   The Tool menu displays.

Design Rules Check

2. Click on Design Rules Check.

The Design Rules Check is a diagnostic tool that can check your StreamNet project for problems before you send configuration files to all StreamNet devices in the system. Save time and check your project first before sending the configuration files to all devices! Design Rules Check Function in Dealer Setup can save you the trouble of a phone call to technical support.
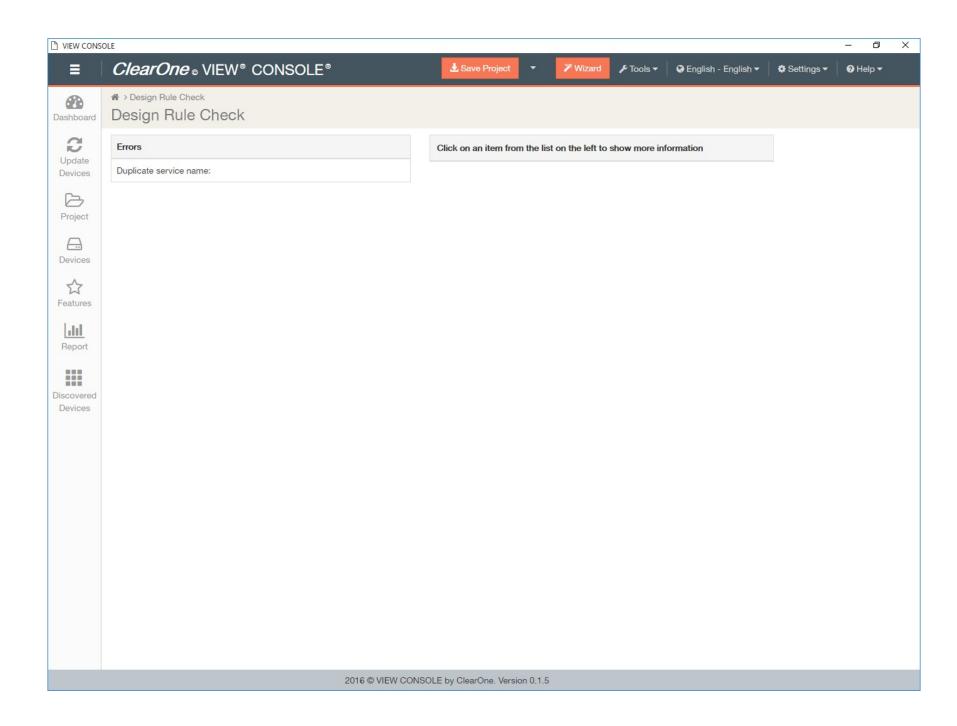
Potential issues that Design Rules checks for:

- Invalid Characters or Strings - includes characters (such as ~, #, $, \, %) or strings (such as "Amp", "C", "Q") these characters are reserved for programming code.
- Duplicate Service Names - checks for one or more devices that have the same name.
- Camera Information - checks for duplicate or improper IP configuration.
- IP conflicts - checks for wrong IP addressing scheme or invalid subnet mask.
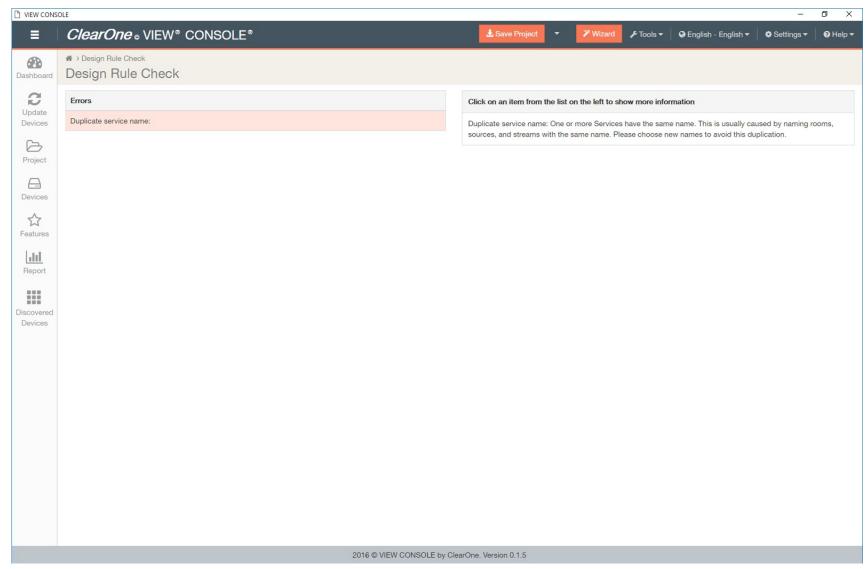
Note:

Other checks are performed in addition to these, but this list includes the most common issues found in StreamNet project.

The Design Rules Check screen displays, and lists problems in your system project.

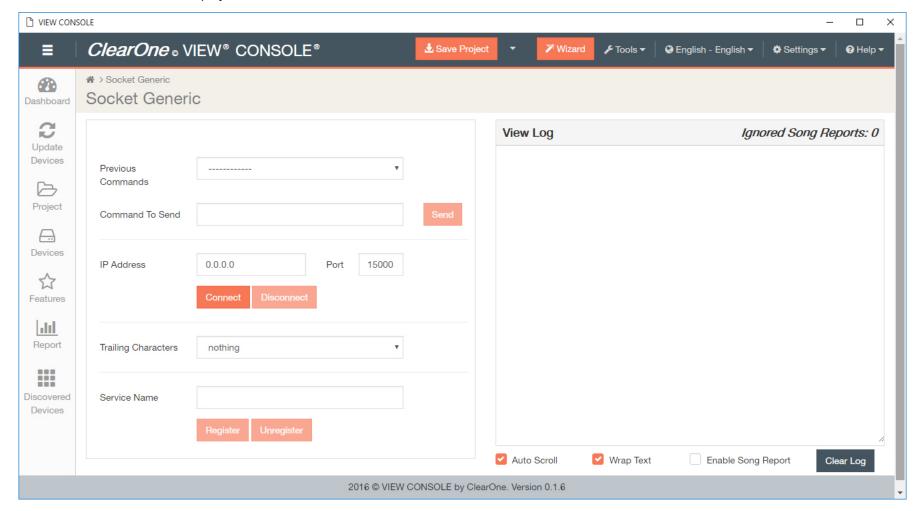1. Click on errors for more details. The information displays to the right.

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🏠 Dashboard

🔄 Update Devices

📂 Project

🖥 Devices

⭐ Features

📊 Report

▦ Discovered Devices

🏠 › Design Rule Check

Design Rule Check

Errors
Duplicate service name:

Click on an item from the list on the left to show more information

2. Note and fix any issues.

3. Rerun the Design Rules Check function until you have cleared all errors.

Socket Generic

3. Click on Socket Generic.

Socket Generic is an advanced dealer tool, and sends commands directly to a designated IP address and port.
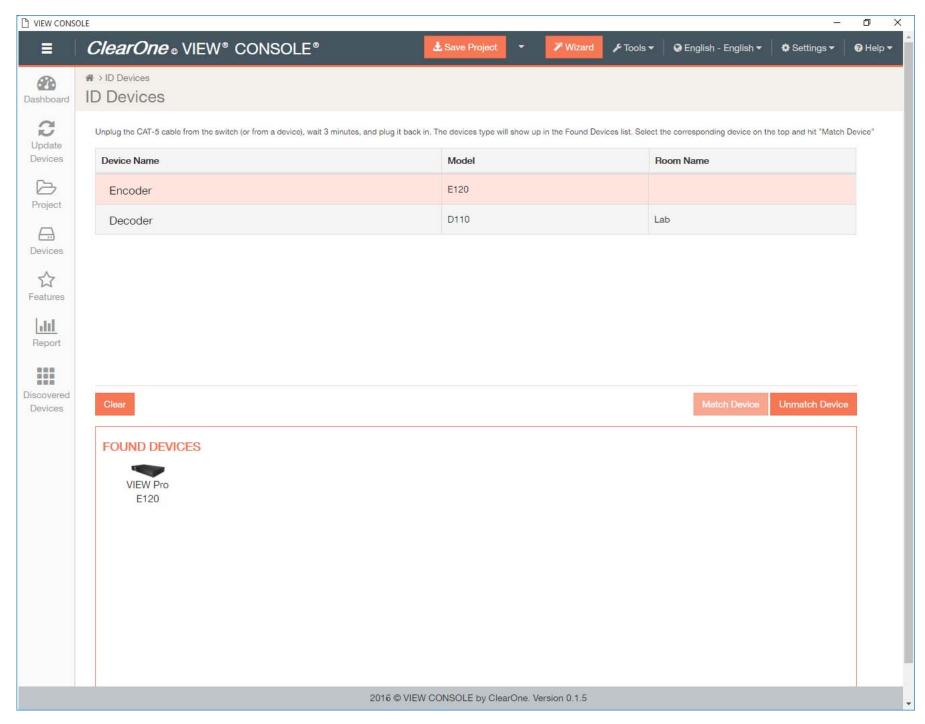
The Socket Generic screen displays.

ID Devices

4. Click on ID Devices.

   ID Devices can help identify and match physical devices with the project.

   a) Disconnect the NIC cable for the device you are trying to identify and match.

   b) Plug the device back in.

c) The device should auto-populate under FOUND DEVICES on this page, and also under the Discovered Devices tile.

d) Click on the *Discovered Devices* tile, and the device, its IP address, and model number will be identified.

e) Go to *Match Devices* for details on how to match the device in your project.

The ID Devices screen displays.

ClearOne © VIEW® CONSOLE®

⬇ Save Project ▾   🪄 Wizard   🔧 Tools ▾   🌐 English - English ▾   ⚙ Settings ▾   ❓ Help ▾

🏠 > ID Devices

ID Devices

Unplug the CAT-5 cable from the switch (or from a device), wait 3 minutes, and plug it back in. The devices type will show up in the Found Devices list. Select the corresponding device on the top and hit "Match Device"

Device Name	Model	Room Name
Encoder	E120	
Decoder	D110	Lab

Clear   Match Device   Unmatch Device

FOUND DEVICES

VIEW Pro
E120

VIEW CONSOLE User Manual

Invalidate All Devices

5. Click on Invalidate All Devices.

Invalidating all devices resets configurations. Only use this function if you need to re-configure **ALL** devices in your current project. You will have to repeat steps in *Devices*.
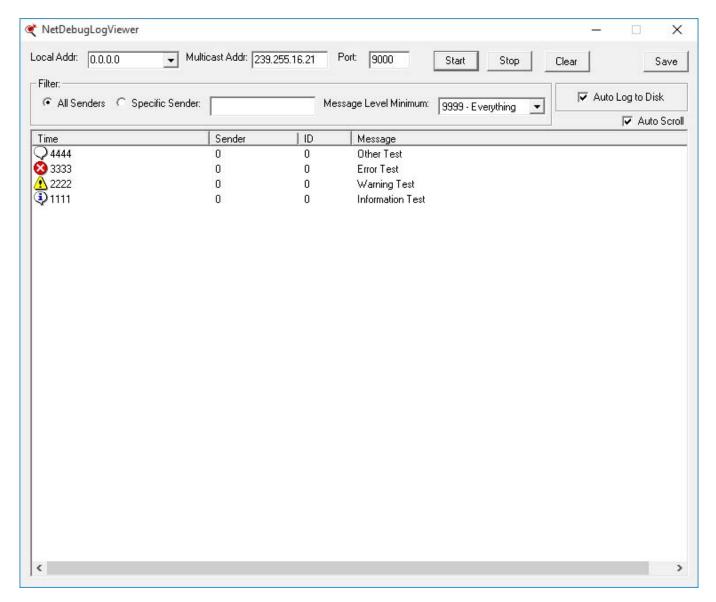
NetDebug Tool

6. Click on NetDebug Tool.

The Net Debug Tool allows you to view real-time network and/or device traffic.

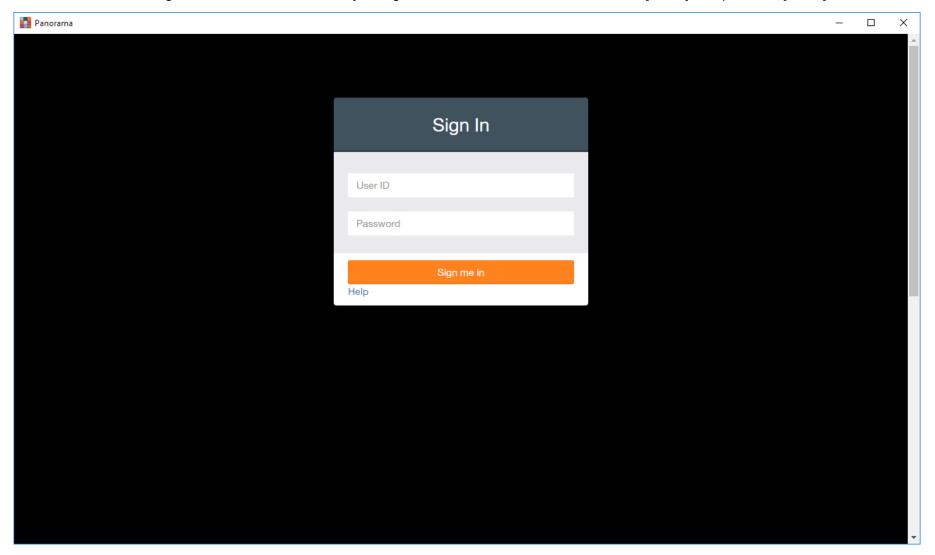See *NetDebug Tool* for more detail.
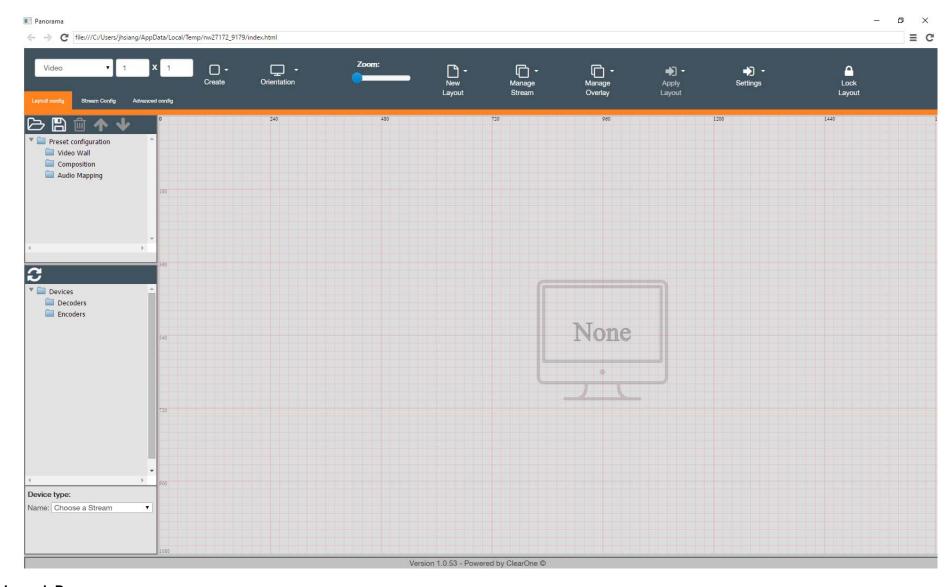
The Net Debug Log Viewer launches.

PANORAMA

7. Click on PANORAMA.

PANORAMA is a video-composition and video-wall layout configuration software license for the VIEW Pro network media system.

See the PANORAMA User Manual for more detail. You can find this in the ClearOne Resource Library: http://www.clearone.com/resources#network_media_streaming

PANORAMA launches. Sign in and use the software with your login information, or with the default User ID [admin], and password [admin].
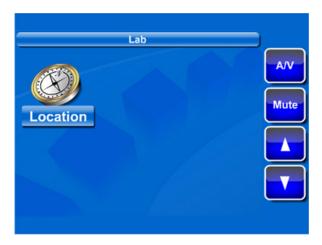
Launch Demo

8. Click on Launch Demo.

This demos the Virtual Control interface. See section *Virtual Control* for more detail.

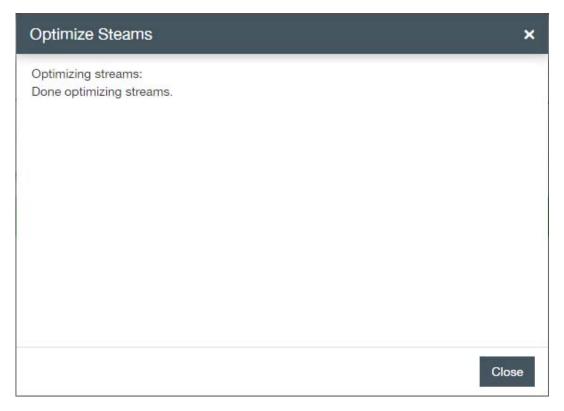The Virtual Control demo launches.

Optimize Streams

9. Click on Optimize Streams.

   This feature optimizes media server audio streams by assigning them to a proxy device (encoder, decoder, SpeakerLinX) with the least network and processor load. This is used for legacy devices.

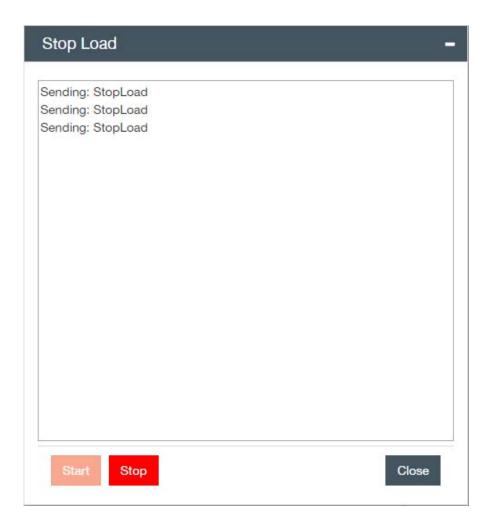   The Optimize Streams window displays, and indicates when optimization is complete.

Optimize Steams ✕

Optimizing streams:
Done optimizing streams.

Close

Stop Load

10. Click on Stop Load.

This function allows units to be reset if they are not being responsive. This is used for legacy devices.

The Stop Load window displays, and shows progression of stopping device loads.

Stop Load —

```
Sending: StopLoad
Sending: StopLoad
Sending: StopLoad
```

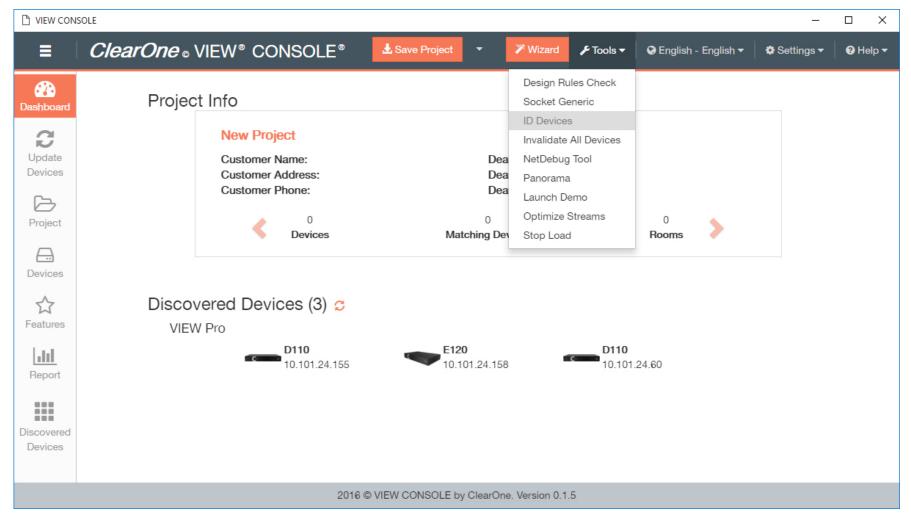Start   Stop   Close

NetDebug Tool
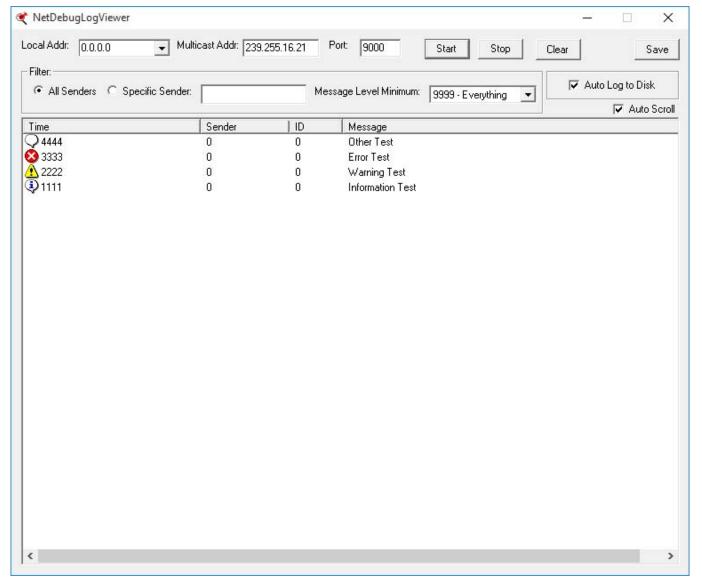
This section outlines how to utilize the NetDebug Tool.

When you want to report a problem to ClearOne Tech Support, please send the following files and logs:

1. A description of the problem,
2. Project file,
3. Help diagnostics,

4. Debug log.

1. To create a NetDebug log, select the NetDebug Tool in the Tools menu in the top Menu bar.

The NetDebug Tool window displays.

2. Change fields in the top portion of the view as follows:
   a) Local Address - the address of the PC NIC that is connected to the SwitchLinX
   b) Message Level Minimum - set to 2 - Warning
   c) The rest of the fields should be blank.

3. Click Start.

   You will get real-time real-time network and/or device traffic information.

4. Let the log run for five minutes or until the problem is captured in the log.

5. Click Stop.

6. Click Save.

7. Save the file as a text file and attach it to the email with the rest of the information discussed at the beginning of this section.

Chapter 11

Language Menu

Topics:

• *Language Menu*

This chapter contains information about the VIEW CONSOLE GUI language menu.

Language Menu

The VIEW CONSOLE graphical user interface (GUI) is available in multiple languages. You can choose between English, Vietnamese, Korean, Chinese, Japanese, Arabic, French, German, Russian, and Spanish.

To change the VIEW CONSOLE GUI language:

1. Click the Language menu in top Menu bar.

   The Language menu appears:

2. Choose an option from the Language menu.

   The VIEW CONSOLE language changes immediately.

Chapter 12

Help

Topics:

- *Help Menu*

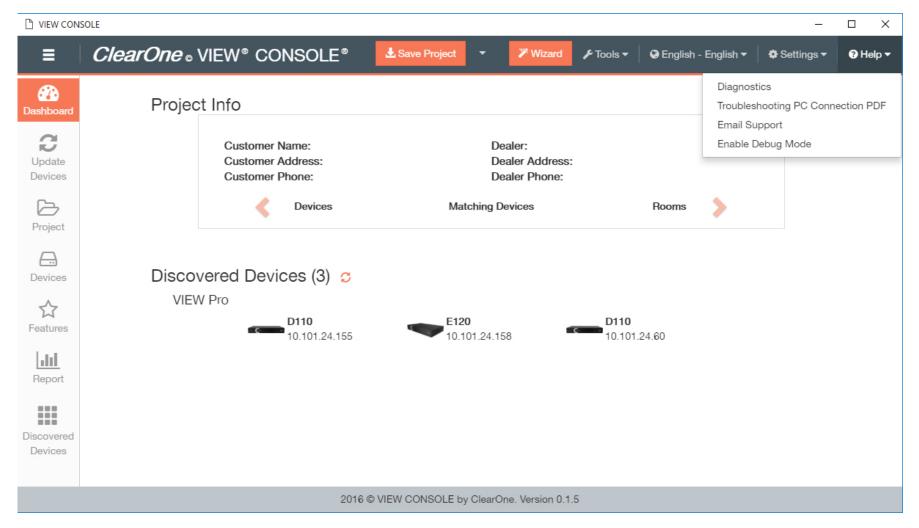This chapter contains information about the VIEW CONSOLE Help menu.

Help Menu

The Help Menu offers additional support resources and tools.

Chapter Outline:

- Diagnostics
- Troubleshooting PC Connection PDF
- Email Support
- Debug Mode

1. Click on **Help** in the top Menu bar.

The Help menu displays.

Diagnostics

2. Click on **Diagnostics** in the Help Menu.

The Diagnostics tool summarizes what devices are currently running, and if there are any errors with current devices.

- You can see information regarding your network connections. This includes:

    - network card name
    - connection IP address

- address type (static or DHCP)
- subnet mask
- the number of StreamNet devices found on the network.
- You can detect problems with your connection, and provides an explanation.
- You can email the ClearOne support team from this window, and from the Email Support function directly in the Help Menu as well. The email support button from this screen automatically includes a copy of the project and the diagnostic. However, this button only works for systems with an email program already configured and working.

The Diagnostics window displays.

Diagnostics ✕

Diagnostics Information

Server operation system: Windows 8.1
Available processors (cores): 4

---------------------- Memory Status ------------------------
Total physical memory (bytes): 8500101120
Total physical available (bytes): 3883556864
Total virtual memory (bytes): 10110713856
Total virtual available (bytes): 3167862784
Memory load: 54%

--------------------- Network Interfaces ----------------------
TAP-Windows Adapter V9
Disconnected

Targus Giga Ethernet
Disconnected

VPN Client Adapter - VPN
Disconnected

Cisco AnyConnect Secure Mobility Client Virtual Miniport Adapter for Windows x64
Disconnected

Bluetooth Device (Personal Area Network)
Disconnected

Intel(R) Dual Band Wireless-AC 7260

[Email Support] [Close]

Email Support

3. Click on Email Support in the Help Menu.

For additional support from ClearOne, use this VIEW CONSOLE Email Support function, or call +1.800.283.5936.

Debug Mode

4. Click to enable or disable Debug Mode.

For more information on operating modes, see *Operating Modes*.

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