

# KRAMER



## USER MANUAL

### **KRAMER NETWORK V-1.0.6**

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# 1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront video, audio, presentation, and broadcasting professionals on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 14 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Video Products; GROUP 12: Digital Signage; GROUP 13: Audio; and GROUP 14: Collaboration.

**KRAMER NETWORK** is a powerful, all-encompassing Enterprise software platform that lets you easily operate, manage and maintain all your Pro AV, IT, IP streaming, and control in one simple single-point web-based interface.

This online user manual accompanies the **KRAMER NETWORK** application software. Download up-to-date Kramer user manuals and Installation guides from the Internet at this URL: [www.kramerav.com/manual/Kramer Network](http://www.kramerav.com/manual/Kramer%20Network).

## 1.1 New features in Kramer Network version 1.0.6

- Added video over IP device support (**KDS-EN4/KDS-DEC4**).
- Added video over IP device support (**KDS-EN6/KDS-DEC6**).
- Support for Dante devices.
- Added Support for Pro-AV matrix devices (see [Section 6](#)).
- Added Pro-AV Master room controllers physical and virtual control panels for real-time control (see [Section 6](#)).
- Support for device firmware upgrade (see [Section 8](#)).
- Added report log for control, events, activity, users and device status (see [Section 9](#)).

## 1.2 New features in Kramer Network version 1.0.4

- Added Kramer Network Administrator Utility.
- Fully supports install, uninstall, repair and update processes.
- Server runs in the background, the console window was removed.
- Improved room controller project presentation support.
- Fixed various bugs.

## 1.3 Backward Compatibility

When upgrading **KRAMER NETWORK** version 1.0.4 to a higher version, you need to reload the virtual room controller **krnt** projects (in Room View), using Kramer **K-Config 3**.

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## 2 Getting to Know KRAMER NETWORK

**KRAMER NETWORK** is an IP-based enterprise management software platform for AV networks. Using any laptop, PC or tablet, **KRAMER NETWORK** lets AV/IT Administrators easily configure, route, control, and manage Kramer Pro-AV devices, room environments, and IP streaming devices from a single point in the network via a user-friendly web-based interface.

**KRAMER NETWORK**'s scalability is unique in the world of AV/IT convergence with its flexible architecture and smart GUI, making managing a network of hundreds of ports as easy as handling a sports bar or retail facility.

**KRAMER NETWORK** can be installed on standard, enterprise, virtual or cloud servers for easy management and control of the entire AV and IP product range, as well as legacy AV, Dante™ and other devices.

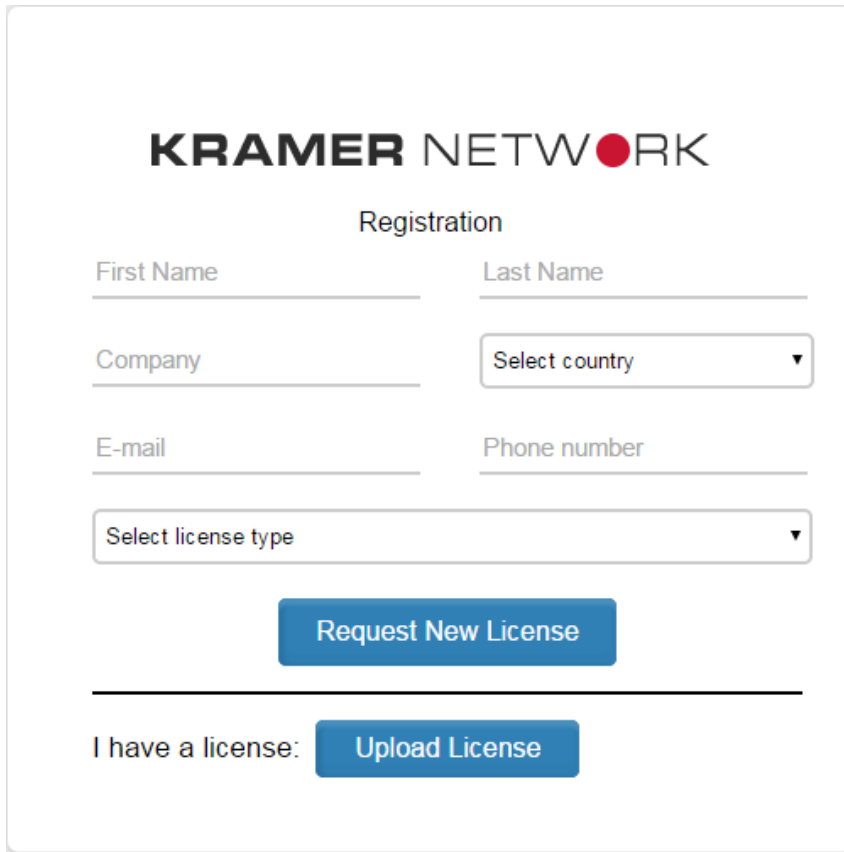
The platform features enhanced security with intuitive user-access management of specific audio or video sources, rooms and predefined scenarios. IT and AV managers can also easily monitor the system's health status and track the connection between a source and a destination.

**KRAMER NETWORK** features:

- User-friendly web-based GUI – easily access and use from anywhere, anytime.
- Automated device detection – reduce configuration time with instant and automated device detection in the network.
- Enhanced security – with intuitive user-access management, delegate access to specific audio or video sources, rooms and predefined scenarios.
- Topological AV system mapping – easily drill down to visualize a specific network, site, building, or room to start managing AV devices.
- View system status at a glance – quickly identify critical issues in the Network, including at the source-destination connection level.
- Remote maintenance – save time and budget with no need for on-site visits.
- Control over IP – control a virtually unlimited number of devices with access to a rich, dynamic library of 3rd-party device drivers.
- Software-based solution – **KRAMER NETWORK** installs on standard or virtual IT servers, reducing your total cost of ownership — no need for a dedicated server.
- Easy installation and use – simply install and start using the platform in minutes with no need for programming.
- Scalability to any size of installation – support hundreds of devices simultaneously.
- Easy Click & Connect system – make connections remotely between inputs and outputs on a physical matrix from anywhere on the network.
- Easy devices firmware upgrade – update device firmware remotely from a centralized location with a single click.
- Reports – show device activity logs, user status and administrative logs for user activities.
- Search filters – find devices easily and quickly with search filters such as Device Name, User Name and Device Activities (based on time periods or specific dates).

## 2.1 Registration

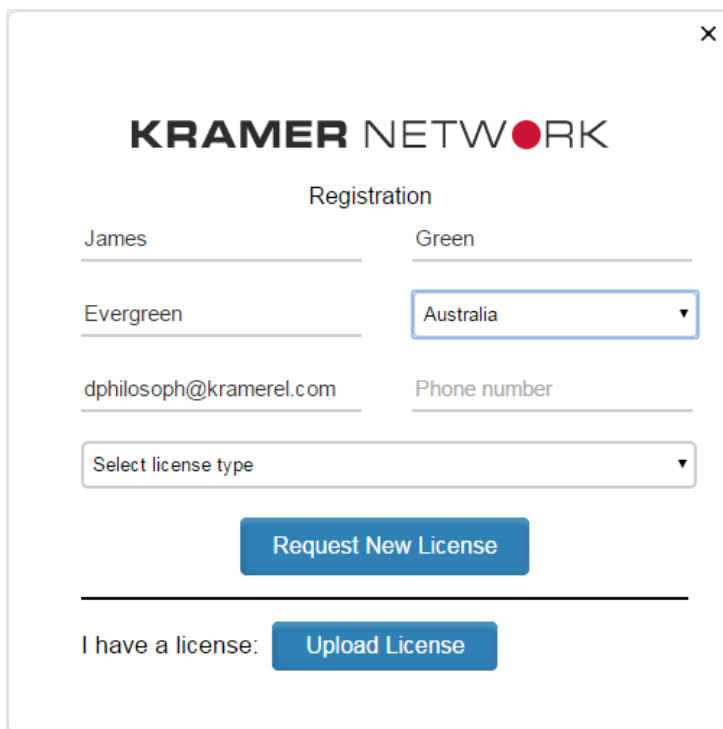
Upon installation, the Super user (which is the built-in user and the only user that can login for the first time) should register the copy of the software in order to be able to use it. When first logging in (as the Super user), a registration pop-up window appears:



The registration form for KRAMER NETWORK is displayed within a light gray border. At the top, the KRAMER NETWORK logo is centered, with the 'O' in NETWORK replaced by a red circle. Below the logo, the word 'Registration' is centered. The form contains several input fields: 'First Name' and 'Last Name' (both empty), 'Company' (empty), 'E-mail' (empty), and 'Phone number' (empty). There are two dropdown menus: 'Select country' (showing a downward arrow) and 'Select license type' (showing a downward arrow). A blue button labeled 'Request New License' is positioned below the license type dropdown. A horizontal line separates this section from the bottom section, which starts with the text 'I have a license:' followed by a blue button labeled 'Upload License'.

Figure 1: Registration Window

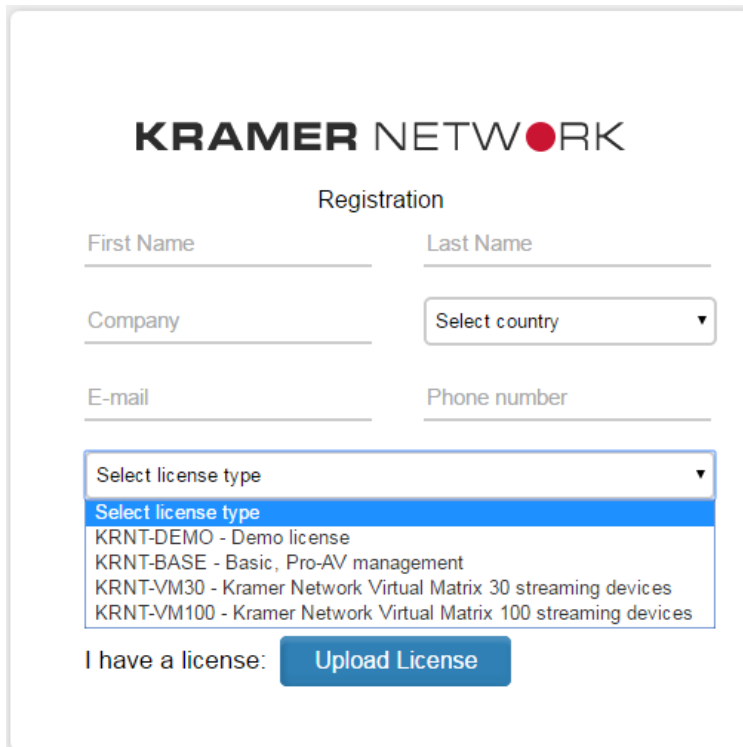
Fill in the details (name, company, country and so on).



The registration form is shown again, but now it is filled with sample data. The 'First Name' field contains 'James' and the 'Last Name' field contains 'Green'. The 'Company' field contains 'Evergreen' and the 'Select country' dropdown menu is set to 'Australia'. The 'E-mail' field contains 'dphilosoph@kramerel.com' and the 'Select license type' dropdown menu is set to 'Select license type'. The blue 'Request New License' button is still present. The bottom section, separated by a horizontal line, shows the text 'I have a license:' followed by the blue 'Upload License' button. A close button (X) is located in the top right corner of the form window.

Figure 2: The Registration Form

Select the license type:



The registration form for KRAMER NETWORK includes fields for First Name, Last Name, Company, E-mail, and Phone number. It also features a 'Select country' dropdown menu and a 'Select license type' dropdown menu. The license type dropdown is open, showing four options: KRNT-DEMO - Demo license, KRNT-BASE - Basic, Pro-AV management, KRNT-VM30 - Kramer Network Virtual Matrix 30 streaming devices, and KRNT-VM100 - Kramer Network Virtual Matrix 100 streaming devices. Below the dropdown is a button labeled 'Upload License'.

**KRAMER NETWORK**

Registration

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Company \_\_\_\_\_ Select country ▼

E-mail \_\_\_\_\_ Phone number \_\_\_\_\_

Select license type ▼

- Select license type
- KRNT-DEMO - Demo license
- KRNT-BASE - Basic, Pro-AV management
- KRNT-VM30 - Kramer Network Virtual Matrix 30 streaming devices
- KRNT-VM100 - Kramer Network Virtual Matrix 100 streaming devices

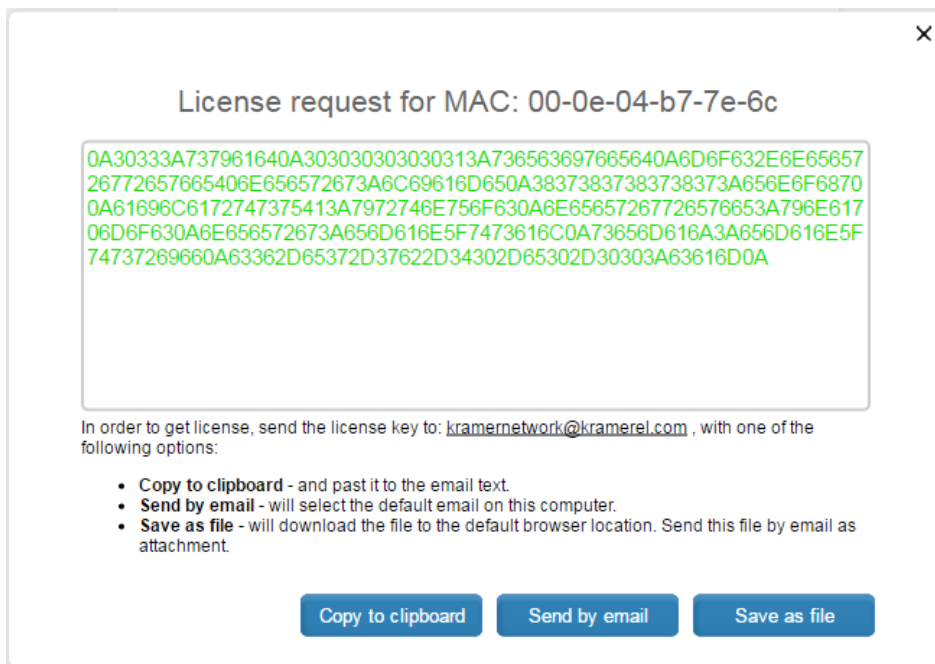
I have a license:

Figure 3: License types

Three types of licenses are available:

- KRNT-DEMO: the Demo license which is limited in time.
- KRNT-BASE: the basic license which enables Pro-AV remote management.
- KRNT-VM-30: licensing package for up to 30 streaming devices.
- KRNT-VM-100: licensing package for up to 100 streaming devices.

Select the required license type and click **Request New License**. The license request window appears:



The license request window displays a license key for MAC address 00-0e-04-b7-7e-6c. The key is a long alphanumeric string. Below the key, instructions are provided on how to send the key to kramernetwork@kramerel.com, with options to copy to clipboard, send by email, or save as file.

License request for MAC: 00-0e-04-b7-7e-6c

0A30333A737961640A303030303030313A736563697665640A6D6F632E6E6565726772657665406E656572673A6C69616D650A3837383738373A656E6F68700A61696C6172747375413A7972746E756F630A6E65657267726576653A796E61706D6F630A6E656572673A656D616E5F7473616C0A73656D616A3A656D616E5F74737269660A63362D65372D37622D34302D65302D30303A63616D0A

In order to get license, send the license key to: [kramernetwork@kramerel.com](mailto:kramernetwork@kramerel.com), with one of the following options:

- **Copy to clipboard** - and past it to the email text.
- **Send by email** - will select the default email on this computer.
- **Save as file** - will download the file to the default browser location. Send this file by email as attachment.

Figure 4: License Request Window

Select one of the three license-handling options:

- Copy the license key and paste it to the email text.
- Send it to the default email on your computer.
- Download the file and send as an attachment.

For example, when clicking **Send by email**, the email is ready to be sent:

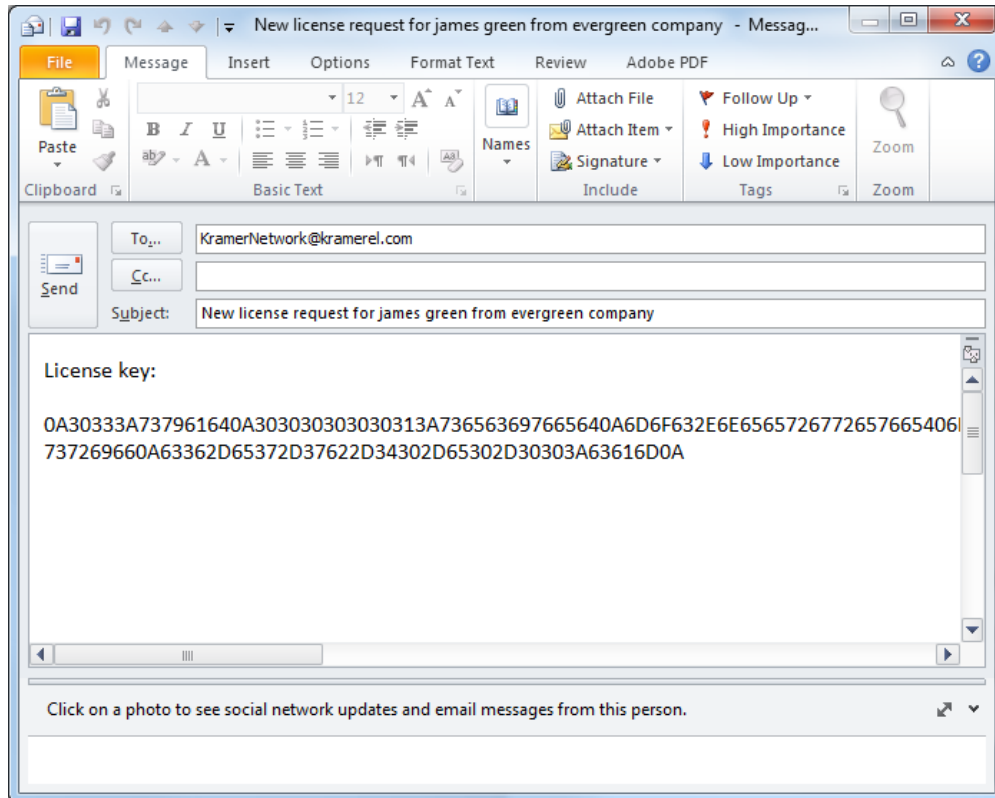


Figure 5: Send License Request by email

Once you get the license file click **Upload License** and download the license you received (KNL file):

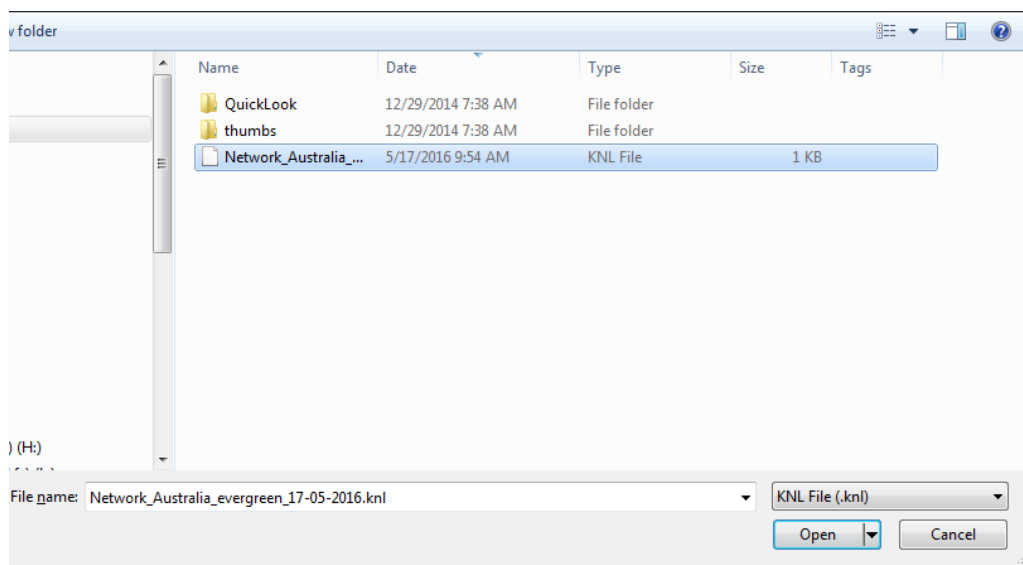


Figure 6: The License Key File

Wait until the license is uploaded. The web page will reload and you will see the login page.

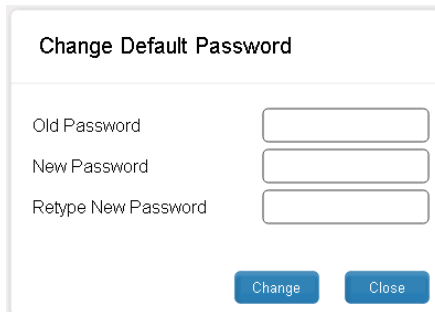


The **KRAMER NETWORK** is managed in three permission levels: Super, Admin and User (see [Section 8](#)). When you first open the **KRAMER NETWORK** enter the default login for Super user:

**User:** super

**Pass:** 123456

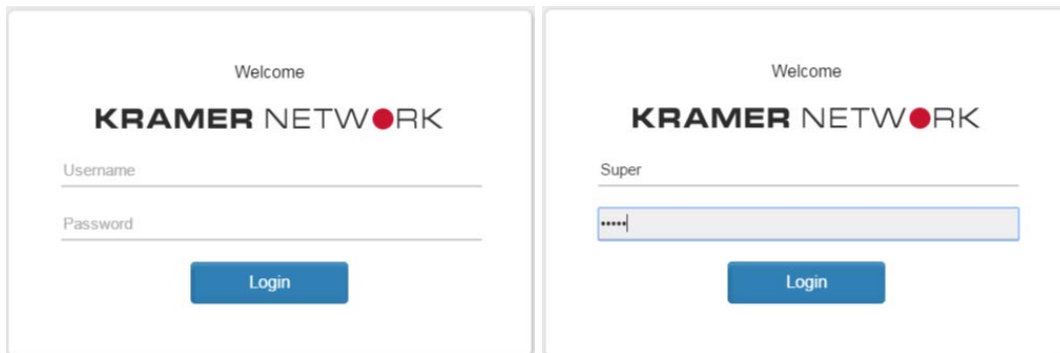
Change the default password:



A dialog box titled "Change Default Password". It contains three input fields: "Old Password", "New Password", and "Retype New Password". Below the fields are two buttons: "Change" and "Close".

Figure 7: Change the Default Password

To login, type your username and the new password:



Two side-by-side screenshots of the KRAMER NETWORK login interface. The left screenshot shows the login form with "Username" and "Password" labels and a "Login" button. The right screenshot shows the same form with "Super" entered in the Username field and "\*\*\*\*" in the Password field, with the "Login" button still visible.

Figure 8: KRAMER NETWORK Login

### 3 Config Inputs Page

The Config Inputs page enables you to detect the audio and video encoders and decoders within the network, assign them to groups and sub-groups, delete or edit a group, view and change the device parameters.

The **KRAMER NETWORK** main window opens for the first time:

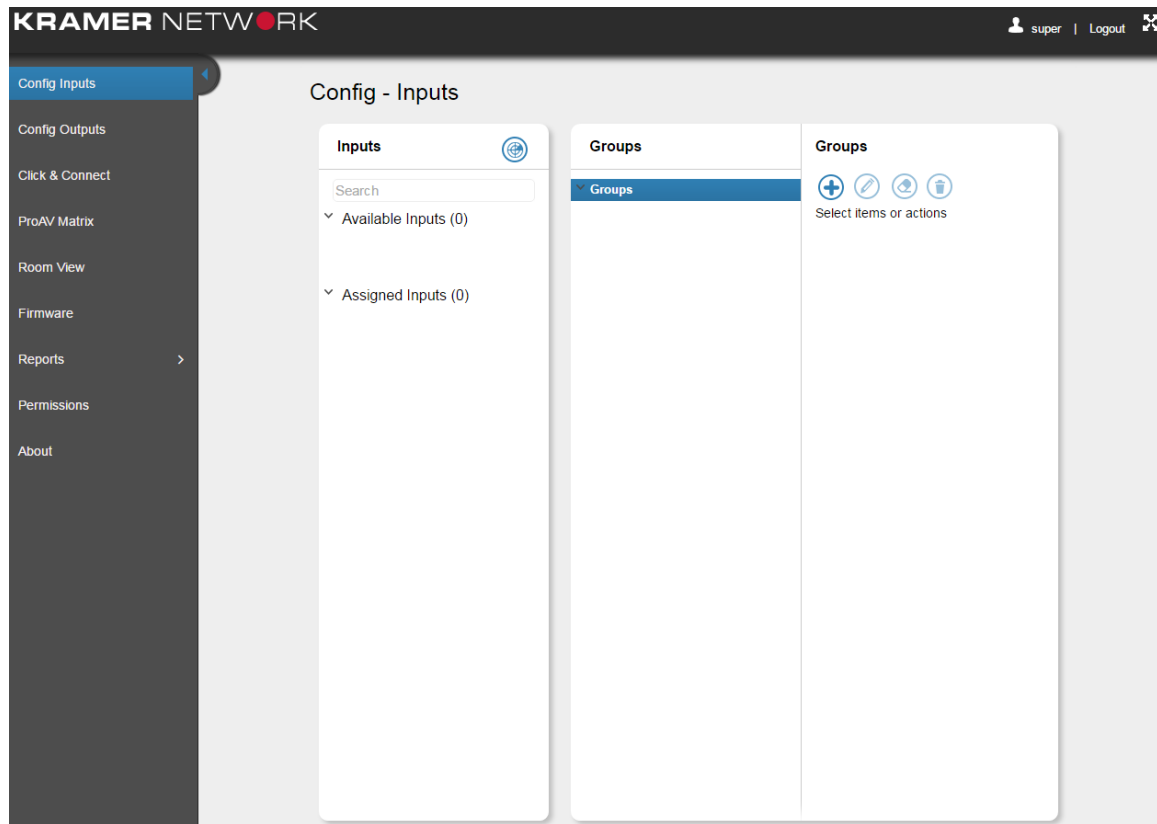





Figure 9: The Config Inputs Page

Click the scan icon  button to discover all the encoders on the LAN. All the connected devices appear in the “Available Inputs” list.

-  The input sources include Kramer encoder (such as the **KDS-EN3**, **KDS-EN4** and so on) and Dante™ encoder devices which are integrated into **KRAMER NETWORK**.
-  Note that only the Super user can scan for available inputs.

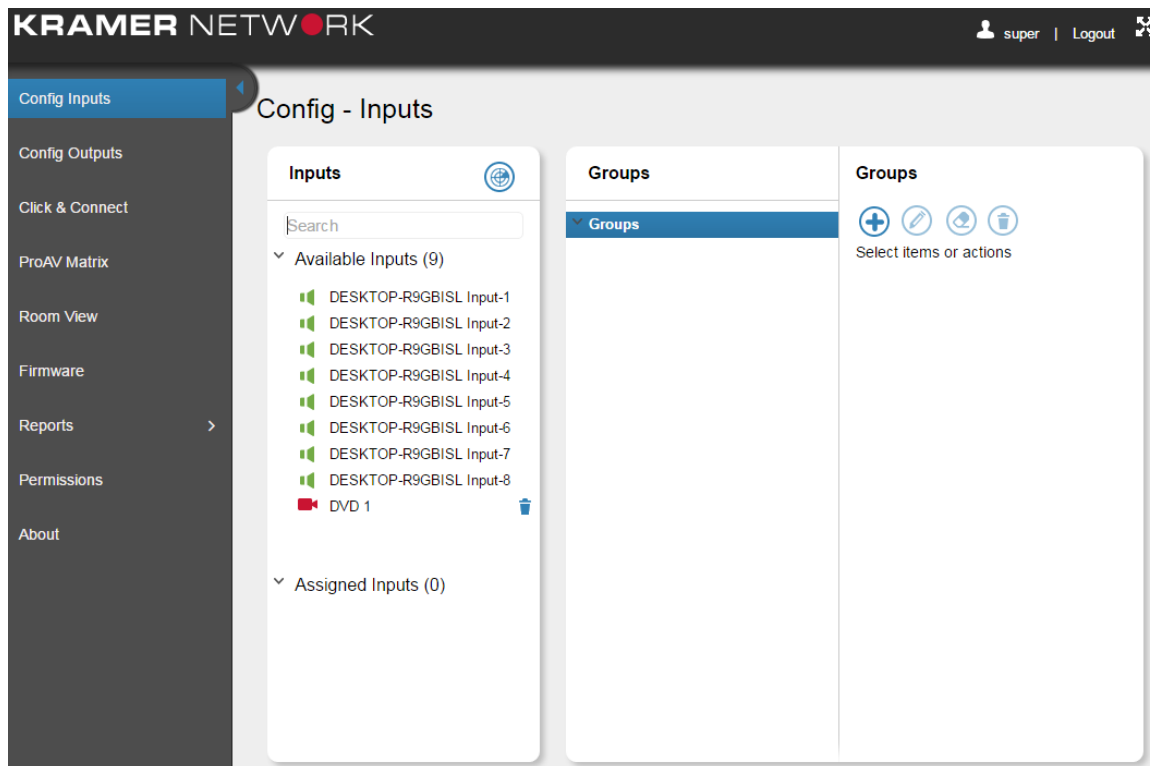





Figure 10: Scanning for Sources


When a device is disconnected from the network, the icon next to the device name turns red and you can remove it from the available devices list by clicking the trash icon by its side (see example in [Figure 10](#)).

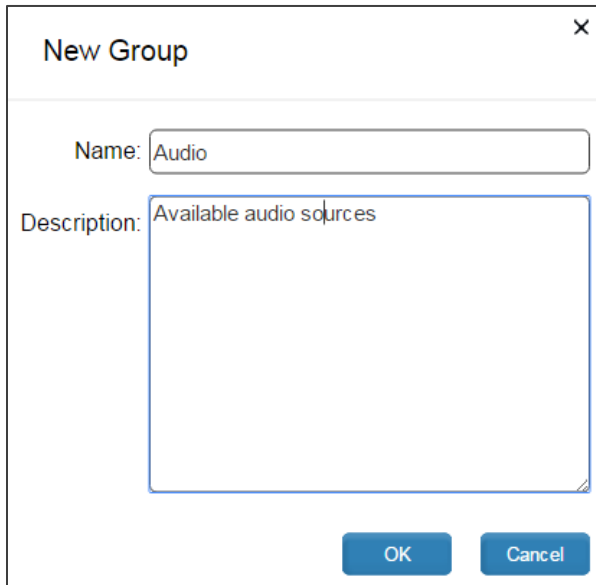
You can use the Search text box to filter inputs.

The following table defines the device status color key (same for audio and video devices):

Icon Color	Status Definition
	Ready (for example, the audio device is ready)
	Awaiting Connection (for example, the video device is awaiting connection)
	Removed from the Network (for example the audio device was disconnected from the network)

These available sources will be set into logical groups for convenience of use. The logical groups come in one or optionally two levels. For example, you may want to create a logical group of sources for all video streams and another group of sources for all the audio streams. This topology will then be presented in other menus such as Click & Connect, ProAV Matrix and Room-View.

To create the groups, click the “add new group” icon  and type in the details:

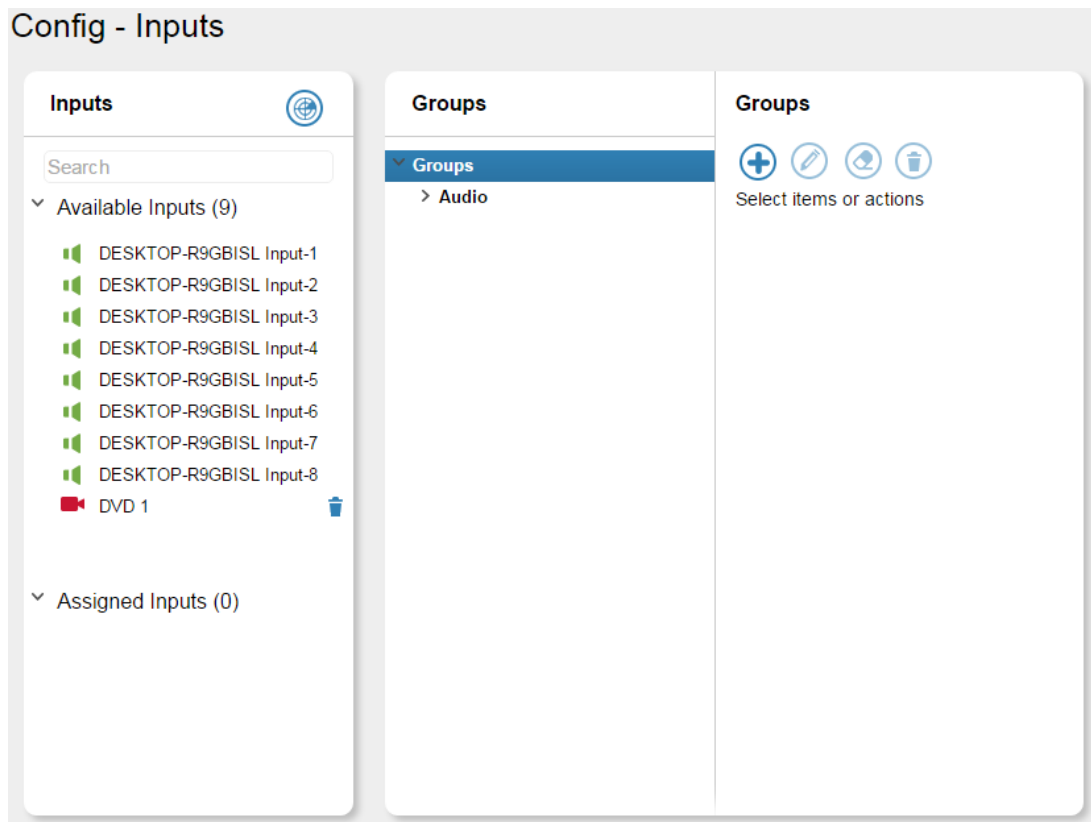


A dialog box titled "New Group" with a close button (X) in the top right corner. It contains a "Name:" label followed by a text input field containing the word "Audio". Below this is a "Description:" label followed by a larger text area containing the text "Available audio sources". At the bottom right are two buttons: "OK" and "Cancel".

Figure 11: Adding a New Group

Click **OK**.

The new group is added to the sources list. You can add as many groups as needed:







The "Config - Inputs" interface is shown. It has a left sidebar with "Inputs" and a search bar. Under "Available Inputs (9)", there are eight "DESKTOP-R9GBISL Input-1" through "Input-8" (each with a green speaker icon) and "DVD 1" (with a red camera icon and a trash can icon). Under "Assigned Inputs (0)", there are no items. The main area is divided into two panels. The left panel is titled "Groups" and shows a tree view with "Groups" expanded, showing "Audio" under it. The right panel is also titled "Groups" and shows four icons: a plus sign, a pencil, a refresh/circular arrow, and a trash can, with the text "Select items or actions" below them.

Figure 12: The Groups List

A subgroup may be used to enable a second level group under a defined group for enhanced usability and site customization possibilities.

Use the Group icons (on the right-hand side of the page) to edit, delete or change the content of the groups or add sub-groups at any time:

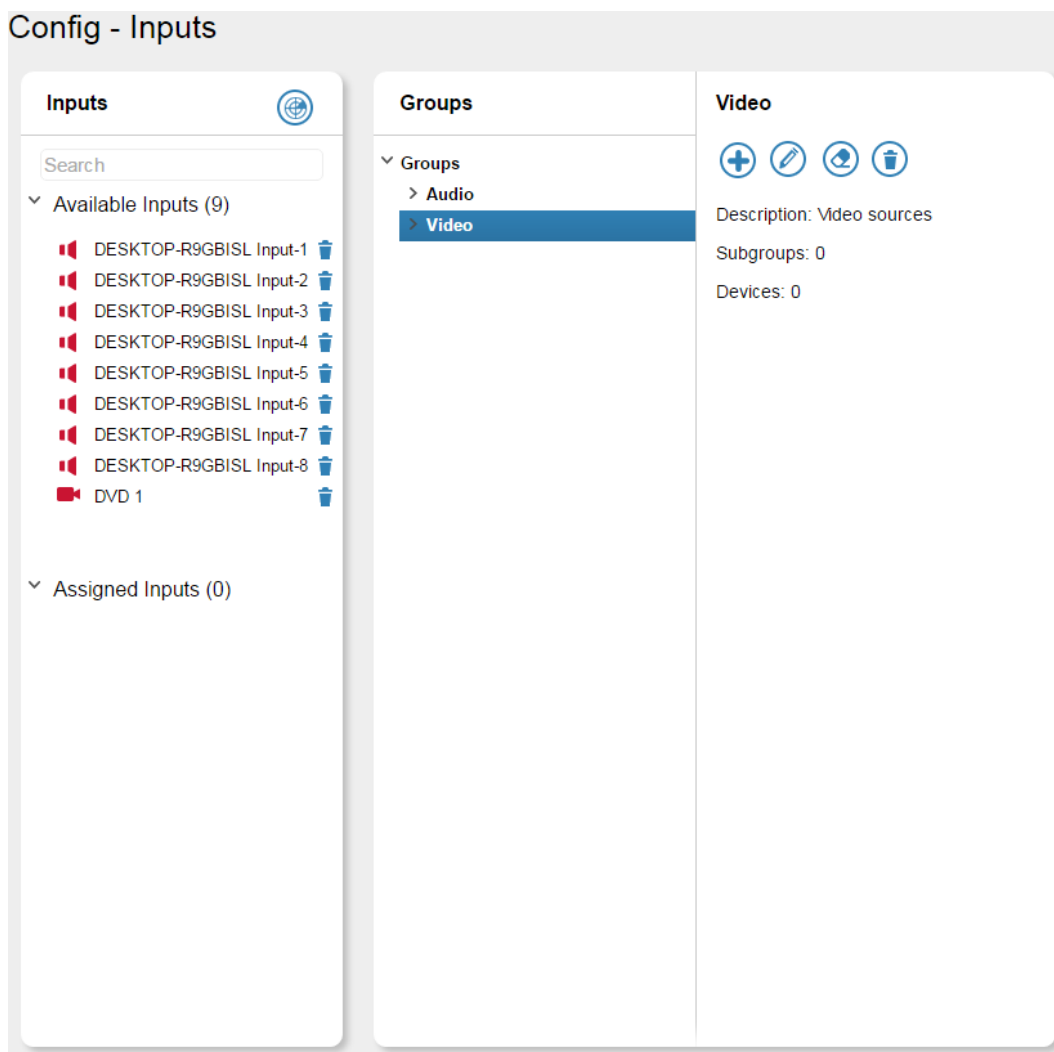
The Icon	Description
	Add a new group or a new subgroup
	Edit the group name and description
	Delete the content of the group but leave the group itself
	Delete the group name and its content or remove the device from the group to the available devices



Note that the video inputs are devices that are connected to Kramer encoders and the audio inputs are devices that are connected to Kramer Dante Interfaces (for example, the **FC-404NET**).

You can add as many groups or subgroups as needed:

## Config - Inputs



The screenshot displays the 'Config - Inputs' interface, which is divided into three main panels: 'Inputs', 'Groups', and 'Video'.

- Inputs Panel:** Features a search bar and two sections: 'Available Inputs (9)' and 'Assigned Inputs (0)'. The 'Available Inputs' section lists eight 'DESKTOP-R9GBISL Input' devices (Input-1 through Input-8) and one 'DVD 1' device. Each device has a red speaker icon and a trash can icon.
- Groups Panel:** Shows a tree structure under 'Groups'. It has a dropdown arrow and two options: 'Audio' and 'Video'. The 'Video' option is currently selected and highlighted in blue.
- Video Panel:** Contains four icons at the top: a plus sign (Add), a pencil (Edit), a person (Delete content), and a trash can (Delete group). Below these icons, the text reads: 'Description: Video sources', 'Subgroups: 0', and 'Devices: 0'.

Figure 13: Adding a Video Group

Once you have groups you can drag devices from the Available list into a group: Drag the sources to the groups:

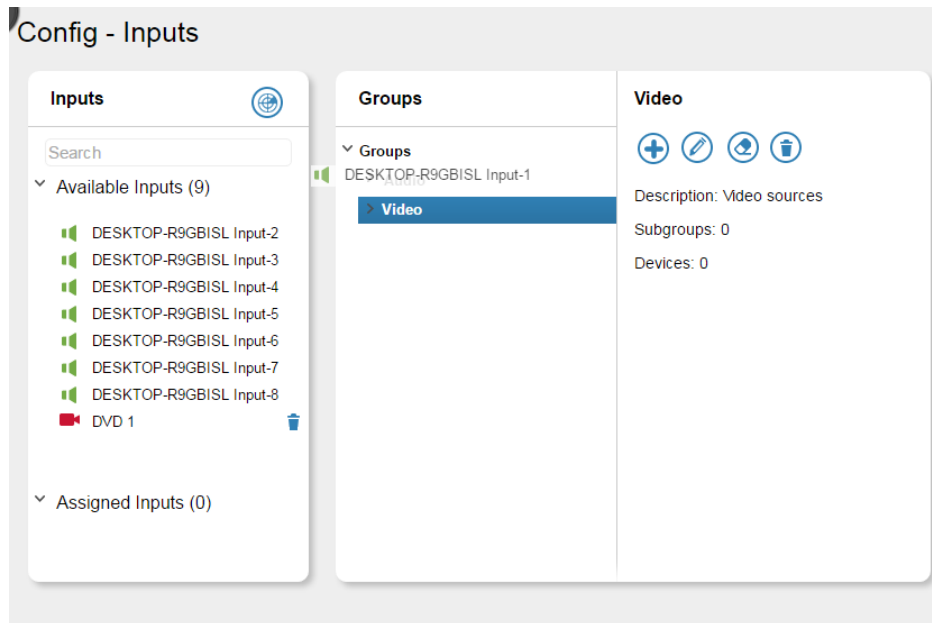


Figure 14: Dragging a Source into a Group

Devices that are assigned in groups appear under the assigned inputs list stating their group location:

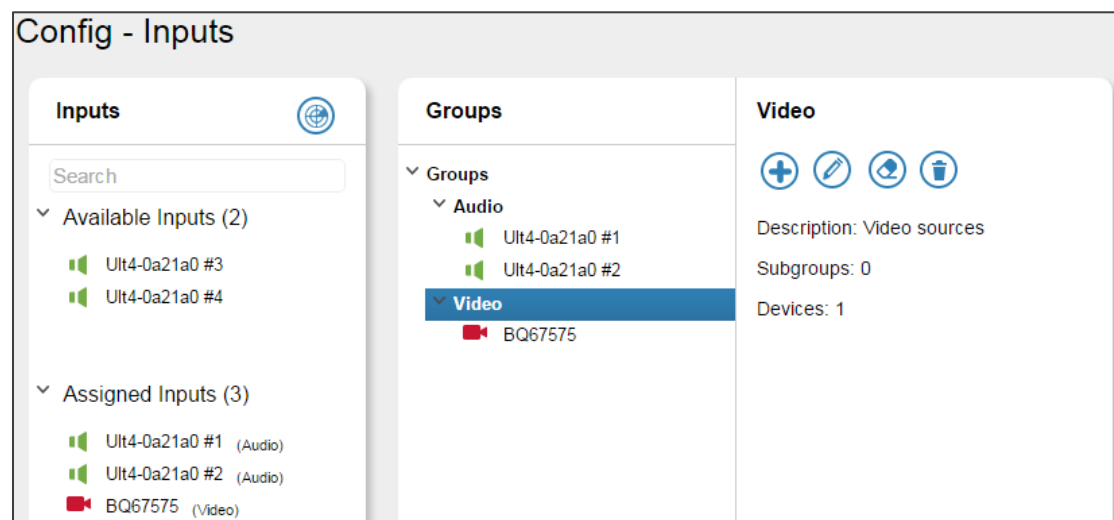


Figure 15: Devices Assigned to Groups



When a new device is connected to the network, the Super user identifies a new entry in the available inputs and is able to associate it to the relevant group.

The column on the right shows the available actions for a group, subgroup or specific device. When a device is selected its details are specified in the right-side column:

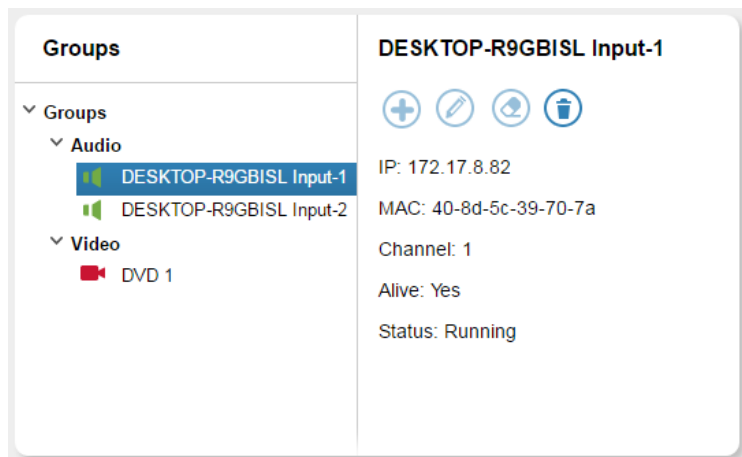


Figure 16: Device Details

Right-click a device to start/stop streaming, rename the device and configure the device parameters.

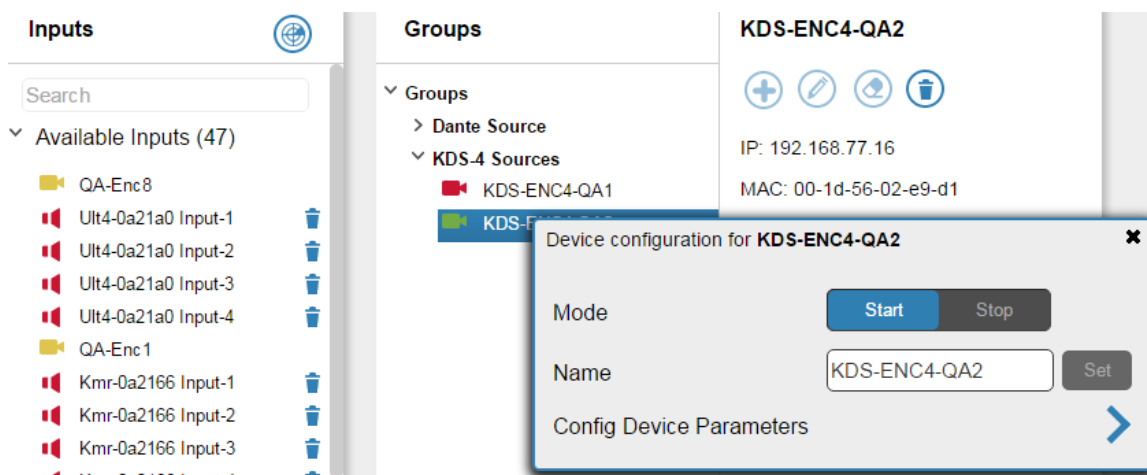


Figure 17: Device configuration

### 3.1.1 Input Config Device Parameters

Click the **Config Device Parameters** line to open the device settings window. The Device Settings window includes three tabs and is specific for each device type. [Figure 18](#) shows an example of device settings tabs of an audio device.

The parameters that appear on this menu reflect the API provided by the device, and thus may change from one device type to another.

Figure 18 shows the audio streamer Device Settings tabs:

The figure displays three screenshots of the 'Device Settings for Dante-QA1 Input-1' dialog box, showing different tabs: General, Settings, and Network.

**General Tab:** This tab contains 'Device Info' with the following fields:

Field	Value
Friendly Name	Dante-QA1
UDPAccessibility	True
Accessibility	Accessible
Model Name	FC-404NET
Name	Dante-QA1
Firmware Version	1.6.31563
Device ID	001dc10a2192
Type	Hybrid

**Settings Tab:** This tab contains 'Output Audio' settings:

- Input
- Output
- Input Audio

**Network Tab:** This tab contains 'Network Config' settings:

Field	Value
Use DHCP	ON
MAC Address	001dc10a2192
IPv4 Address	192.168.77.201
IPv4 NetMask	255.255.0.0
IPv4 Gateway	0.0.0.0

Figure 18: Device Settings Tabs –Audio Input



Note that the audio device settings include both input and output parameters. Changing the output settings here will affect the audio device settings in the Config Outputs page.



Figure 19 shows the video encoder Device Settings tabs:

The figure displays three screenshots of the 'Device Settings for KDS-ENC4-QA1' window, showing different tabs: General, Settings, and Network.

**General Tab:**

- Device Info
- Friendly Name: KDS-EN4-1 (Set)
- Type: Encoder
- Device ID: 001d5602e9cc
- Accessibility: Accessible
- Name: KDS-EN4-1
- Firmware Version: 01.06.32489
- State: Encoding
- Model Name: KDS-EN4

**Settings Tab:**

- Connection Settings
- Folder Name: stream (Set)
- Stream Port: 554 (Set)
- Streaming Protocol: RTSP (Set)
- Action
- Streamer Settings

**Network Tab:**

- Network Config
- IPv4 Address: 192 . 168 . 77 . 43 (Set)
- Use DHCP: ON (OFF)
- IPv4 Gateway: 192 . 168 . 0 . 1 (Set)
- IPv4 NetMask: 255 . 255 . 0 . 0 (Set)
- MAC Address: 001d5602e9cc

Figure 19: Device Settings tabs – (for a Video Device)

3.1.2 Config Inputs Page for Other Users

Figure 20 shows the **KRAMER NETWORK** Config-Inputs page for the Admin.

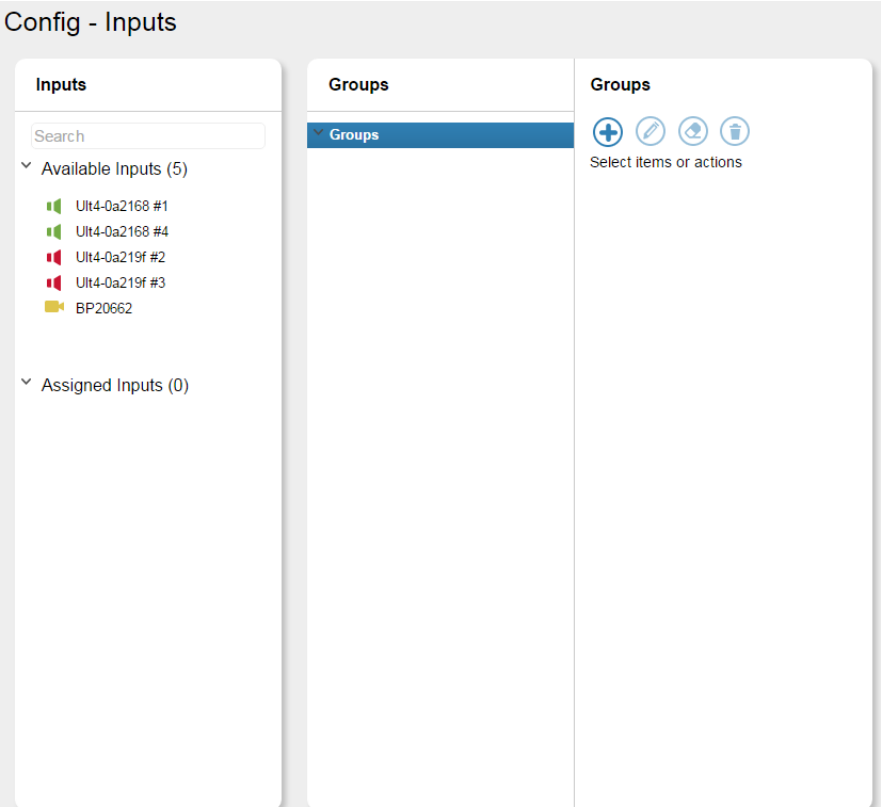


Figure 20: Config-Inputs for the Admin

Figure 21 shows the **KRAMER NETWORK** Config-inputs page for the User:

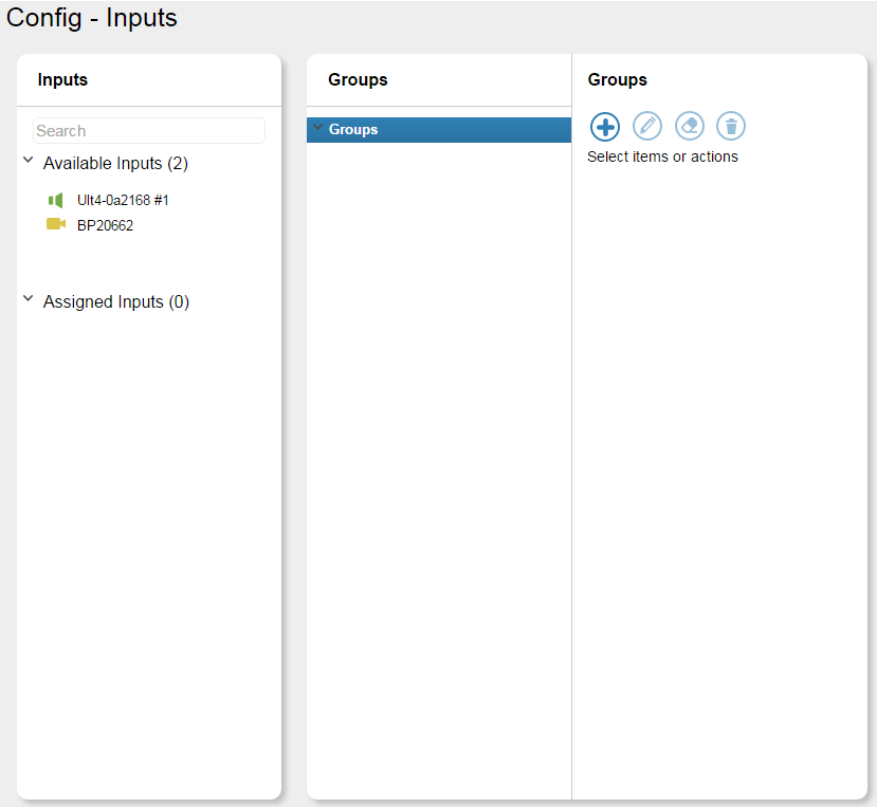


Figure 21: Config Inputs for the User

Both the Admin and User can create groups within their permissions.

## 4 Config Outputs Page

Select Config Outputs and click the scan button (🌐) to detect the outputs connected to the AV network.

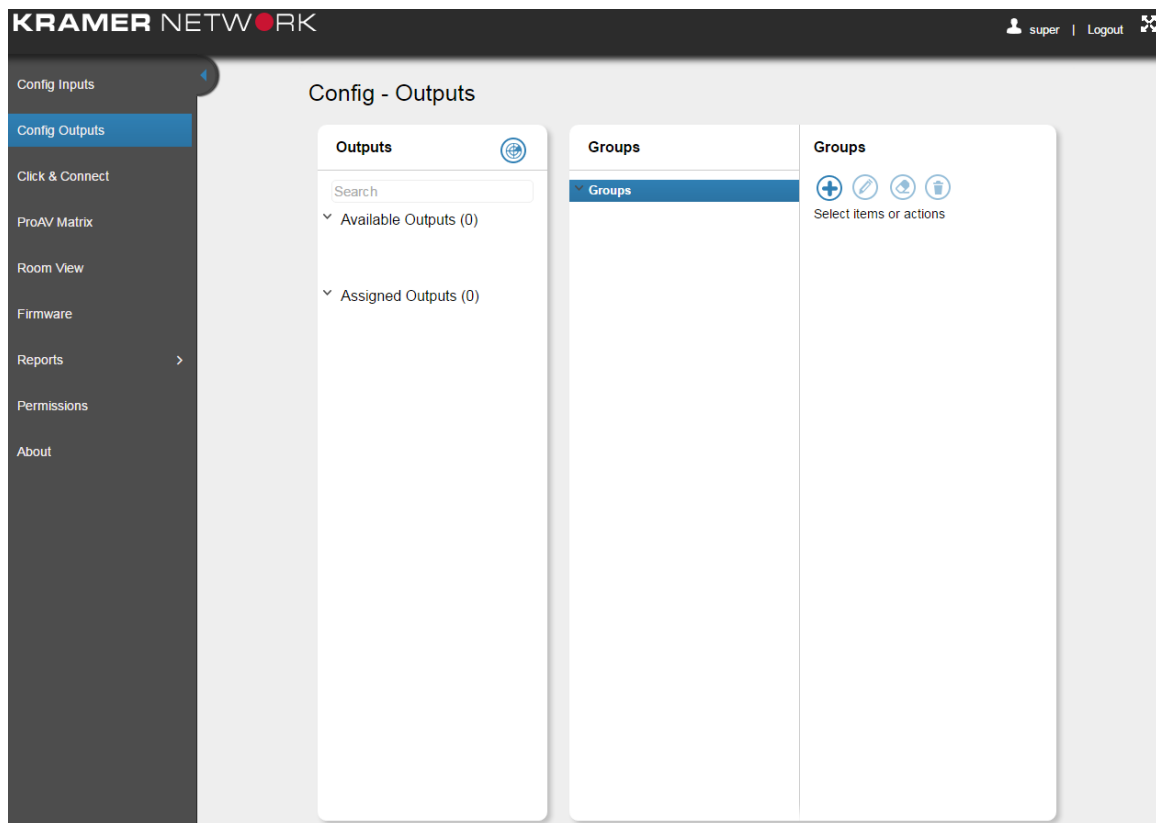



Figure 22: Config Outputs Page

After clicking the scan  button to discover all the decoders on the LAN, all the connected devices appear in the “Available Outputs” list.

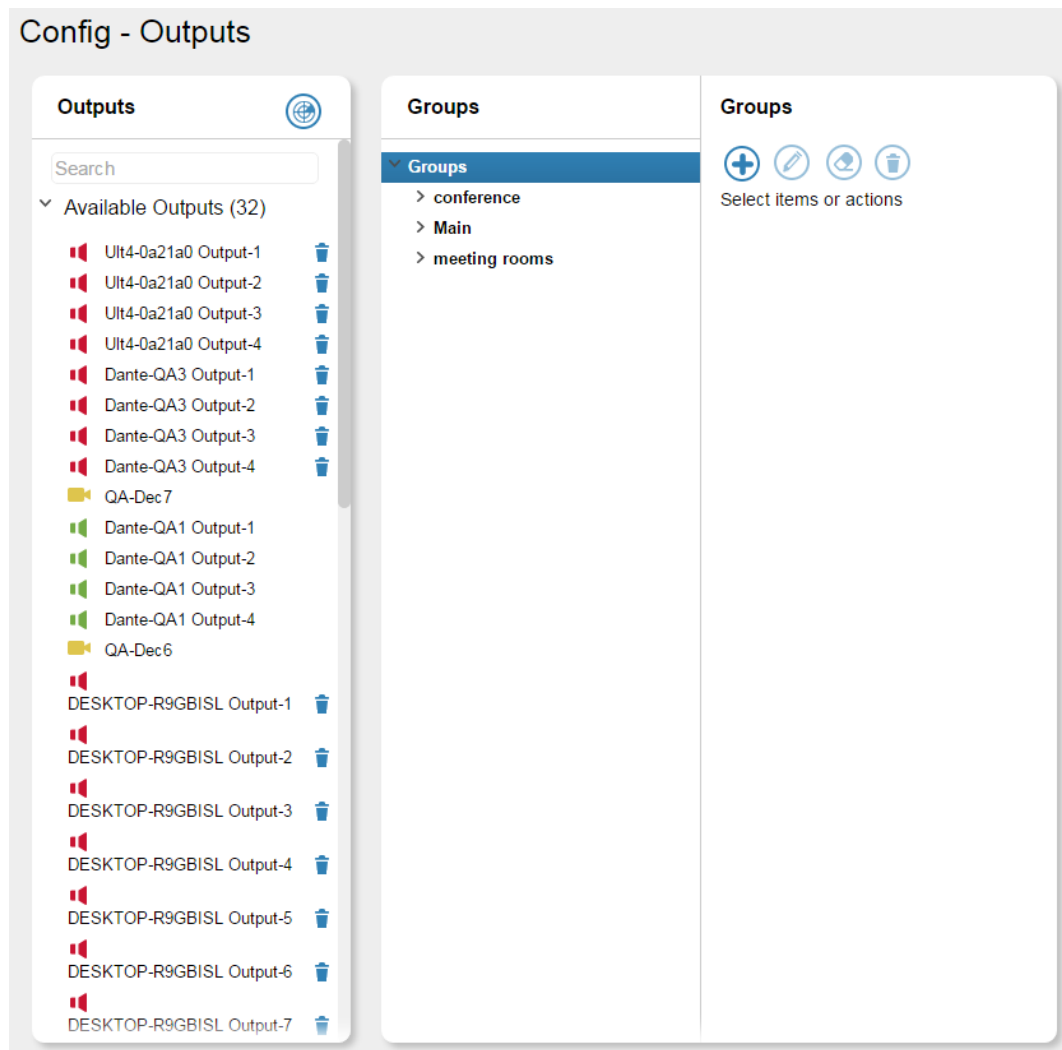



Figure 23: Config Outputs Page – Available Outputs List



Note that the Admin and User do not have access to the Config Outputs.

Use the  button to create groups and assign the detected outputs to subgroups (a floor in a building, for example) and subgroups (rooms in a selected floor) which represent their physical location.

The topology created here is also represented in the Click & Connect (virtual matrix) and the room-view menus. Subgroups here represent rooms. Each room created here will have its own entry in the room-view menu. The Groups created here will be represented as floors/buildings in the room-view menu.

In this example, the floors in the building have different types of meeting rooms and the groups are set accordingly:

## Config - Outputs

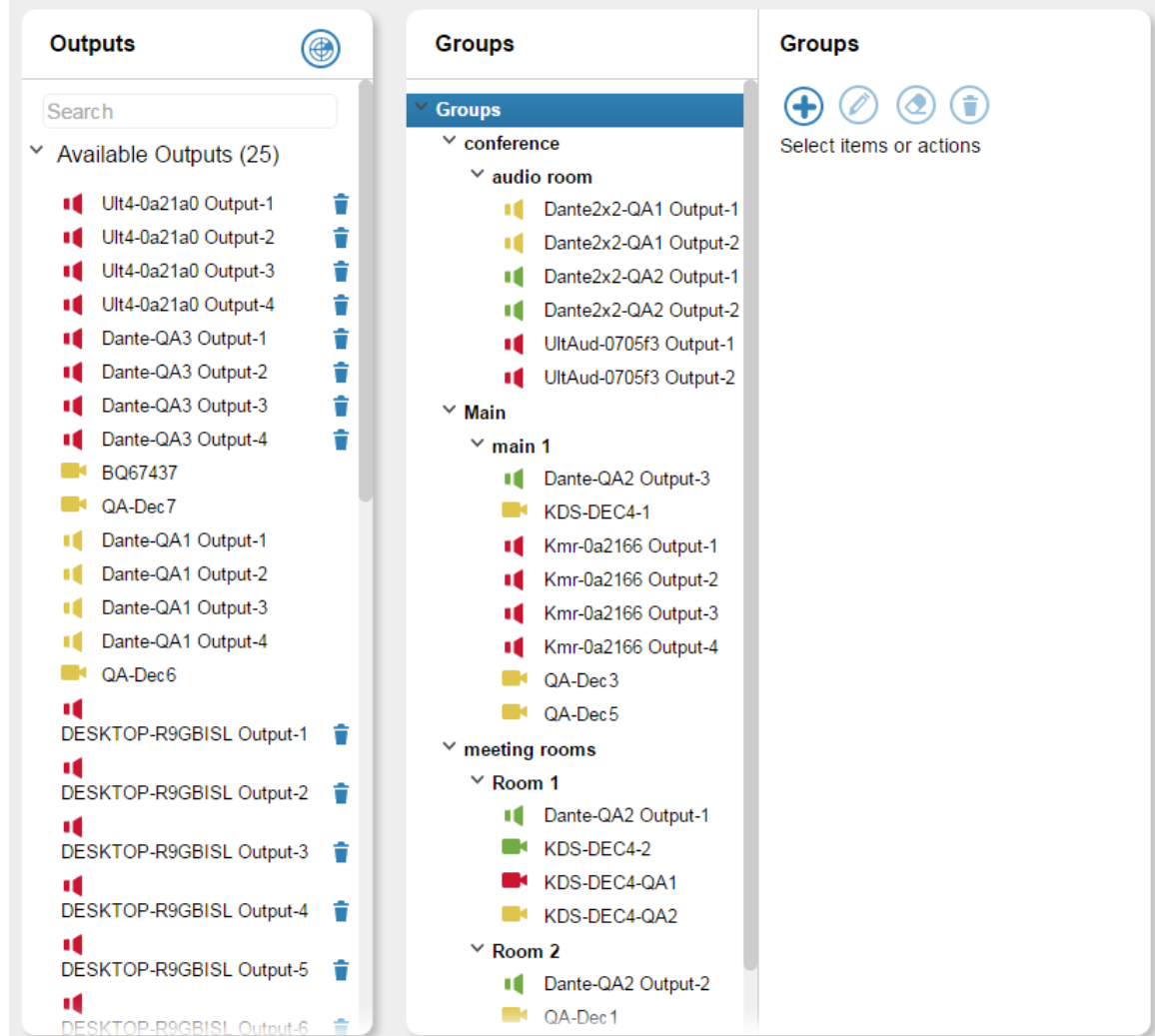


Figure 24: Config Outputs Example

The following table defines the device status color key (same for audio and video devices):

Icon Color	Status Definition
	Ready (for example, the audio device is ready)
	Awaiting Connection (for example, the video device is awaiting connection)
	Removed from the Network (for example the audio device was disconnected from the network)

Right-click a device to configure its settings (available only when the device is connected):

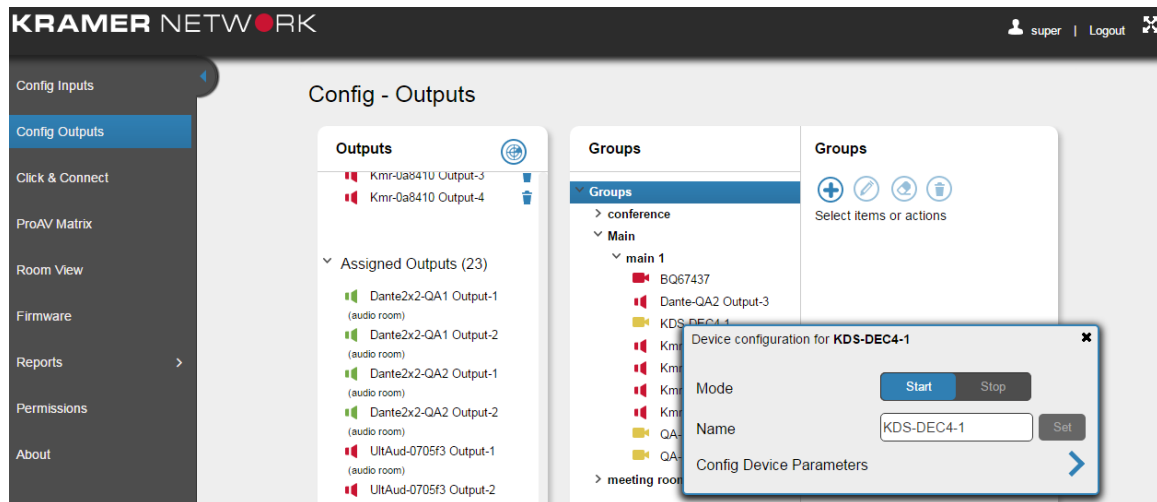


Figure 25: Video Output Device Configuration

#### 4.1.1 Output Config Device Parameters

The Device configuration window includes three tabs and is specific for each device type. [Figure 26](#) (for video decoders) and [Figure 27](#) (for audio outputs) show an example of the device settings tabs.

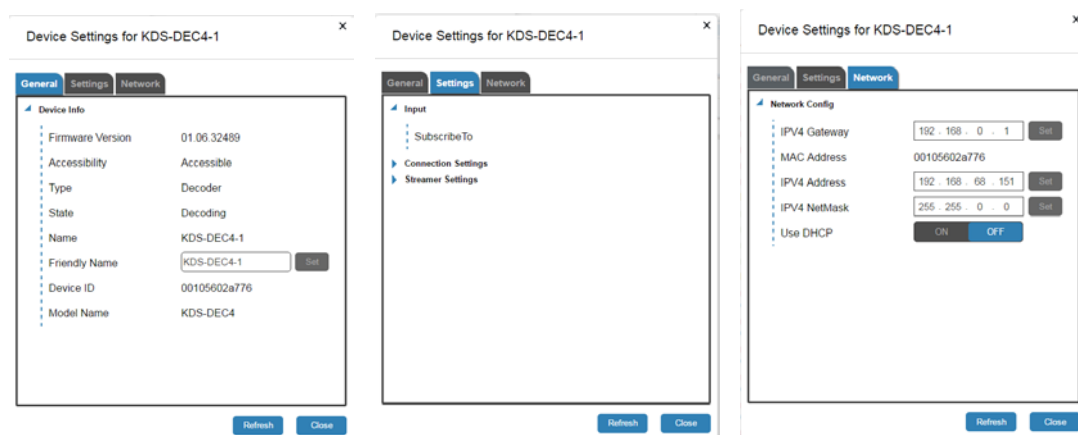


Figure 26: Decoder Device Settings Tabs (Video)

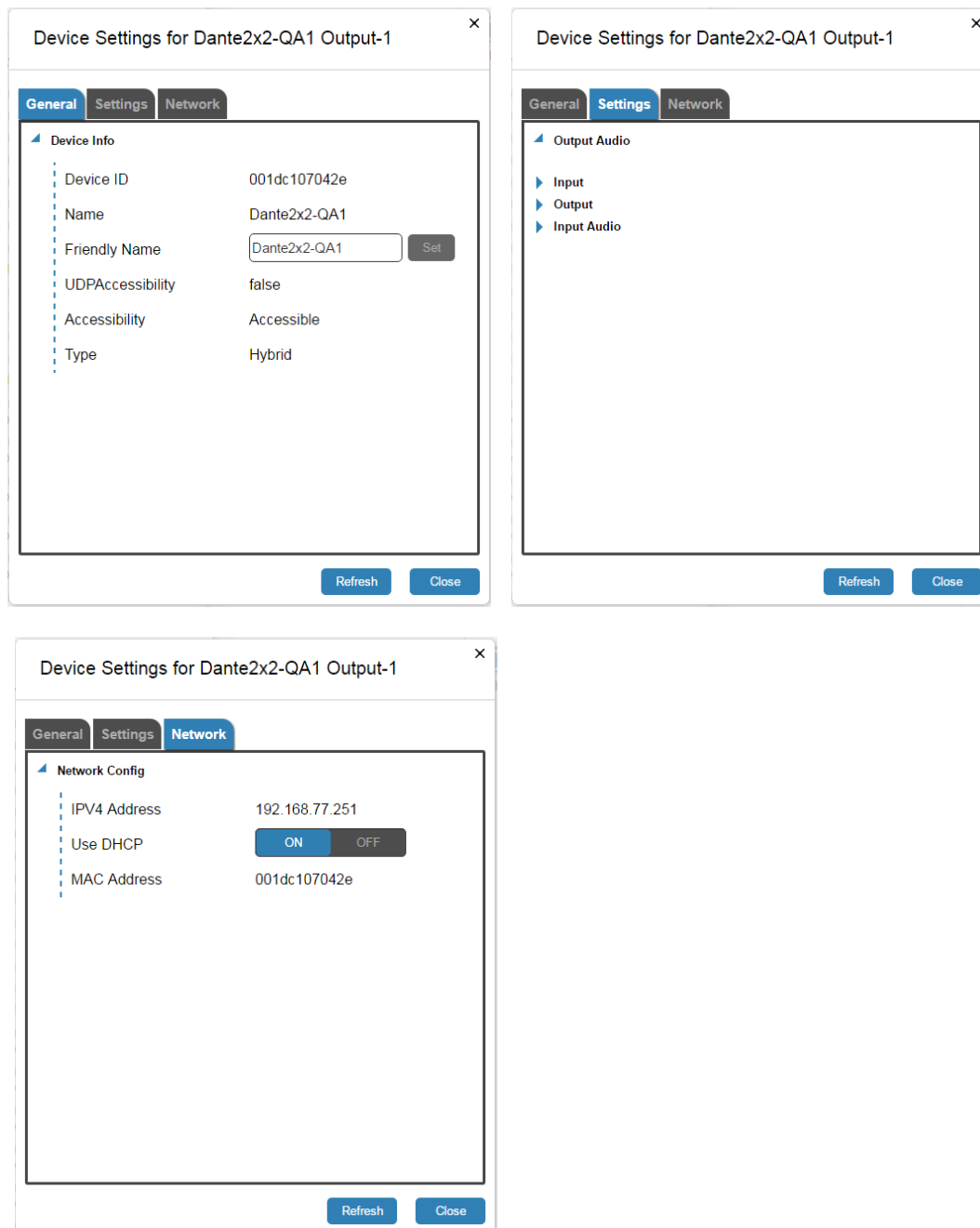


Figure 27: The Decoder Device Settings Tabs (Audio)



Note that the audio device settings include both input and output parameters. Changing the input settings here will affect the audio device settings in the Config Inputs page.

## 5 Click & Connect Page

After creating the Input and Output groups of streaming devices and setting the topology appropriately, select the Click & Connect page. The Click & Connect page shows all the groups that were added when configuring the inputs and outputs (see [Figure 28](#)) and lets you connect the inputs to the outputs or disconnect them (the video and audio devices are set separately). Scenarios are added recorded and saved.



Note that the Click & Connect page is only accessible to the Super user and the Admins.

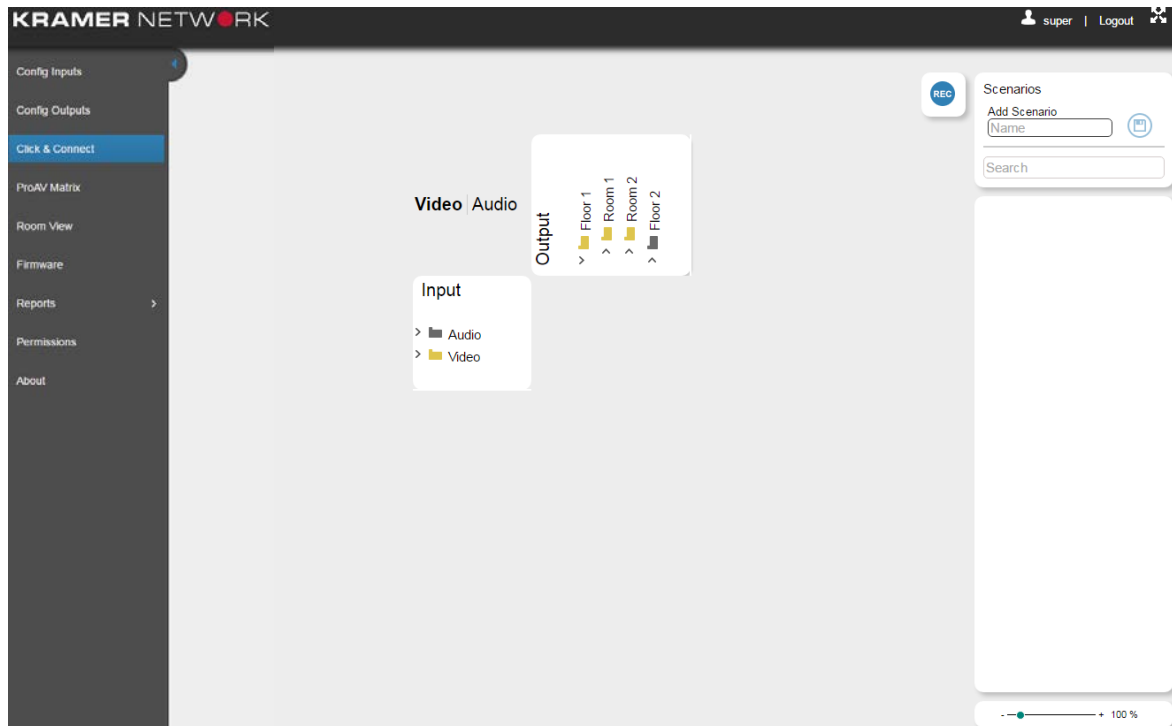


Figure 28: The Click & Connect Page

The input-output virtual matrix is scalable, allowing focus on a specific group of inputs and outputs or the entire network at once. You can view the current status of the matrix and check that the in-out connections are OK, or detect a malfunction that requires your attention such as a disconnected device or a signal that is not detected.

Click on an empty cross-point to connect an input to the output. Note that the video and audio inputs are displayed separately, the inputs are arranged according to the groups defined in the Config Inputs page and the outputs are arranged in their physical location (as defined in the Config Outputs page).



In this example the audio input-output matrix is viewed:

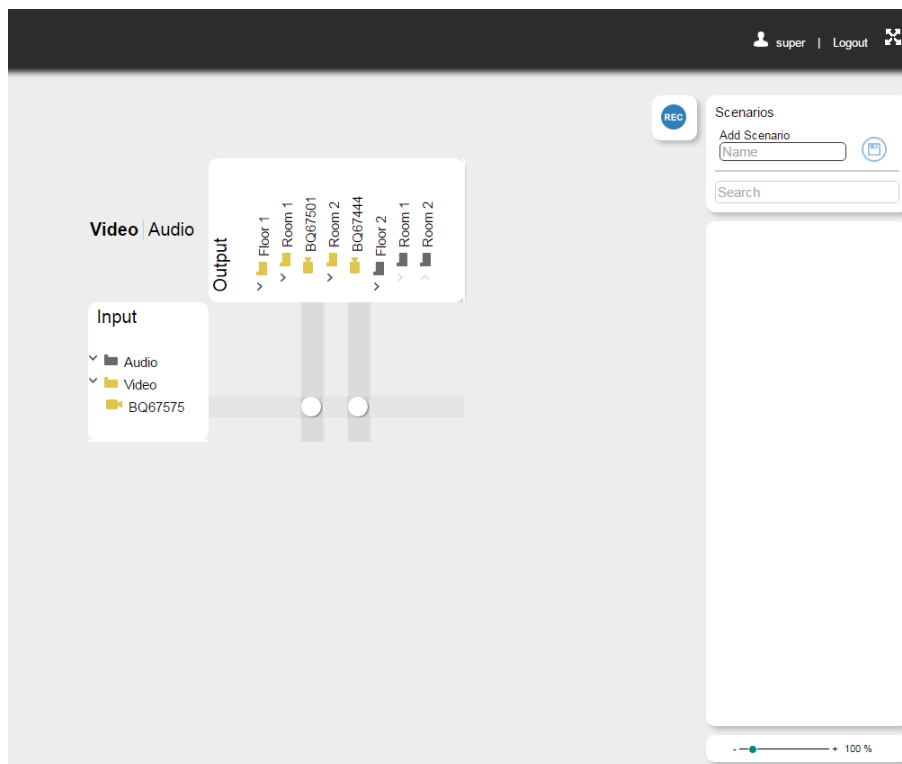


Figure 29: The Click & Connect Page – the Video Input-Output Matrix

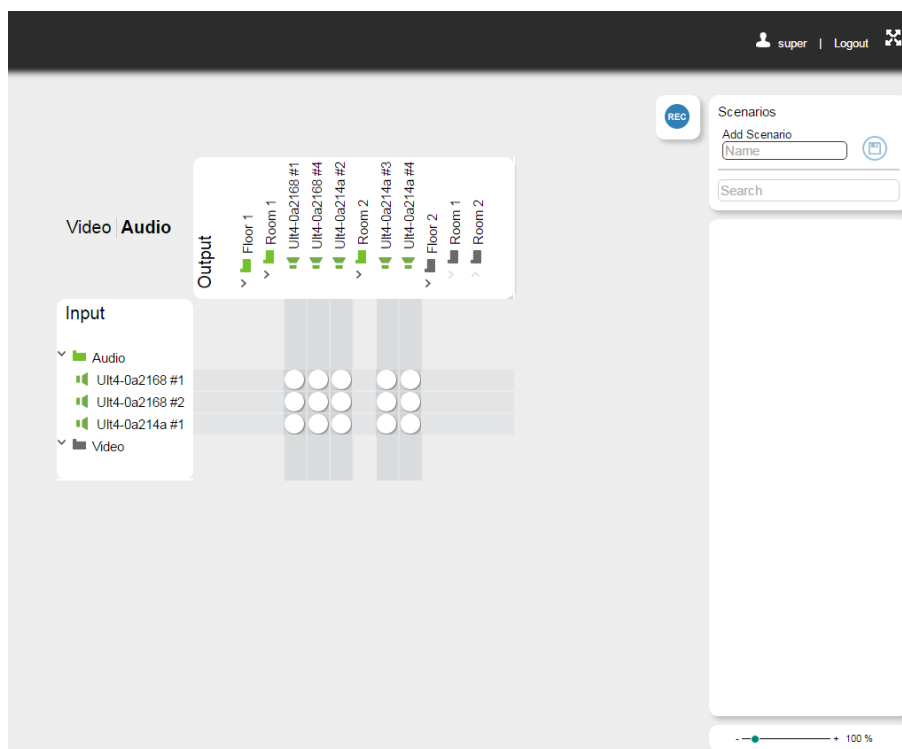


Figure 30: The Click & Connect Page – the Audio Input-Output Matrix

The status of the device (video and audio) can be identified according to the following table:




Device Icons	Description
	The device is not connected (for example, a video device)
	The device is connected and a signal is detected (for example, an audio device)
	Warning. For example, No signal on input, awaiting connection, device stopped encoding, and so on (for a video device in this example)

Figure 31 shows an example of the video cross-points:

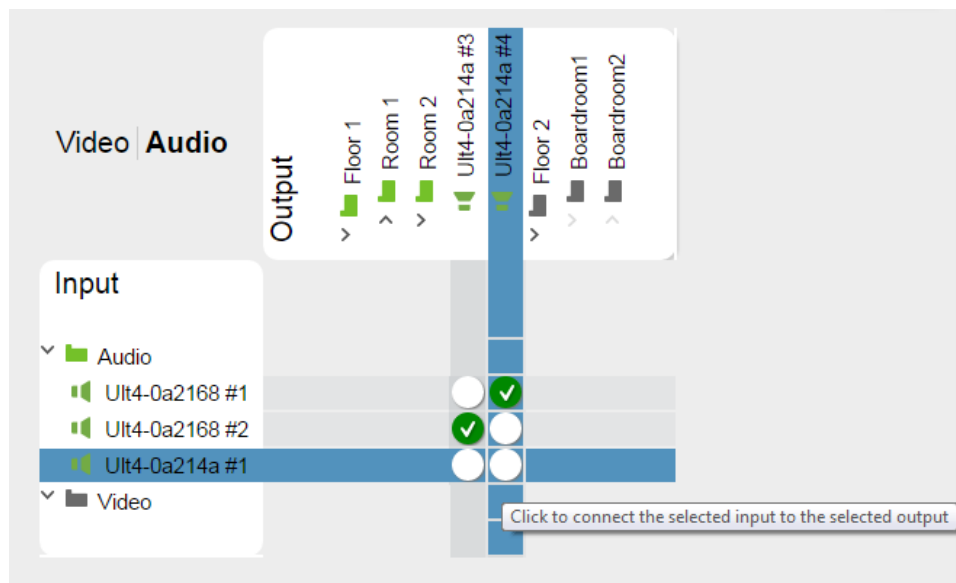


Figure 31: The Click & Connect Page – Cross Points

Click a node to connect between an input and an output. On the lower right side you can use the slider to zoom in or out:

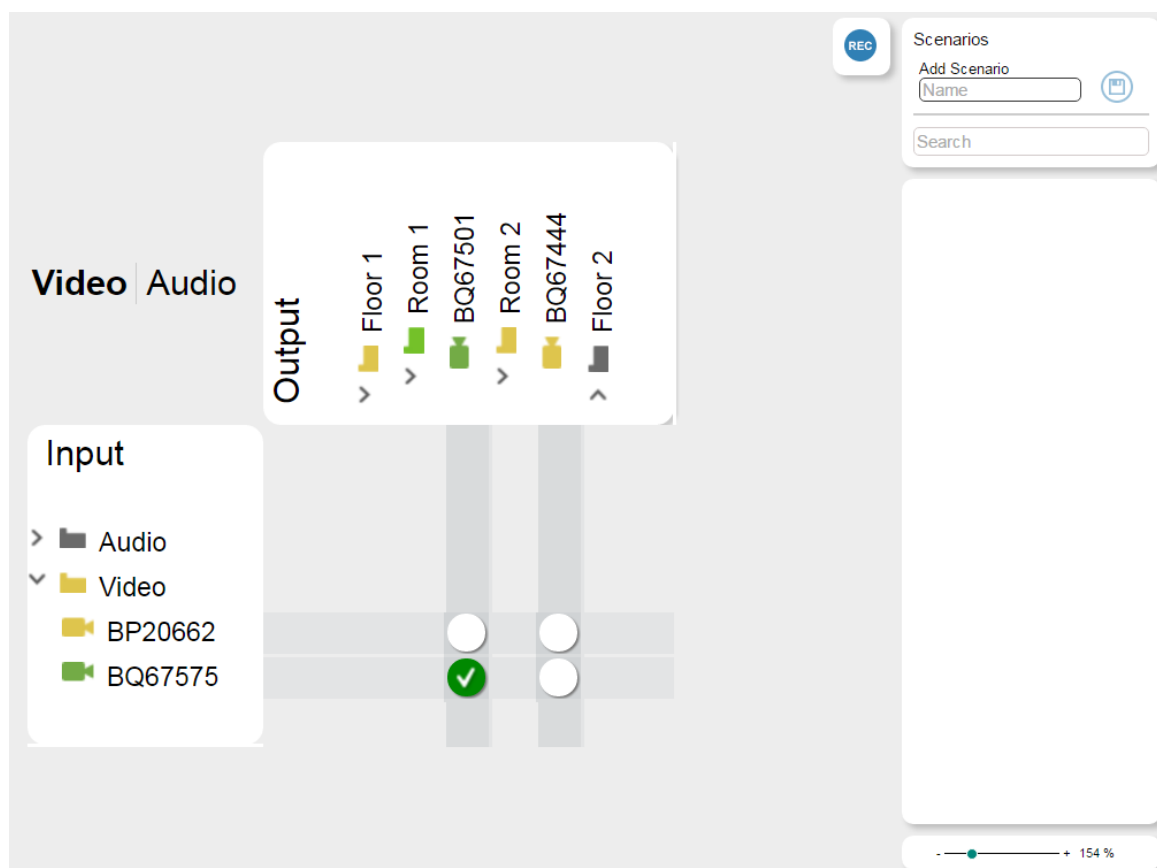


Figure 32: The Click & Connect Page – Zoomed In

The Matrix shown can be as large as needed. [Figure 33](#) shows an example of a different, larger matrix.

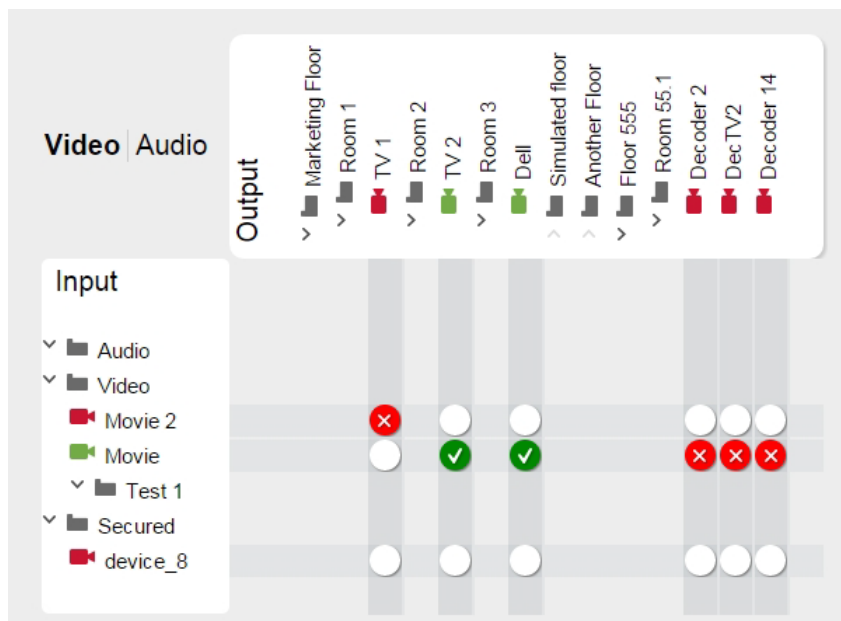


Figure 33: An Input – Output Matrix

In this example there are four floors with different types of rooms. The inputs are ordered in the logical groups (as defined in Config Inputs) and the outputs are ordered in topological groups (as defined in Config Outputs). An input is switched to an output by simply clicking the node in the crossroad between an input and an output. Connected items are labeled with the following possible icons thus letting you see the status of the whole system at once.

Cross-point Icons	Description
	Signal detected (for example, the video connection between the encoder and decoder is OK)
	The device is disconnected from the network (for example, the video connection between the encoder and decoder is NOT OK)
	Video stream warning (for example, no HDMI in input, awaiting connection, device stopped encoding and so on) or audio stream disabled
	Node not selected

## 5.1 Scenarios

Two types of scenarios are available:

- Saving the current setup (see [Section 5.1.1](#)).
- Recording a sequence of setups (see [Section 5.1.2](#)).

### 5.1.1 Saving the Current Setup

A scenario saves the current status of the matrix and lets you load it whenever needed. Scenarios are separate for audio and video.

The Scenarios box on the right side of the page lets you create scenarios and lists the existing scenarios.

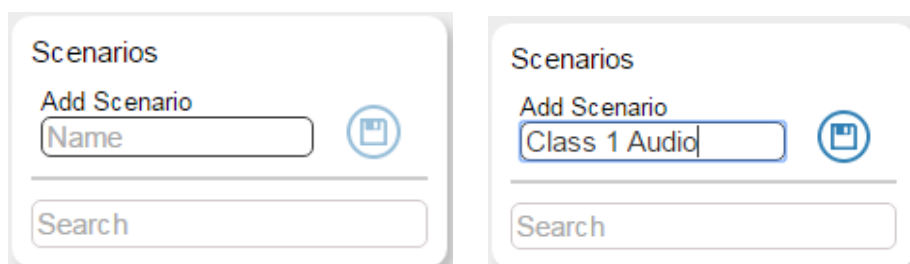


Figure 34: Add an Audio Scenario

The following table defines the different scenario icons:




Scenario Icons	Definition
	Audio Scenario
	Video scenario
	Video and audio scenario

Figure 35 shows a saved audio scenario:

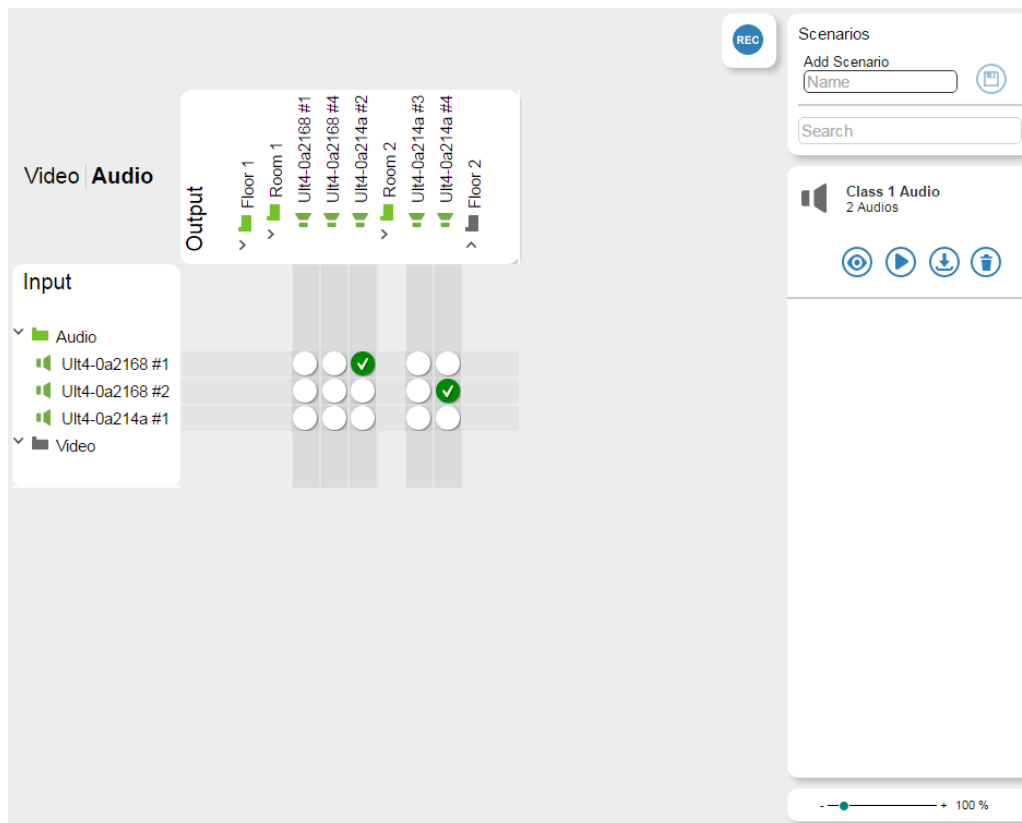






Figure 35: Creating and Saving a Scenario

You can:

- Preview a scenario .
- Load a scenario .
- Update the current scenario with the existing virtual matrix configuration .
- Delete the current scenario .
- Use the Scenario Search text box to search specific scenarios from a list.

After saving the scenario, click the play () button to load the scenario to the matrix.

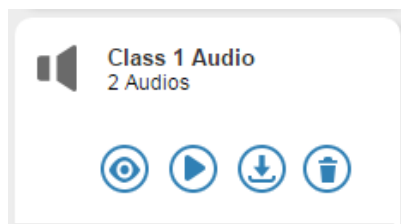


Figure 36: Playing the Scenario

There is no practical limit to the number of scenarios that you can create.

## 5.1.2 Recording Scenarios

Video and audio setups can be “recorded” to form a sequence of scenarios.

To record a scenario, click the blue **REC** button. The Scenario Recording system sets the matrix offline to let you record a sequence of matrix setups which are listed as a log of events and can be stored as a recorded scenario.

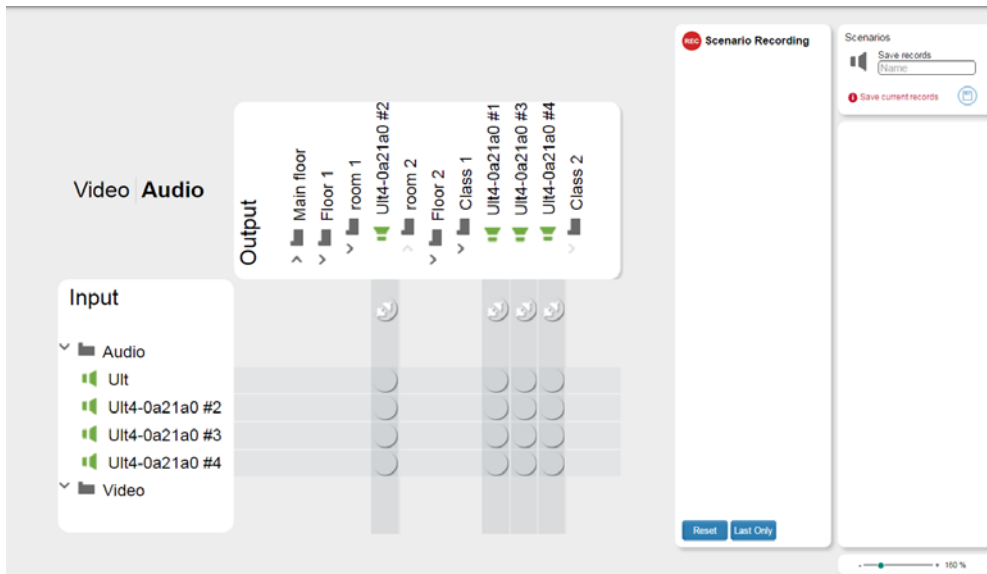


Figure 37: Recording a Scenario – Clicking the REC button

To create a connection, click on the cross-point of the input and output:

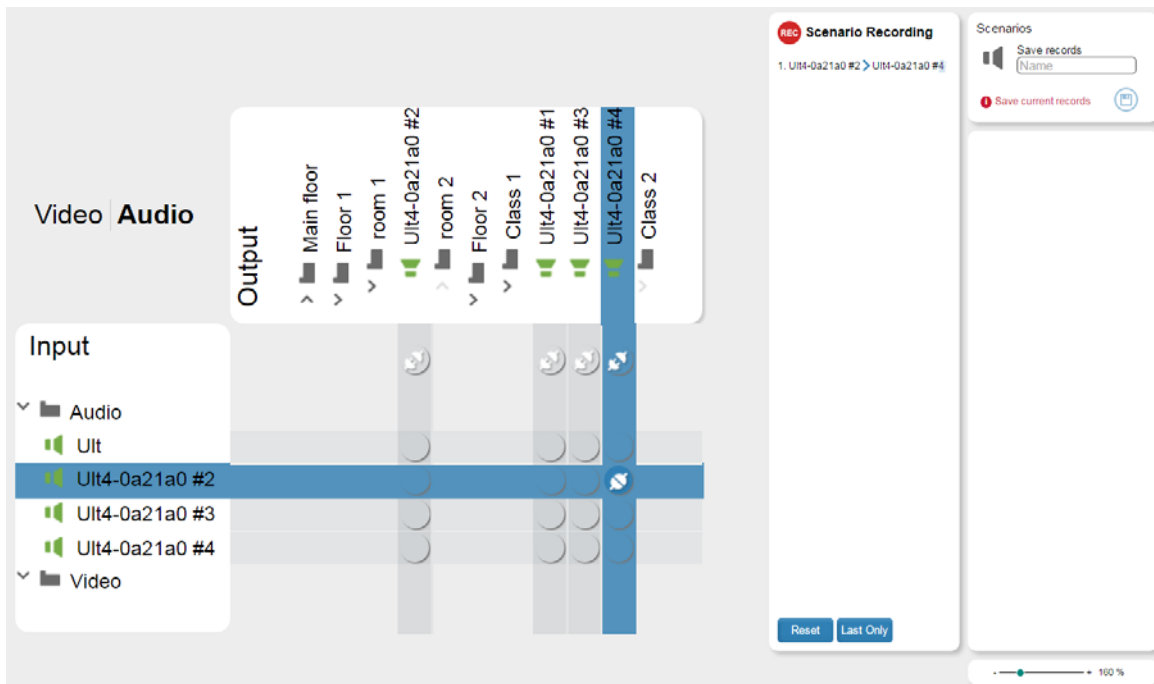


Figure 38: Recording a Scenario – Clicking a Cross Point to Connect an Input to an Output

To disconnect an input-output connection click the disconnect icon just below the output you want to disconnect:

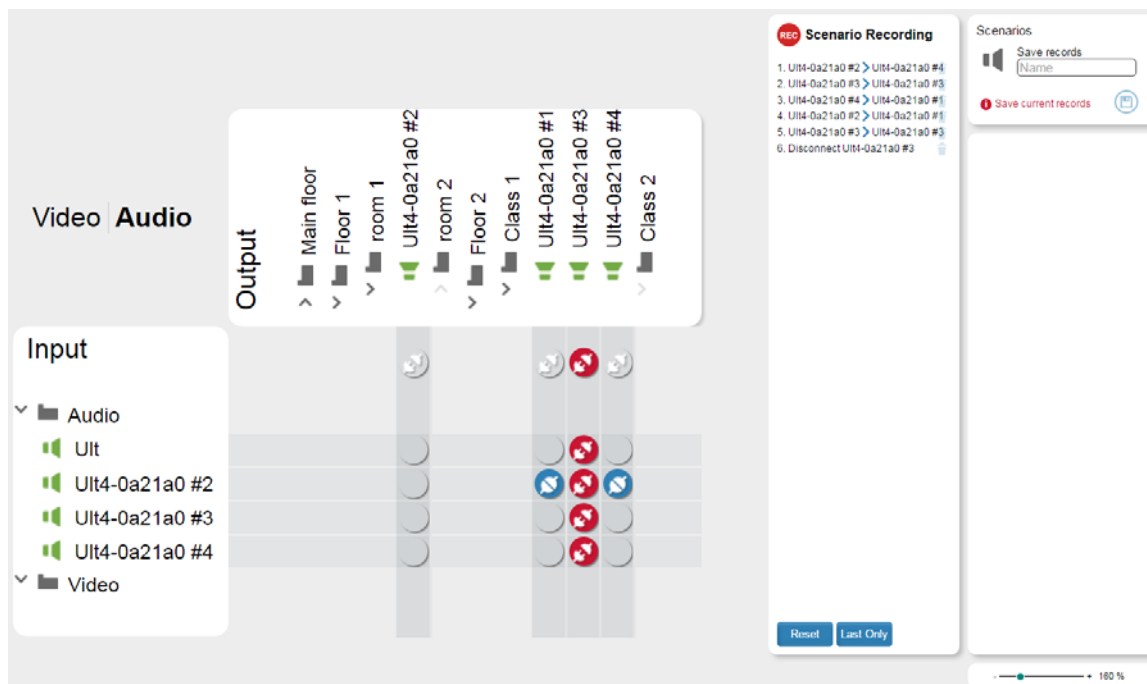


Figure 39: Recording a Scenario – Clicking a Cross Point to Connect an Input to an Output



Note that even if the output is disconnected the inputs keep streaming.

All the actions are logged in the Scenario recording list and can be separately deleted if required.

Click the **Last Only** button to save only the last recorded connections in the matrix. For example, if the recording in [Figure 40](#) includes several connecting operations (on the left), clicking **Last Only** will remove all the connecting operations except for the last recorded operation for each output.

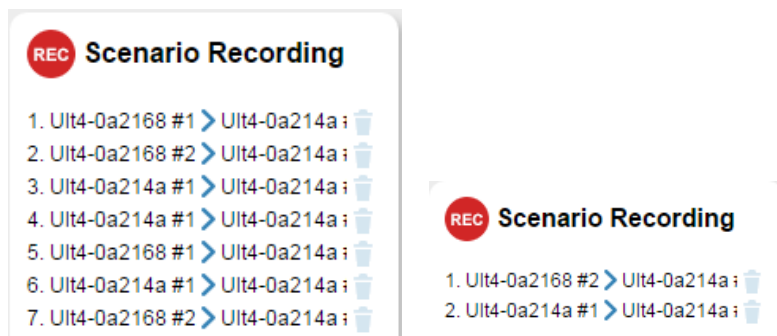


Figure 40: Recording a Scenario – Clicking the Last Only Button



At any point you can return online to the actual setup of the matrix by clicking the red **REC** button (without losing the recorded action list). Click the **REC** button once again to continue recording.

Type in the Scenario name and click the save icon:

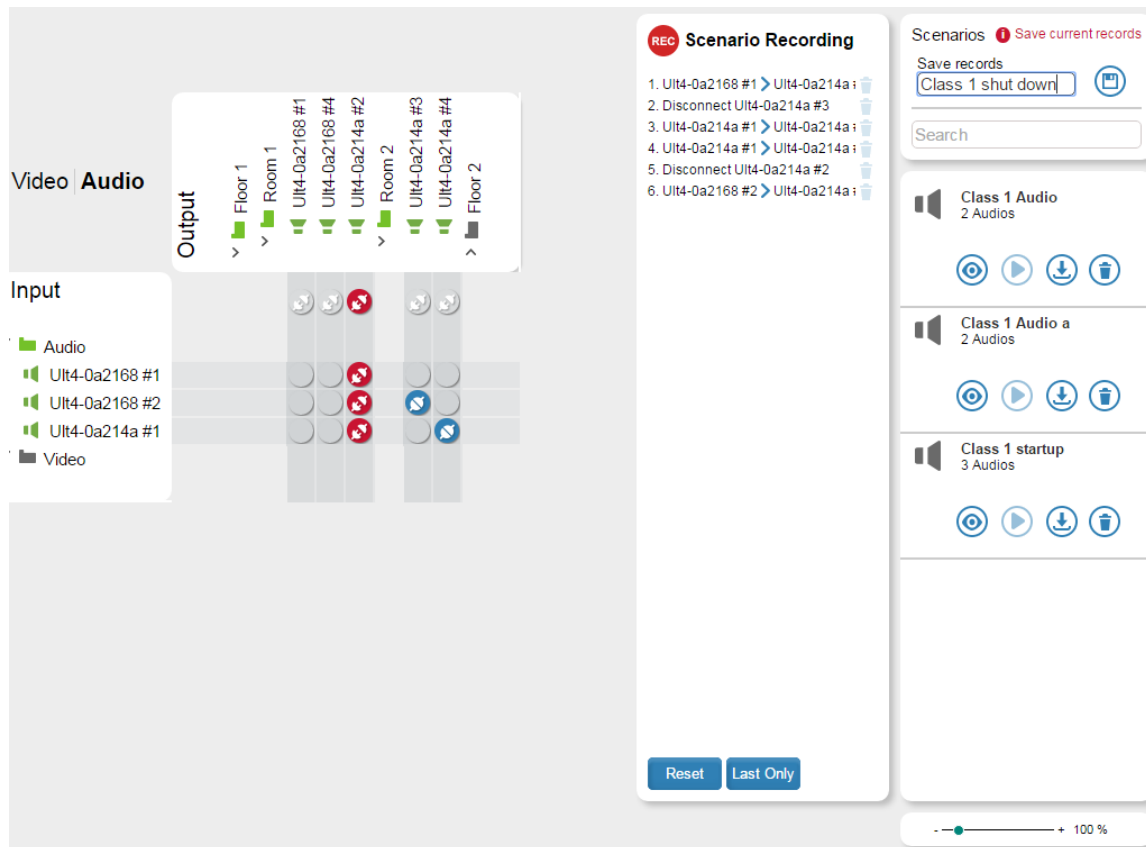


Figure 41: Recording a Scenario – Saving a Recorded Scenario

The Scenario is saved:

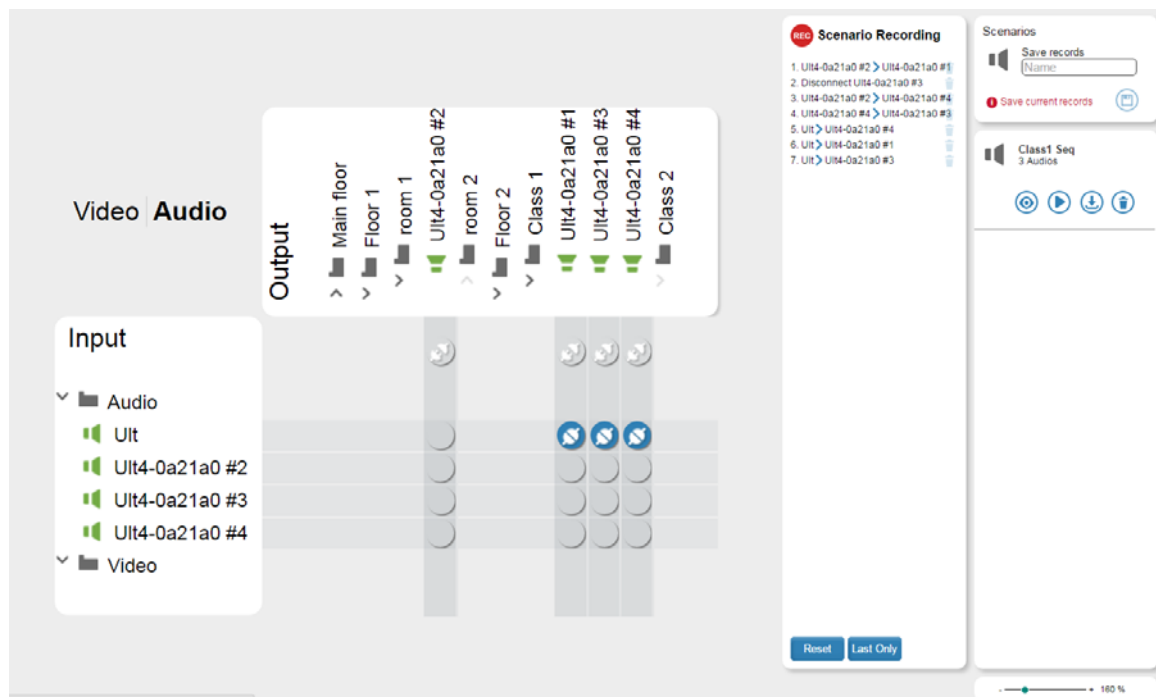


Figure 42: Recording a Scenario – the Saved Recorded Scenario

Click the **Reset** button to delete the entire scenario recorded list of actions.

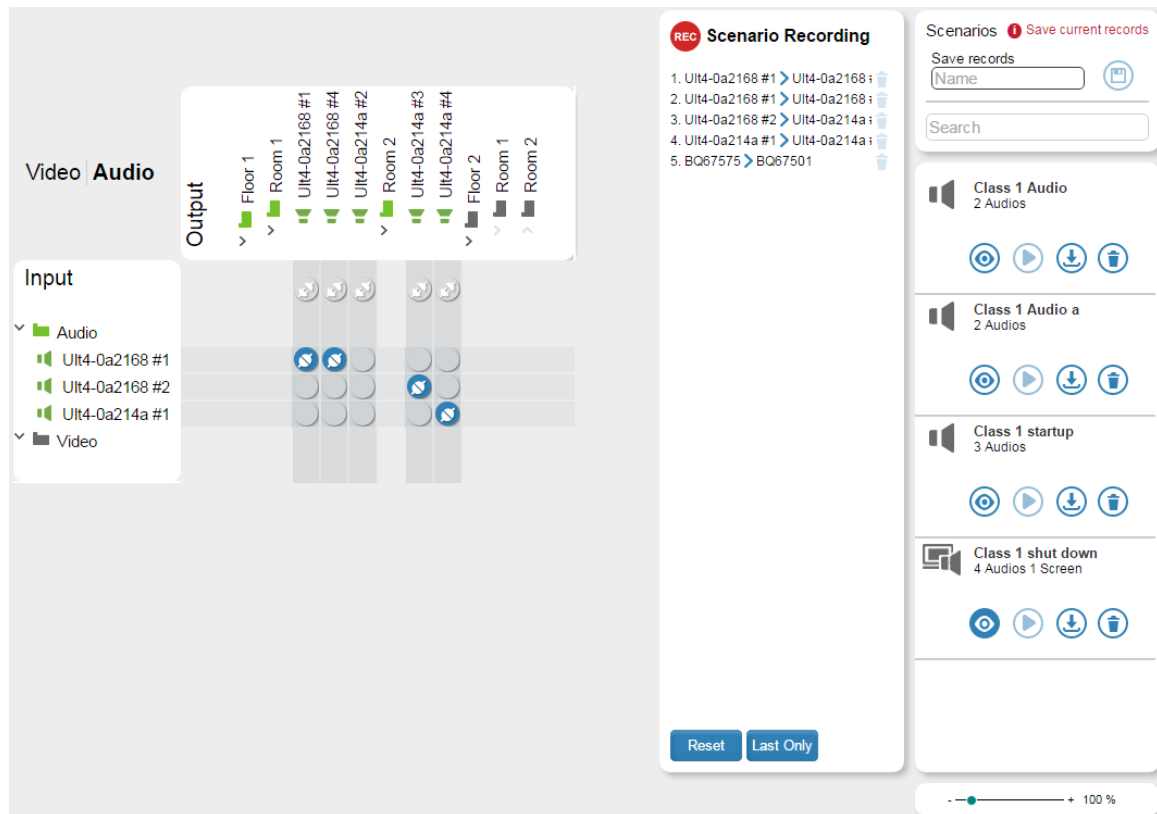


Figure 43: A/V Scenario

In the following example the switching A-V Scenario of a mixed video and audio setup is loaded.

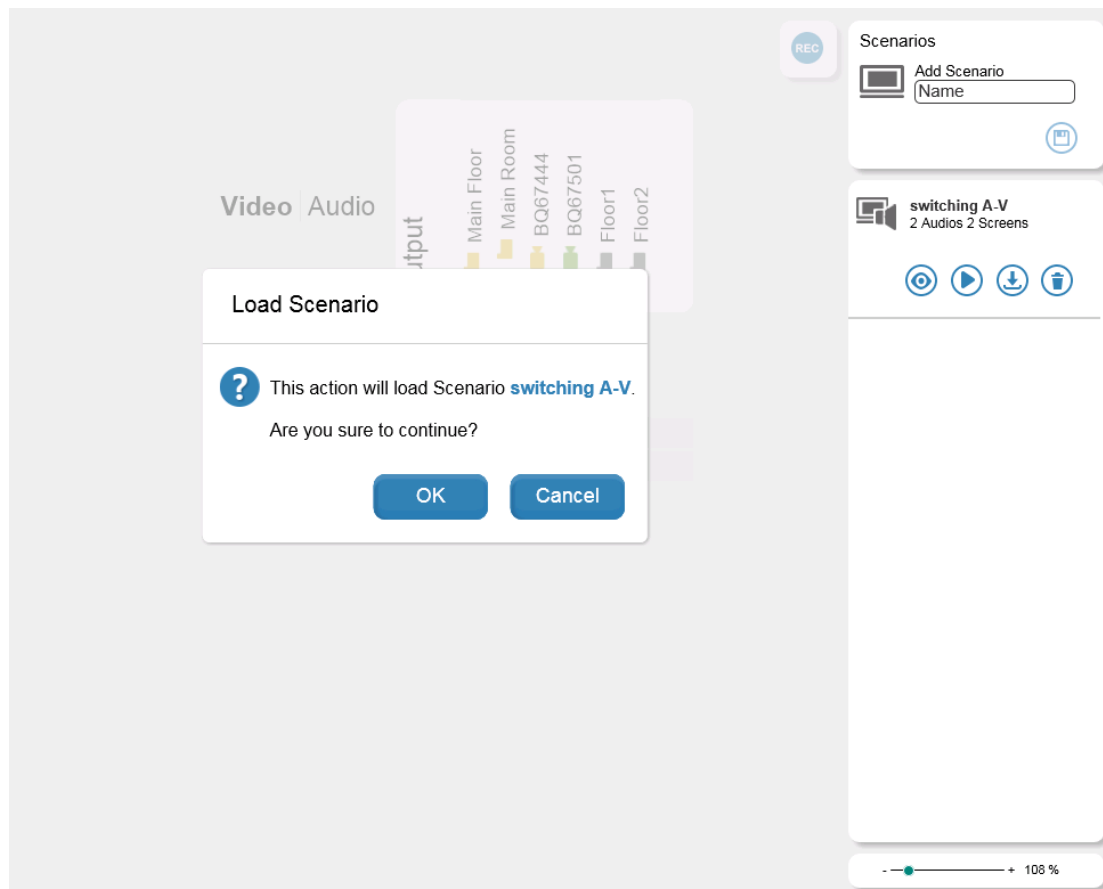


Figure 44: Loading a Scenario



Click **OK**. The scenario is loaded to the system:

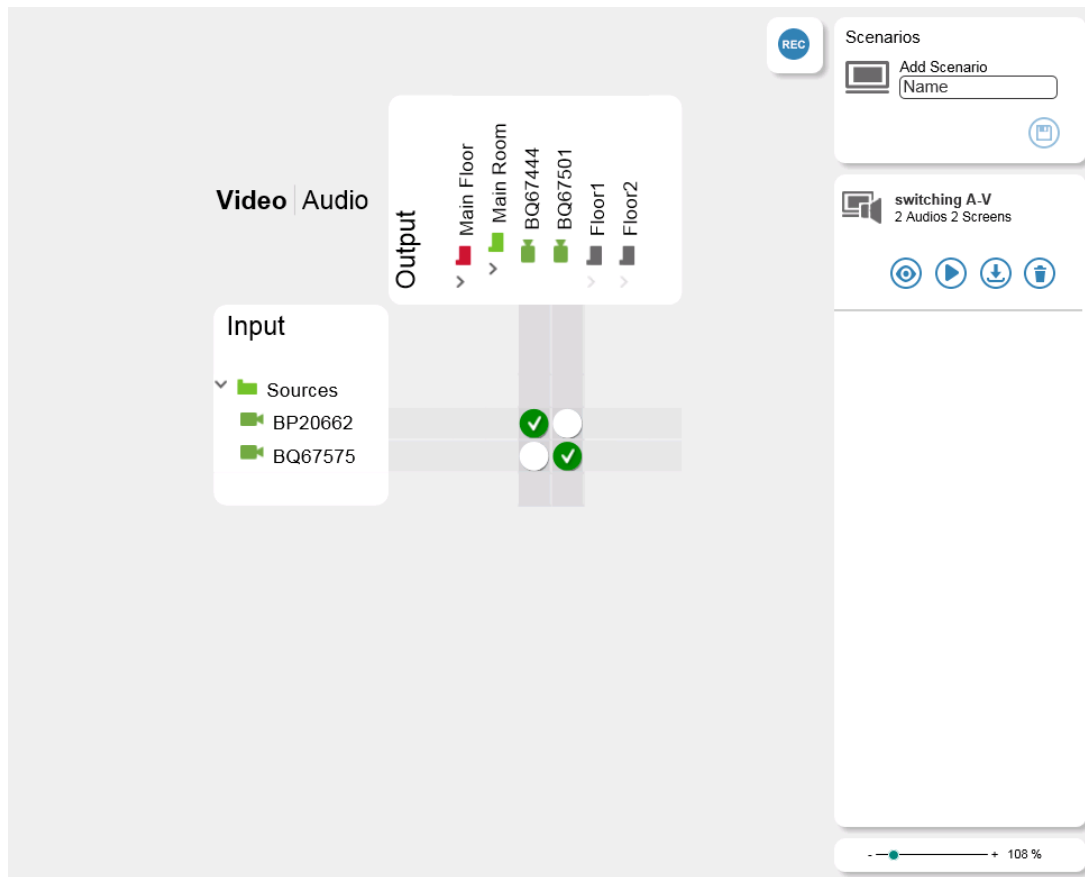


Figure 45: The Scenario is Uploaded and Running

You can save any number of Scenarios:

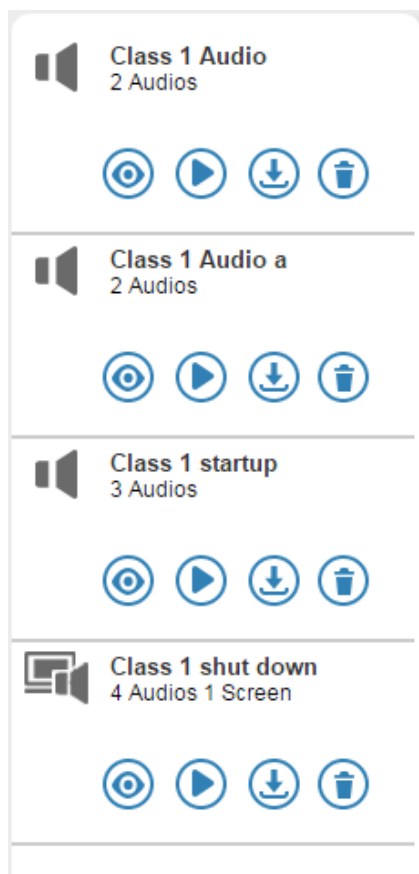


Figure 46: The Scenario List

# 6 ProAV Matrix

You can detect and manage ProAV Kramer devices on the Network via the ProAV Matrix page:

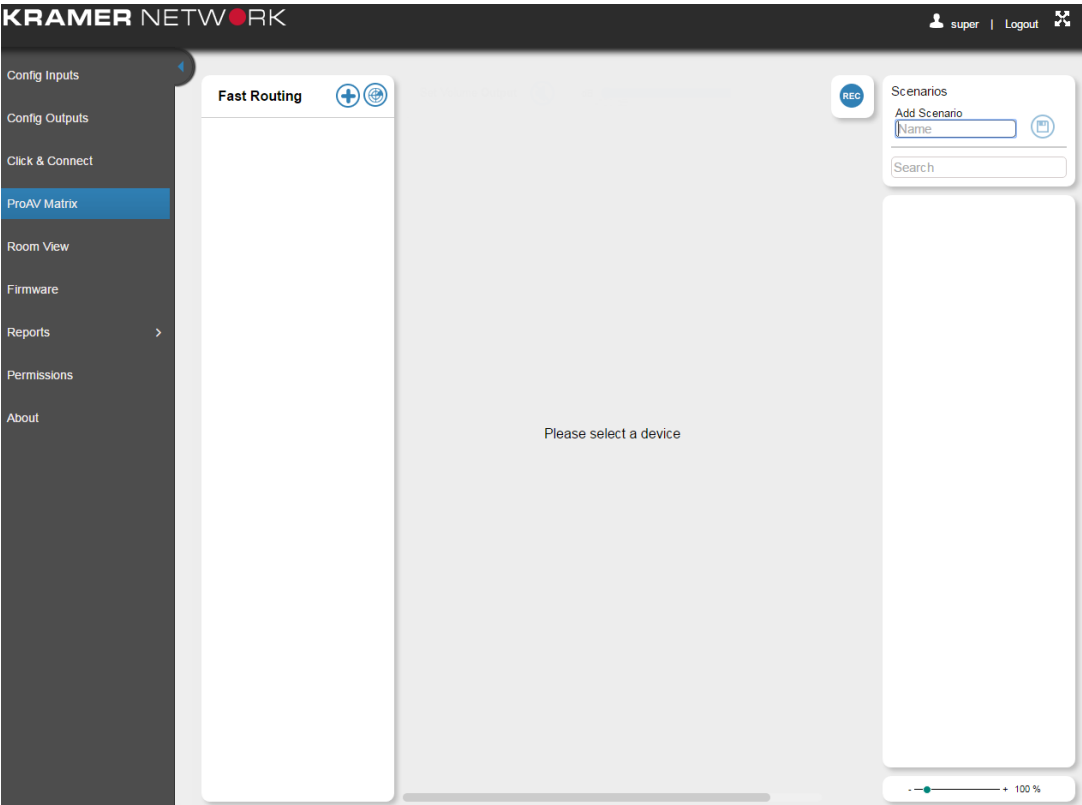


Figure 47: ProAV Matrix Page

## 6.1 Adding ProAV Devices

ProAV devices can be added to the ProAV either manually or automatically by scanning the Network. The list of supported devices is detailed in [Section 12](#)

### 6.1.1 Adding a ProAV Device Automatically

Click the scan button (🌐) to find AV devices that are connected to the network and add them to the list:

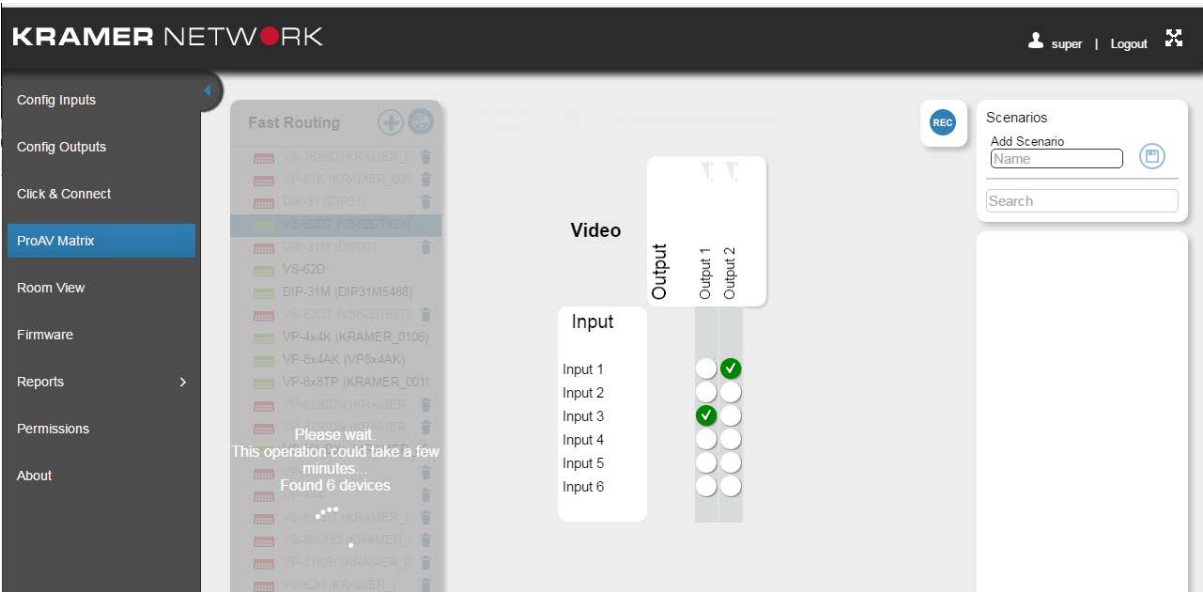



Figure 48: ProAV Matrix Page – Scanning for Devices

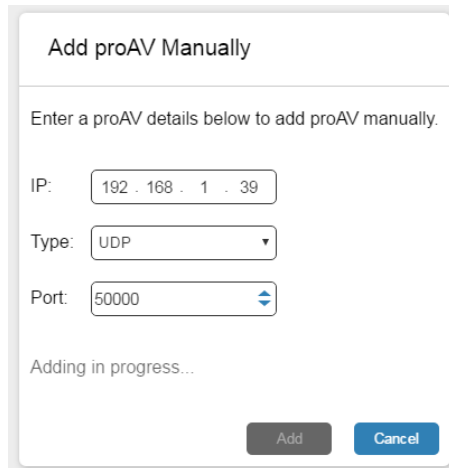
## 6.1.2 Adding a ProAV Device Manually

Some devices do not support the auto-discovery feature and can be added manually only (for example, the Kramer VS-1616D).

To add a device manually:

1. Click the  button.

The Add proAV Manually window appears:



The dialog box titled "Add proAV Manually" contains the following fields and controls:

- Text input for IP: 192 . 168 . 1 . 39
- Dropdown menu for Type: UDP
- Spin box for Port: 50000
- Text label: Adding in progress...
- Buttons: Add (disabled), Cancel

Figure 49: Adding a ProAV Device Manually

2. Fill-in the IP address, port type and number.
3. Click **Add**.

## 6.2 Using the ProAV Matrix

Once the devices are detected, you can switch the inputs to the outputs with a click on the matrix. You can select a device and set it either to AFV on (audio-follow-video mode) or to AFV off (audio breakaway mode). When AFV is on, the Audio matrix view is disabled and the audio switching follows the video switching. When AFV is off, you can switch audio and video separately.

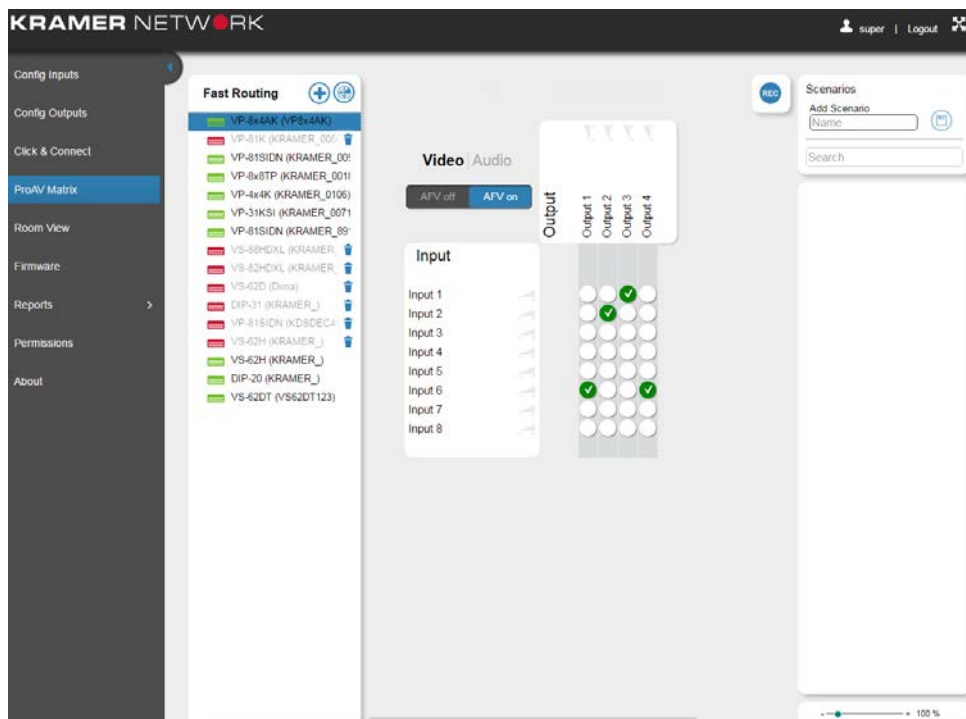


Figure 50: Switching AV Devices

## 6.3 Recording a ProAV Scenario

You can create scenarios that include more than one AV device.

Two types of scenarios are available:

- Saving the current setup (see [Section 6.3.1](#))
- Recording a sequence of setups (see [Section 6.3.2](#))

### 6.3.1 Saving the Current ProAV Setup

A scenario saves the current status of the device and lets you load it whenever needed.

The Scenarios box on the right hand side lets you create scenarios and lists the existing scenarios.

**To create a ProAV scenario:**

1. Set the switcher to the desired switching setup.

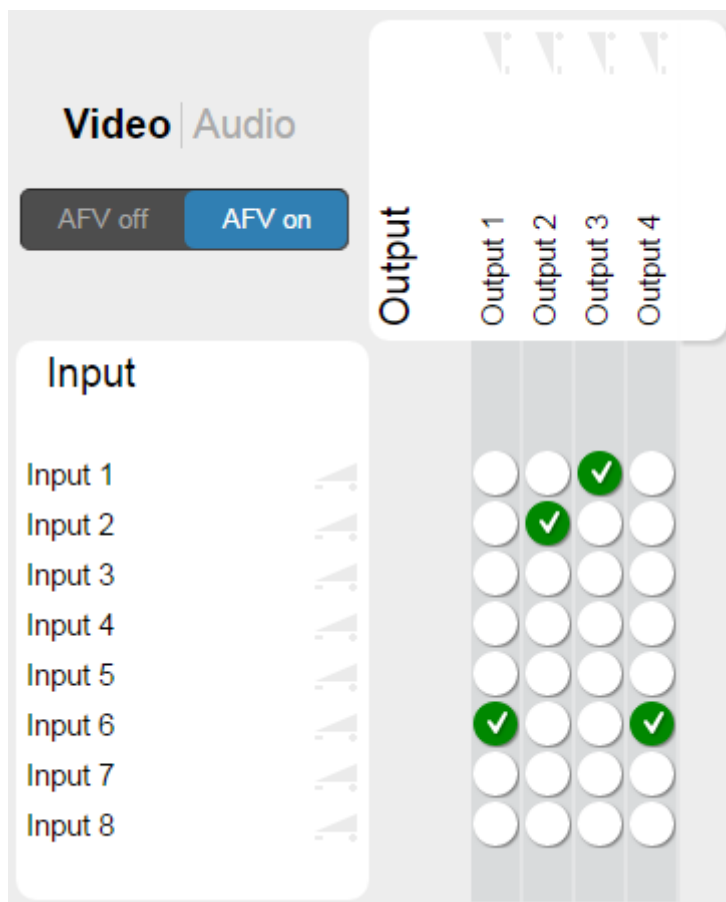


Figure 51: Switching Setup

2. Type the new scenario's name and click the save icon.

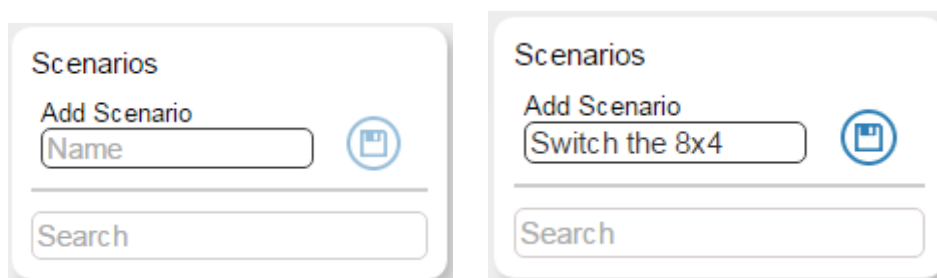


Figure 52: Add a ProAV Scenario

The scenario confirmation message appears:

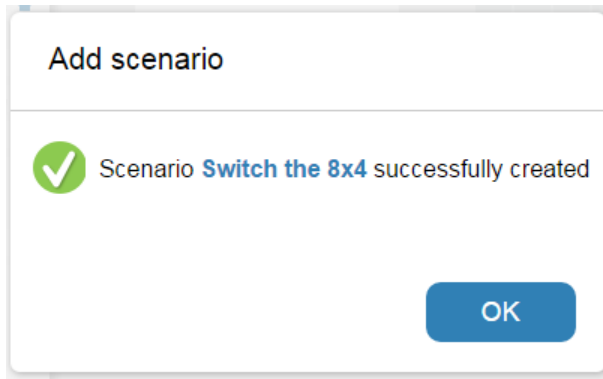


Figure 53: Scenario Confirmation Message

3. Click **OK**.

The saved scenario appears in the list of scenarios:

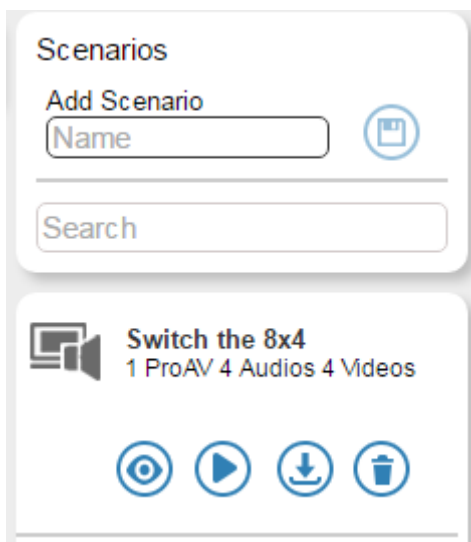






Figure 54: Scenarios List

You can:

- Preview a scenario .
- Load a scenario .
- Update the current scenario with the existing virtual matrix configuration .
- Delete the current scenario .

There is no practical limit to the number of scenarios that you can create.

### 6.3.2 Recording ProAV Scenarios

Video and audio setups can be “recorded” to form a sequence of scenarios.

To record a scenario, click the blue **REC** button. The Scenario Recording system sets the device switching offline to let you record a sequence of switcher setups which are listed as a log of events and can be stored as a recorded scenario.

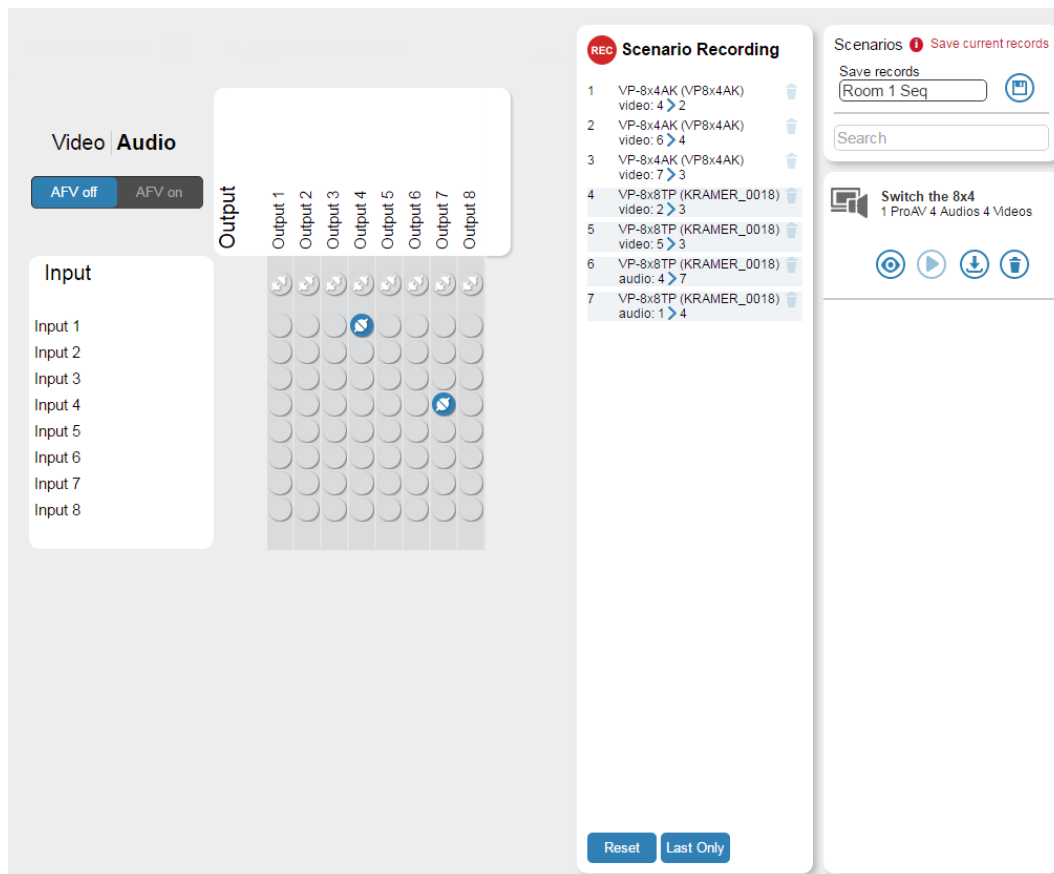


Figure 55: Recording a Scenario

Save the recorded scenarios to the new scenario you created:

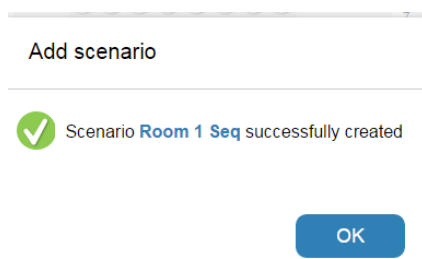


Figure 56: Creating a Scenario

Click the red **REC** button to end the recording.

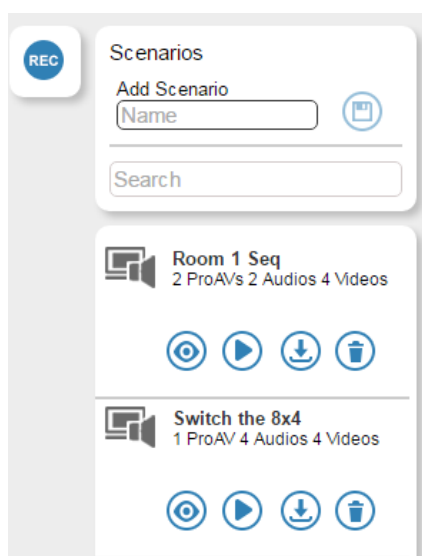


Figure 57: Saving a Recorded Scenario

## 7 Room View Page

The Room View page lets you arrange and design the room view as you need. Admins can then be granted permission to access a group of rooms from the Super. Users can then be granted permission to access specific rooms from Admins.

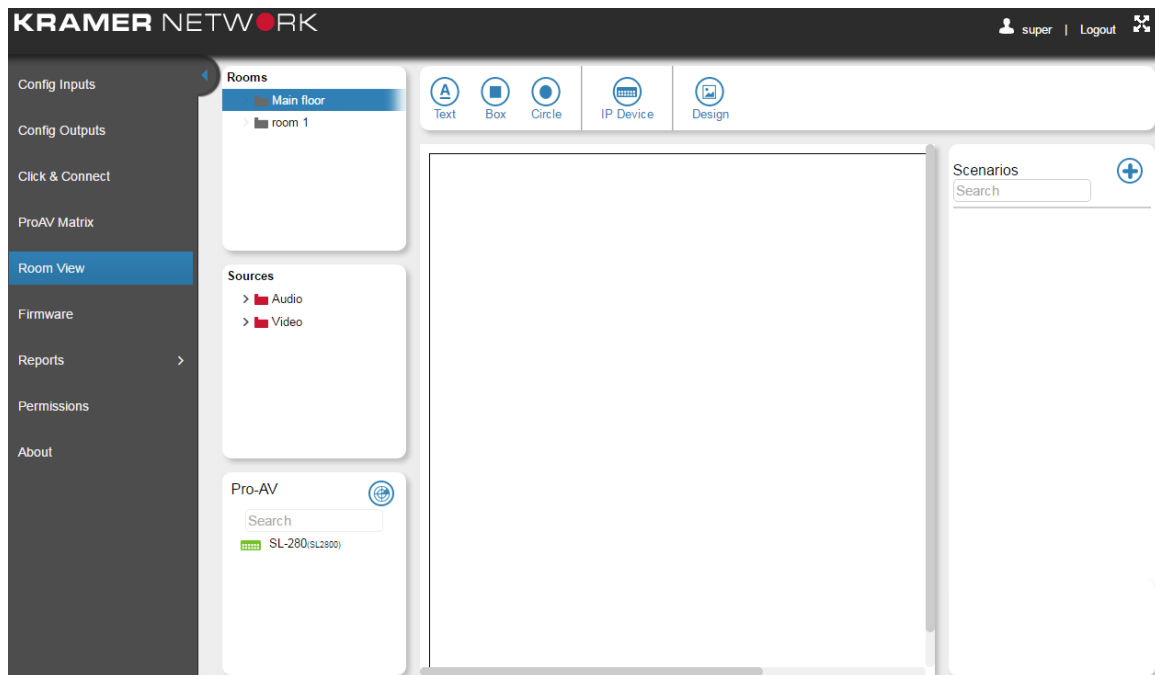


Figure 58: The Room View Page

The following sections describe how to design and customize the Room View.

### 7.1.1 Adding Text

Click the **Text** button to add text to the room view and then right-click the word Text that appears in the Room View. The following window opens:

Type the text, select its location, the font size, the font color and appearance or remove an existing text line.

Note that you can also click and drag the text anywhere in the room view.



Figure 59: Add Text

### 7.1.2 Adding a Box

Click the **Box** button to set a link in the current page to any of the other rooms in the system. In this way you can go from one room to another by clicking the link in the box. To edit the Box you need to right-click the box area. In the following example a box is set in the First floor area to link to the Room 1 view:

Type the title and select the:

- Title top.
- Color of the title.
- Link destination.
- Opacity (0 to 1: 0=transparent; 1=opaque).
- Horizontal and vertical alignment within the box.
- Size and location of the box.
- Box background color and/or any background image if desired.
- Background repeat (no repeat, repeat-x, repeat-y) and size (initial, contain, cover).
- Border color and shape.

Note that you can also click and drag the box anywhere in the room view area.

The Rooms

**Box - The Rooms** [X]

**Remove**

Title:

Title Top:

Title Left:

Title Color:

Destination:

Opacity:

Width:

Height:

Left:

Top:

Background color:

Background image:

Background repeat:

Background size:

Border color:

Border radius:

**Close**

Figure 60: Add a Box

The following Table defines the background repeat and size options (for [Figure 60](#) and [Figure 61](#))

Background Repeat Options	Definition
No repeat (or empty)	The background-image will not be repeated
Repeat	The background image will be repeated both vertically and horizontally
Repeat-X	The background image will be repeated only horizontally
Repeat-Y	The background image will be repeated only vertically
Background Size Options	Definition
Initial (or empty)	Leave the image at its initial size and crop it
Cover	Scale the background image to be as large as possible so that the background area is completely covered by the background image. Some parts of the background image may not be in view within the background positioning area
Contain	Scale the image so that both its width and its height can fit inside the content area



### 7.1.3 Adding a Circle

Click the **Circle** button to set a link in the current page to any of the other rooms in the system. In this way you can go from one room to another by clicking the link in the box. To edit the Box you need to right-click the box area. In the following example a box is set in the First floor area to link to the Room 1 view:

Type the title and select the:

- Title location.
- Color of the text.
- Link destination.
- Opacity (0 to 1: 0=transparent; 1=opaque).
- Horizontal and vertical alignment within the box.
- Size and location of the circle.
- Box background color and/or any background image if desired.
- Background repeat (no repeat, repeat-x, repeat-y) and size (initial, contain, cover).
- Border color.

Note that you can also click and drag the circle anywhere in the room view area.

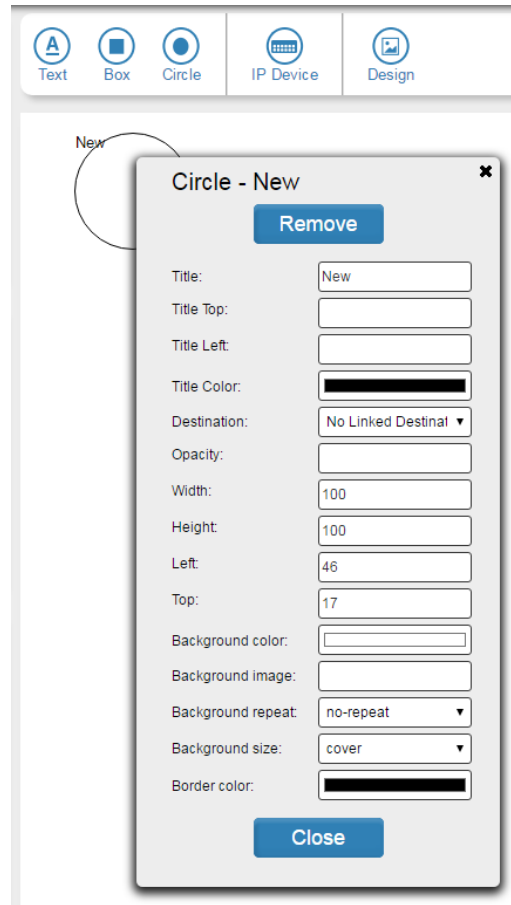


Figure 61: Add a circle

### 7.1.4 Adding an IP Device

Click the **IP Device** button and right-click the “new device”. The following window appears:

Type the name of the device and set the:

- IP address.
- Location of the IP device icon.

Note that you can also click and drag the IP Device icon anywhere in the room view area.

Adding an IP device enables you to associate this device with this room.

Double click the device icon to open its web page.

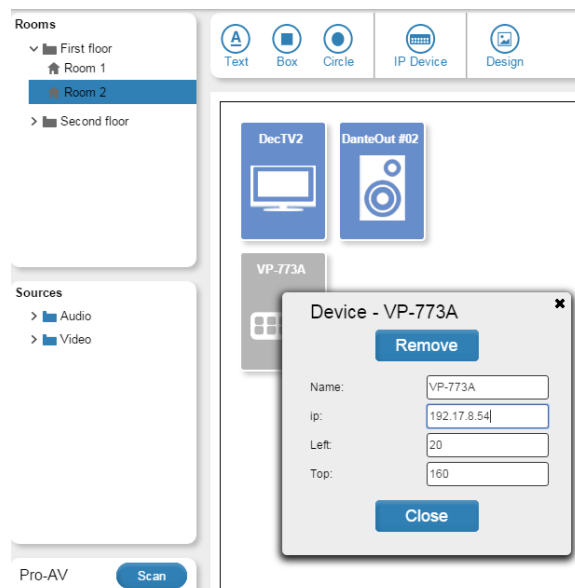


Figure 62: Add an IP Device

### 7.1.5 Setting the Background

Click the **Design** button. The Manage Images window appears:

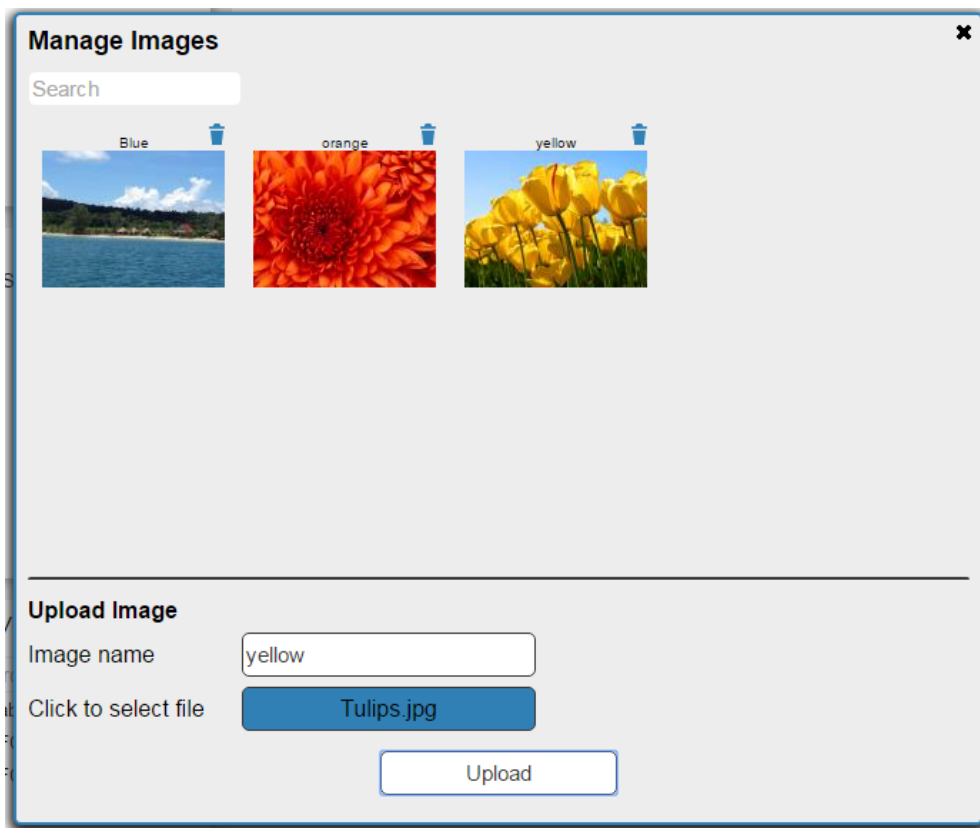


Figure 63: The Manage Image Window

To add an image, click the “Click to select file” box and select an image file (gif, jpg and png); give the new image a name and then click **Upload**. The new picture appears in the image manager:

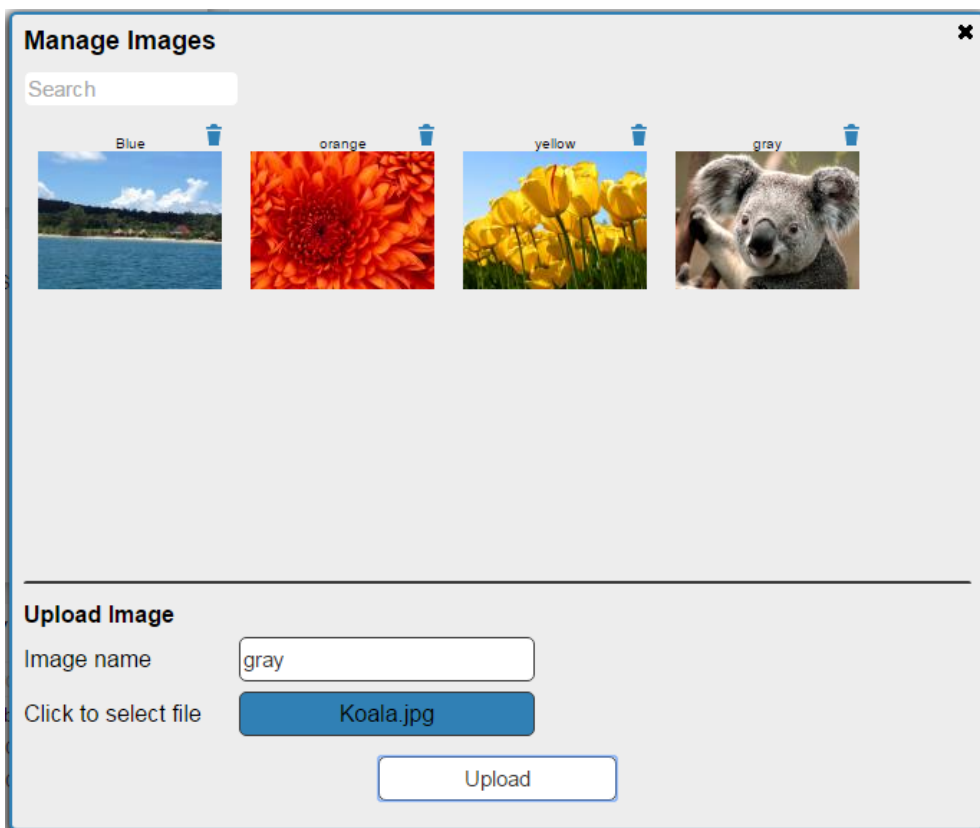


Figure 64: Adding an Image

Click the **x** on the top right to close the window.

An image can be added to be the background of a room, a circle or a box. You can upload background pictures and use them for the Room View.

Add a box.

Right-click the box and select the background image:

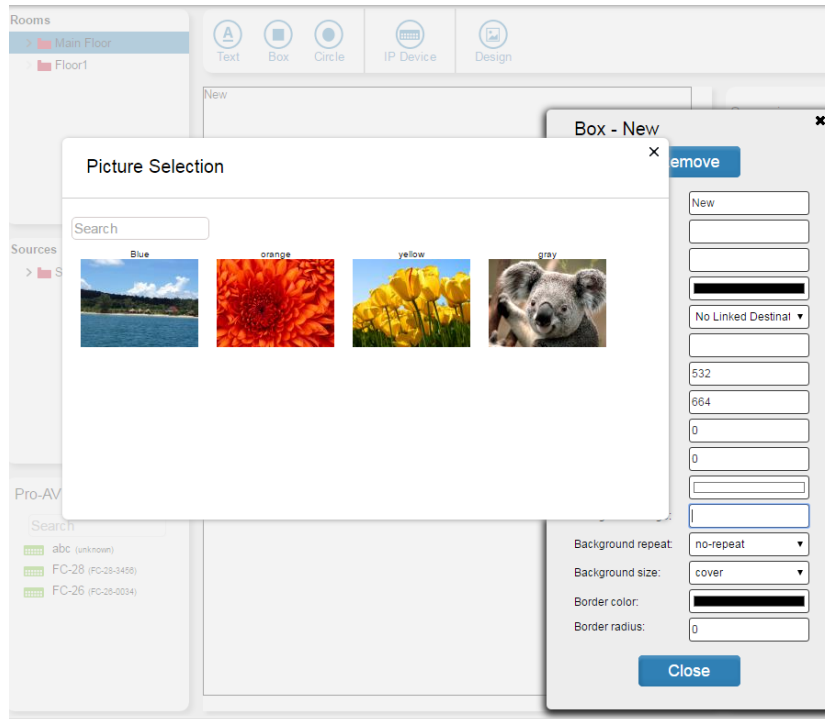


Figure 65: Adding the background Image

Add the following to a room:

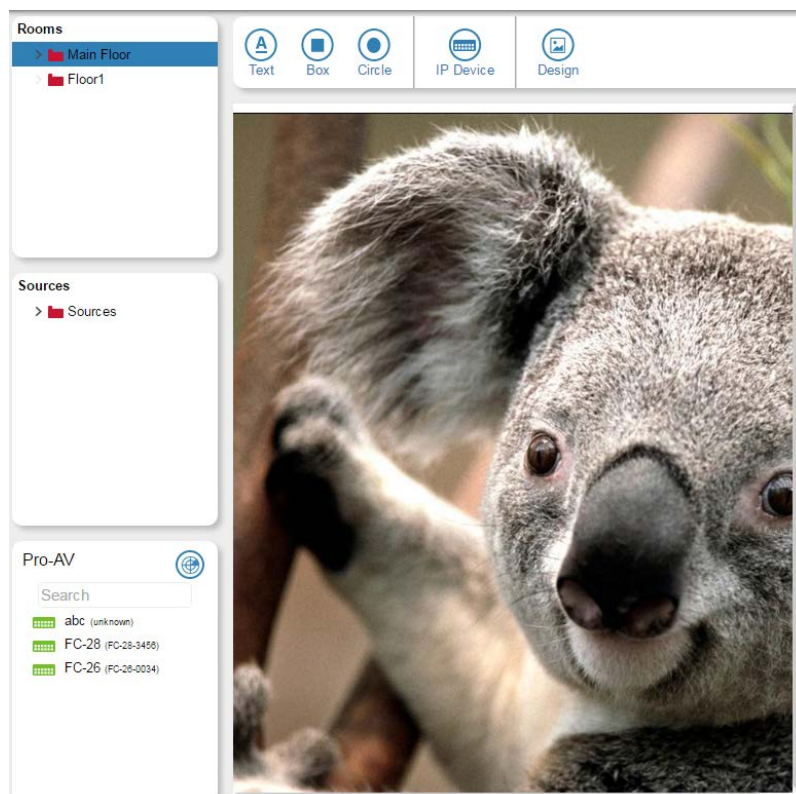


Figure 66: background Image Added

### 7.1.6 Upload Control Configuration

You can upload control configuration to a room only (and not to a floor, for example) via the control configuration at the lower left side of the window:

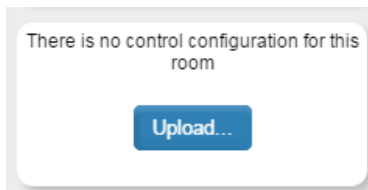


Figure 67: Uploading a Control Configuration

To upload a control configuration you need to export a Virtual Master configuration file (\*.krnt) via the **K-Config 3** software available on our web site.

You can download the **K-Config 3** user manual at: [www.kramerav.com/manual/K-Config\\_3](http://www.kramerav.com/manual/K-Config_3). Once the configuration file is ready, click the **Upload** button and select the configuration file.

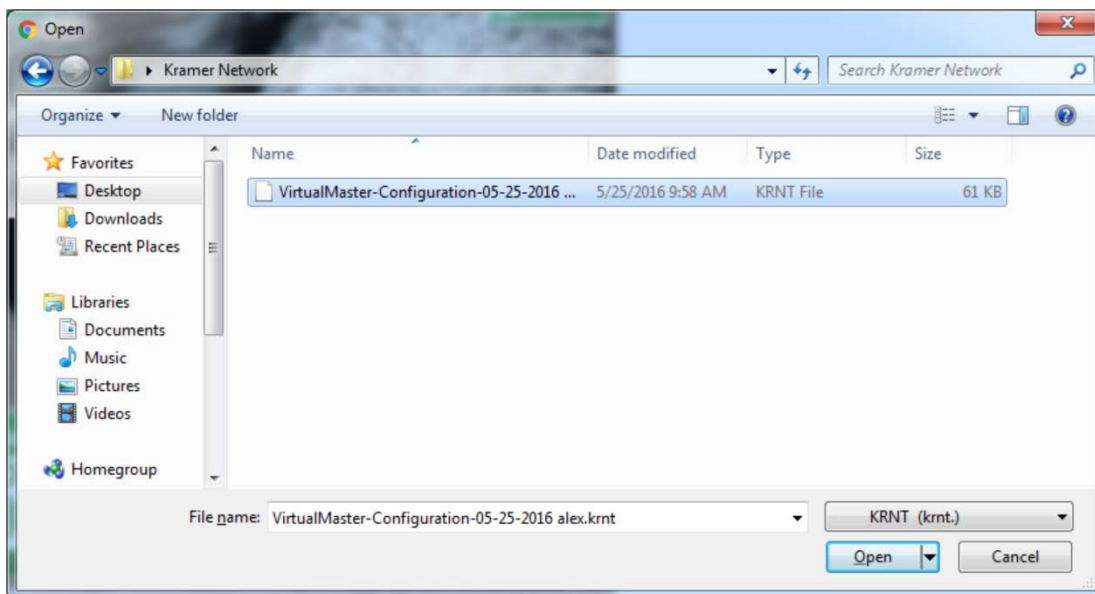


Figure 68: Loading a KRNT file

Click **Open**.



Figure 69: Configuration Uploaded

Click the **Control This Room** button. The Virtual controller appears in the room view and lets you control the AV devices in the room:

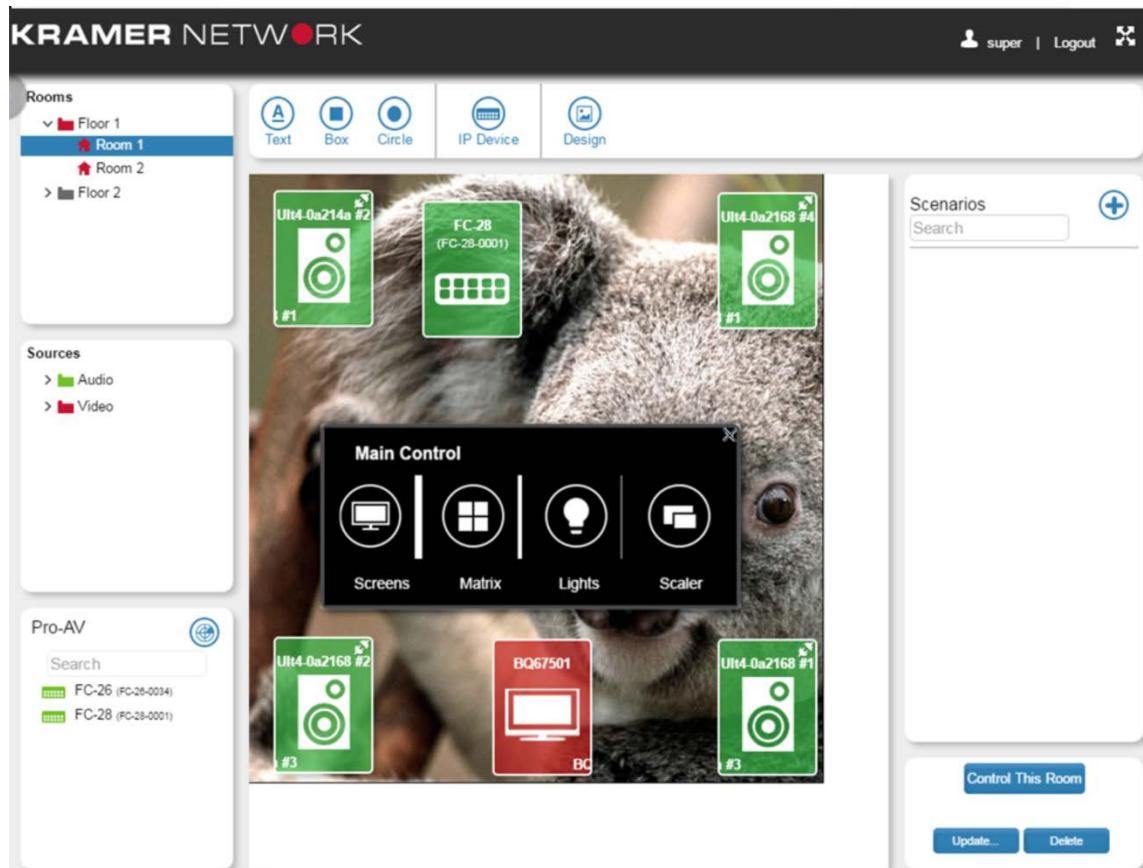


Figure 70: The Room Controller in the Room View Window

Use the room controller to control the devices in the room.

You can create more than one panel using **K-Config**. And for each streaming device you can assign a panel that is included in the imported file, see the example in [Figure 71](#).

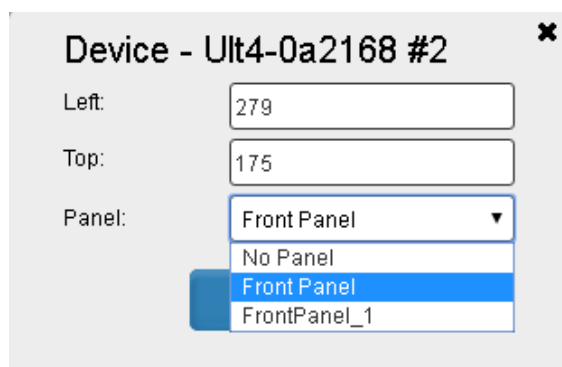


Figure 71: Selecting a Panel

#### 7.1.6.1 Viewing a Physical Room Controller

You can remotely control the room with a physical room controller.

**To control via a physical Room Controller (for example, the RC-74DL):**

1. Select the Room View page.
2. From the Pro-AV area, Drag-&-Drop the **RC-74DL** room controller device.
3. Fill-in the IP address, port type and number.

4. Right-click the device and click **Load Project**.

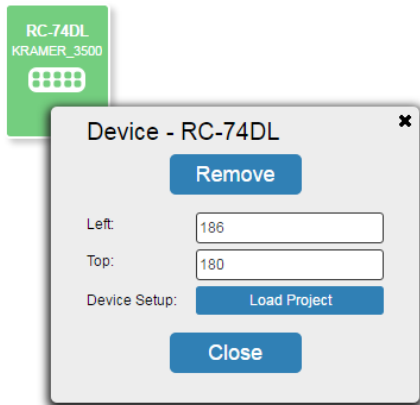


Figure 72: Loading a Room Controller Project

5. Right-click the device and click **Load Project**.

After a few seconds, the list of panels (as configured in the **K-Config 3** project) is uploaded to the device.



The panels loaded include the physical Master panel, the auxiliary physical device panels and the virtual-panel (id: 11).

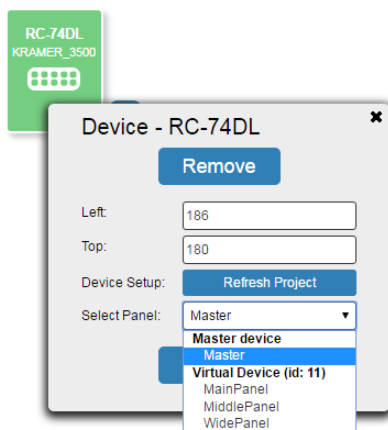


Figure 73: Loading Room Controller Panels

6. Select a panel and close the Device pop-up window.  
A control Icon appears next to the **RC-74DL** device.


7. Click the control icon.  
The device control panel appears.



Figure 74: RC-74DL Control Panel



### 7.1.7 Adding Scenarios to the Room View

The Super and Admin can click the  sign next to Scenarios on the top right side of the page. A window listing all the scenarios appears. Select the relevant scenarios and close the window. The scenarios appear on the right-hand side of the page ready for you to use:

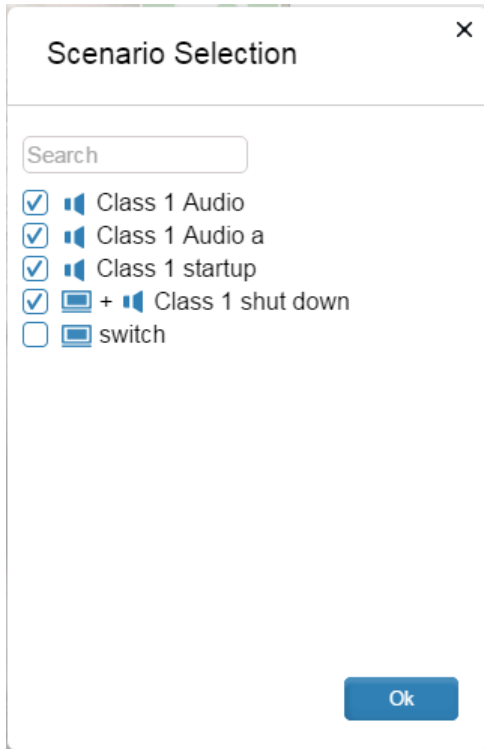


Figure 75: Selecting the Scenario List

Select the Scenarios that are relevant for each room and click **OK**. The list of scenarios appears in the room view:



Figure 76: The Scenario List in the Room

Click the arrow icon to load a scenario:

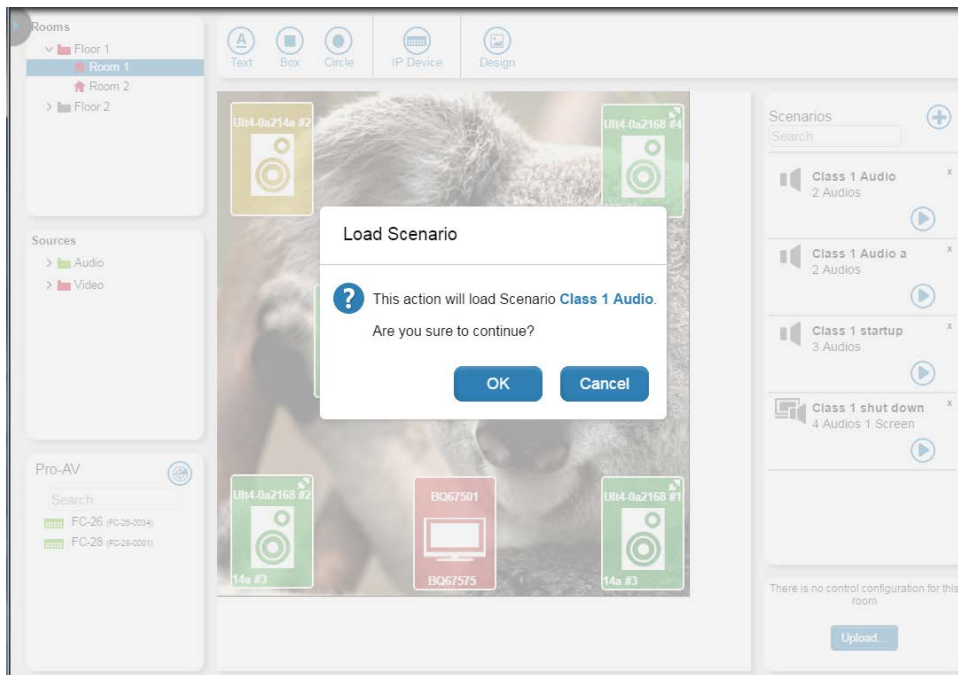


Figure 77: Loading a Scenario

Click **OK**.

The new scenario is loaded onto the room.



The scenario is setup per room. An Admin/Super can only delete the scenarios he/she created (see the x on the top right side of the scenario that appears only for scenarios that were created by the current Super/Admin that is logged in) and cannot delete another Super/Admin's scenario.

### 7.1.8 Pro-AV

Click the Scan button to discover all the AV devices on the network or search the name of the AV device. The list of discovered devices appears under Pro-AV on the lower left side.

Drag an AV device to the room:

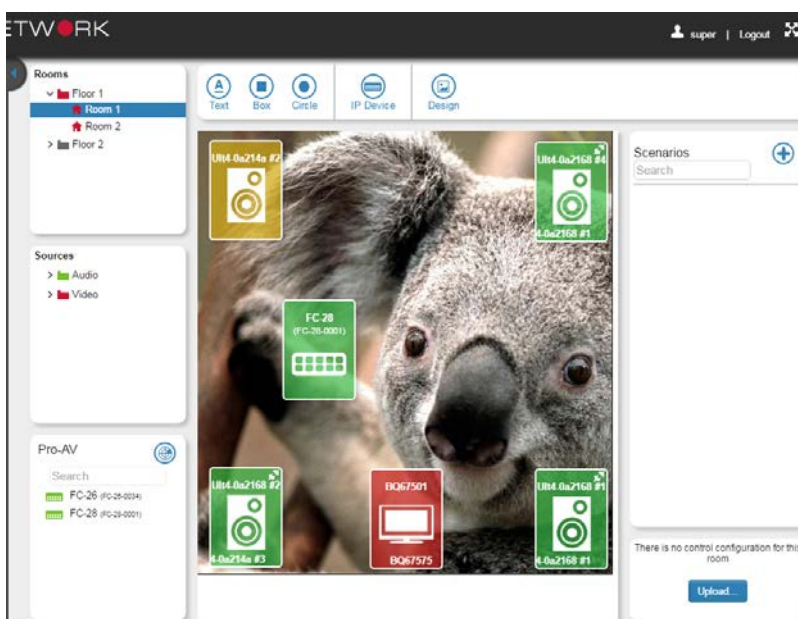


Figure 25: Dragging a Pro-AV Device to the Room View



Right-click to set the location of the device or remove it:

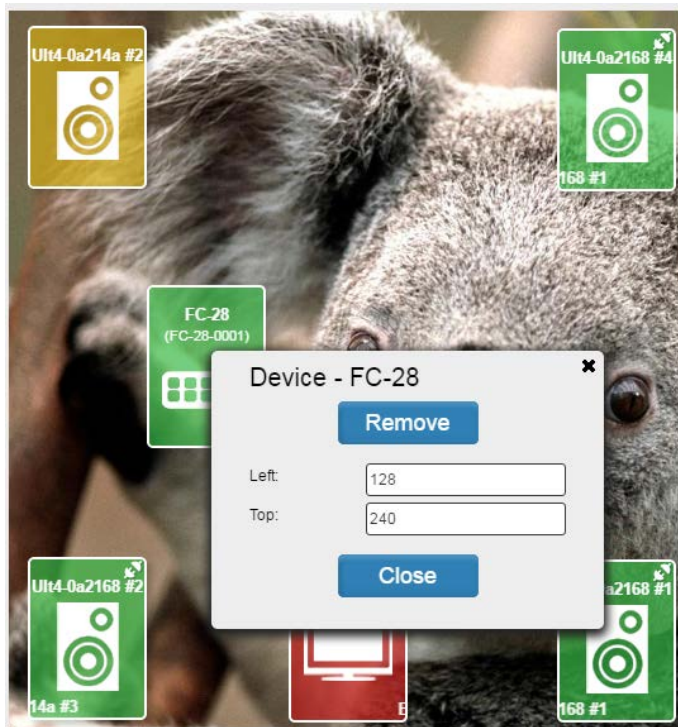


Figure 78: Pro-AV Device Settings

Double click an IP device or a Pro AV device to open its web page (if it has one) in a separate tab.



You can associate the same device multiple times in a room and also for multiple rooms.

### 7.1.9 The Room View Page for Other Users

Figure 79 shows the **KRAMER NETWORK** Room View page for the Admin

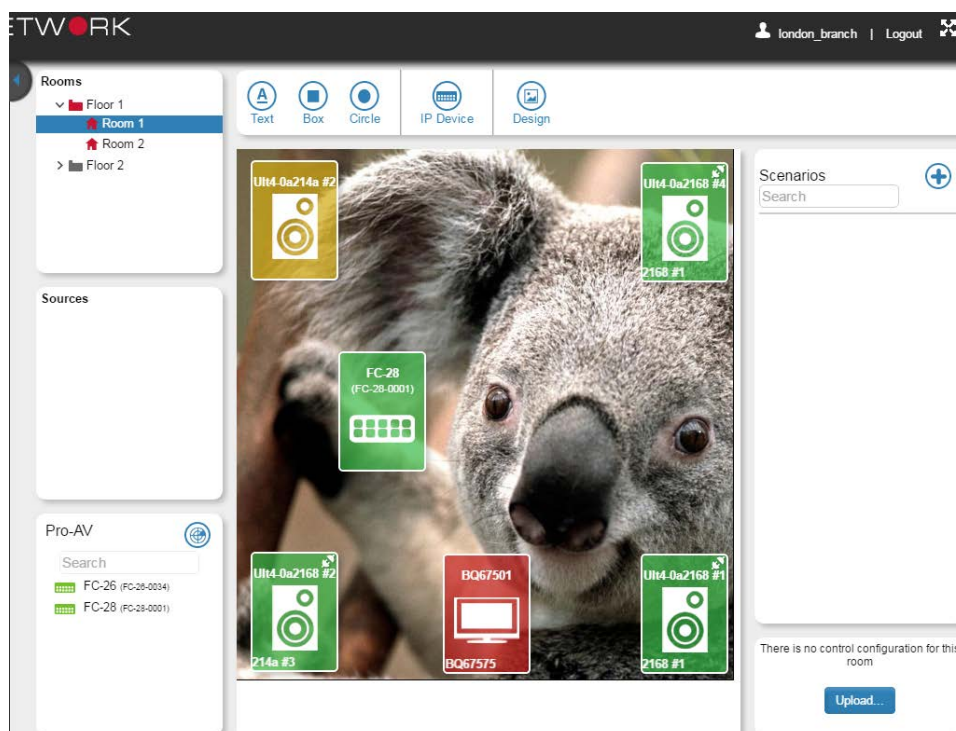


Figure 79: Room View for the Admin

A User can only use the room view for selecting sources from a list granted to him by the Admin and connect them to the destinations (TV screens and Speakers) defined by the topology. The User can use the related scenarios selected by the Admin and also launch the web page of the devices associated with this room.

[Figure 80](#) shows the **KRAMER NETWORK** Room View page for the User:

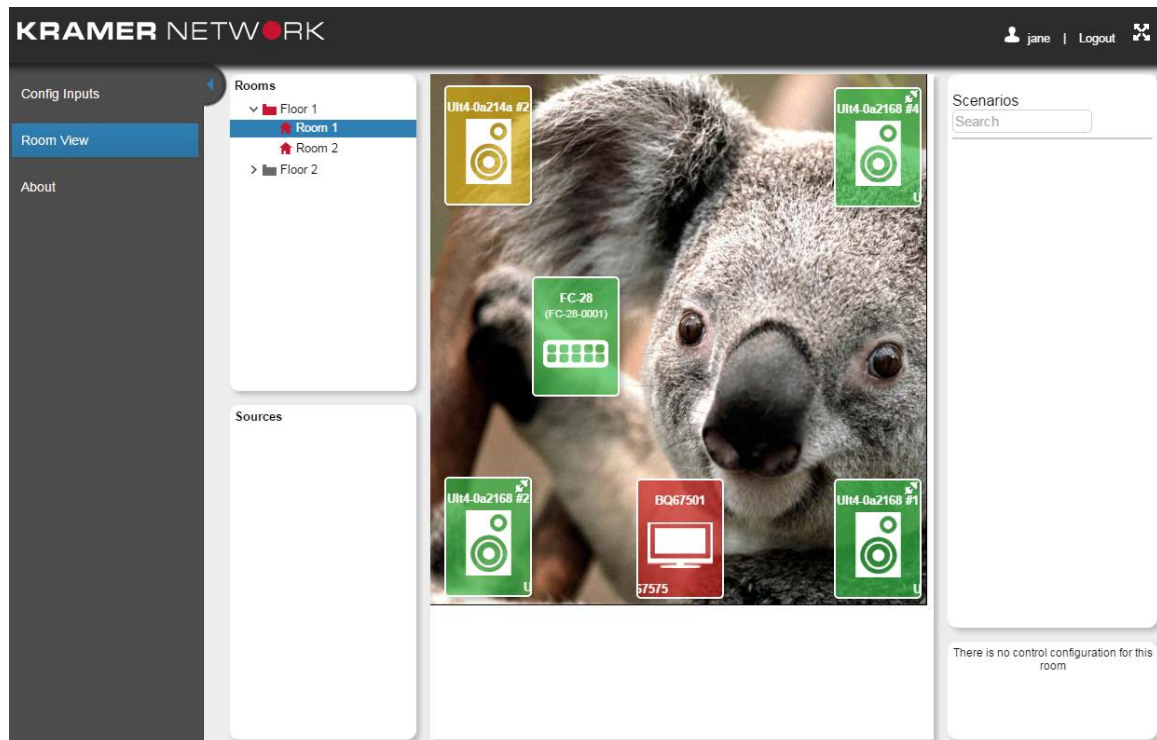


Figure 80: Room View for the User


## 8 Firmware Management

You can manage the different versions of the devices in the system and perform firmware upgrade of devices in the list via the Firmware page.

The Firmware page includes the:

- Firmware upgrade tab (see [Section 8.1](#)).
- Version management tab (see [Section 8.2](#)).

### 8.1 Firmware Upgrade Tab

The Firmware Upgrade tab, accessible to the Super and Admin, allows you to upload new Firmware versions to one or several devices within the network in parallel. You can customize the column titles by clicking the  button on the top right side. Check the Enable Filters box to filter out certain items from the list.

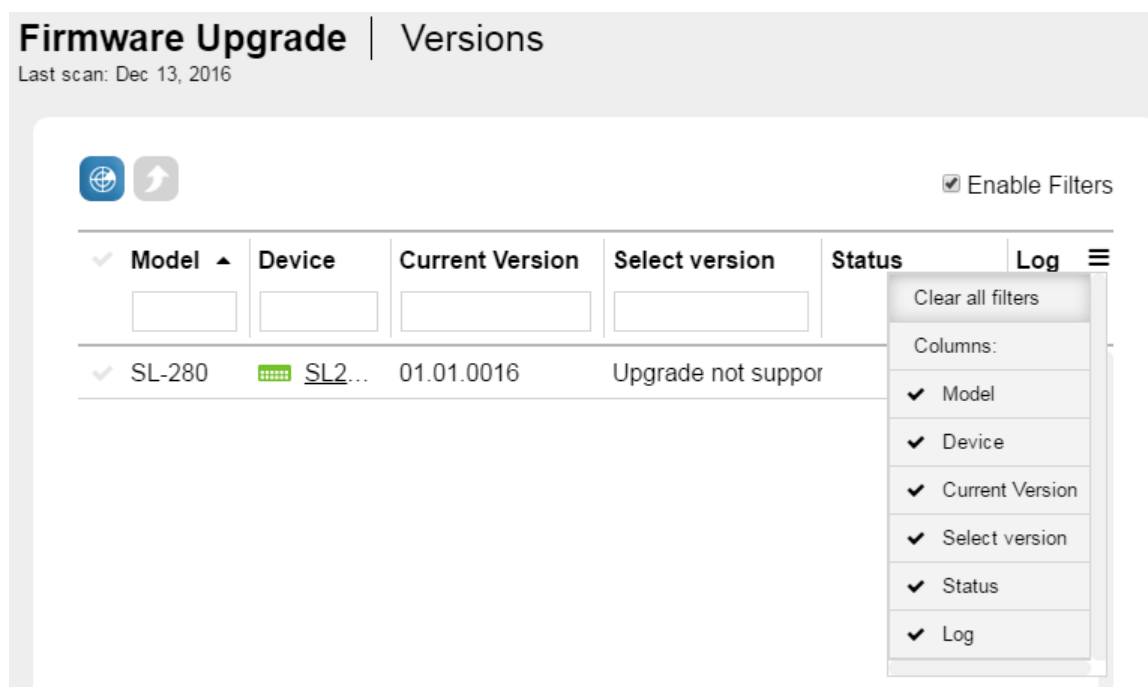



Figure 81: Firmware Upgrade Tab – Customize Columns and Filter Items

**To upload new firmware versions:**

1. In the Firmware page, select the Firmware Upgrade tab. The last scan date appears under the title.
2. Click the scan button () to scan for Pro-AV devices and available firmware upgrades.  
**KRAMER NETWORK** scans for devices and firmware upgrades:

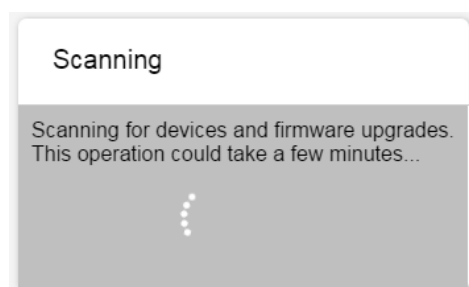


Figure 82: Firmware Upgrade Tab – Scanning for Devices and Firmware Versions

3. Select the device/s, for which you want to upload the new firmware, from the list of devices.

**Firmware Upgrade** | Versions  
Last scan: Dec 19, 2016

Enable Filters

Model	Device	Current Version	Select version	Status	Log
✓ AAddEE	FC7P0123	2.11.32944	-		
✓ DIP-31	KRAMER	1.17.31825	-		
✓ DIP-31M	DIP31M	1.999.32558	-		
✓ DIP-31M	DIPDIP2	1.999.32558	-		
✓ FC-28	FC28	2.8.30629	-		
✓ FC-54P	KRAMER	2.11.32944	-		
✓ KDS-DEC4	KDSDEC41	01.06.32489	-		
✓ KDS-EN4	KDSEN41	01.06.32489	Upgrade not supported		
✓ PL-50	KRAMER_0087	01.02.00.9140	Upgrade not supported		
✓ PL-50	KRAMER_0032	01.02.00.9140	Upgrade not supported		
✓ PL-50	Erez_PL50	01.02.00.9140	-		
✓ RB-6	KRAMER_0046	02.00.00.32264	-		
✓ RC-712M	KRAMER_0023	04.00.33.29083	-		
✓ RC-74DL	Grishka	04.00.37.31563	4.0.37.31563		
✓ RC-76M	KRAMER_1234	04.00.33.29083	-		
✓ RC-78R	KRAMER_0096	04.00.38.32458	4.0.34.30581		
✓ SL-12	KRAMER_1111	04.00.38.32458	-		
✓ SL-12	4321	04.00.29.24637	4.0.33.29083		
✓ SL-280	SL2800	01.01.0016	-		
✓ SL-280	SL2800	01.01.0016	-		

Figure 83: Selecting Devices for Upgrade

4. Click the upload button (📶).

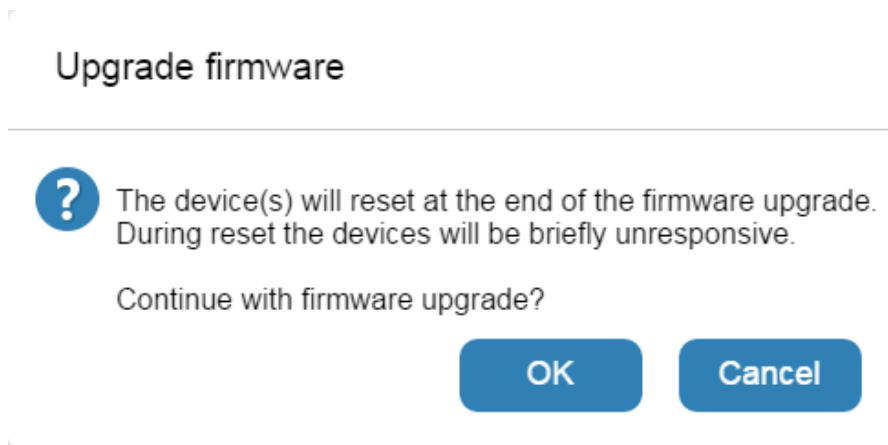


Figure 84: Firmware Upgrade Message

5. Click the upgrade devices button (📶) and follow the online instructions.

## 8.2 Versions Management Tab

The Versions management tab shows the firmware versions kept for each Pro-AV device model. These firmware versions enter the system either through automatic download or by manual upload.

If the **KRAMER NETWORK** server has access to the public Internet it automatically downloads the latest firmware for every device it discovers (from the Kramer service). New versions are searched whenever a Pro-AV device scan is performed. The latest downloaded version for a given device model is marked as the default version for devices of that model.

After scanning for new versions, the following list appears:

Firmware Upgrade



Versions


Last scan: Dec 13, 2016

☐ Enable Filters

>	Model	Version	Default	Registe...	Source	Comme...	Action	≡
>	PL-50 (2)	1.2.0.9140						
	VS-8FDXL							
	VP-558							
	VP-8x4AK							
	FC-28							
>	VS-62H...	1.3.24573						
>	VP-81SI...	5.5.23320						
	VS-41H2							
>	VP-771 (1)	31585						
>	RC-712...	4.0.33.2...						
	SL-280							
>	RC-74D...	4.0.37.3...						
>	RC-76M...	4.0.33.2...						
	VP-772							
	DIP-31							
	VS-62D							
	VP-8x8TP							
>	VP-4x4...	5262						
	VS-88H...							
	RB-6							

Figure 85: Available Firmware Versions

The Versions list illustrated in [Figure 86](#) shows **VS-62HA** with two (selectable) firmware versions. The first firmware version was manually uploaded (  ) and the second firmware version was downloaded from the Network (  ) following a scan. The **VP-4x4K** firmware version was downloaded via the Network.


☐ Enable Filters

















>	Model	Versio...	Default	Registe...	Source	Com...	Action	≡
	MODELtest							
✓	VS-62HA (2)	1.3.24...						
		1.3.24...	<input checked="" type="radio"/>	2016-11-...				
		1.4.30...	<input type="radio"/>	2016-11-...				
	VS-88HDXL							
	VS-82HDXL							
✓	VP-4x4K (1)	5262						
		5262	<input checked="" type="radio"/>	2016-11-...				
	FC-28							
>	VP-81SIDN...	5.5.23...						
	VP-8x4AK							
>	VP-81K (1)	6191						

Figure 86: Scanning for New Firmware Upgrade Versions

For each device on the list you can manually add a new firmware version.

**To add a new firmware version manually:**

1. Click the  button in the Action column. The following window appears:

### Upload new firmware version

✕

Model type

FC-28

Firmware file

Click to select file

Firmware

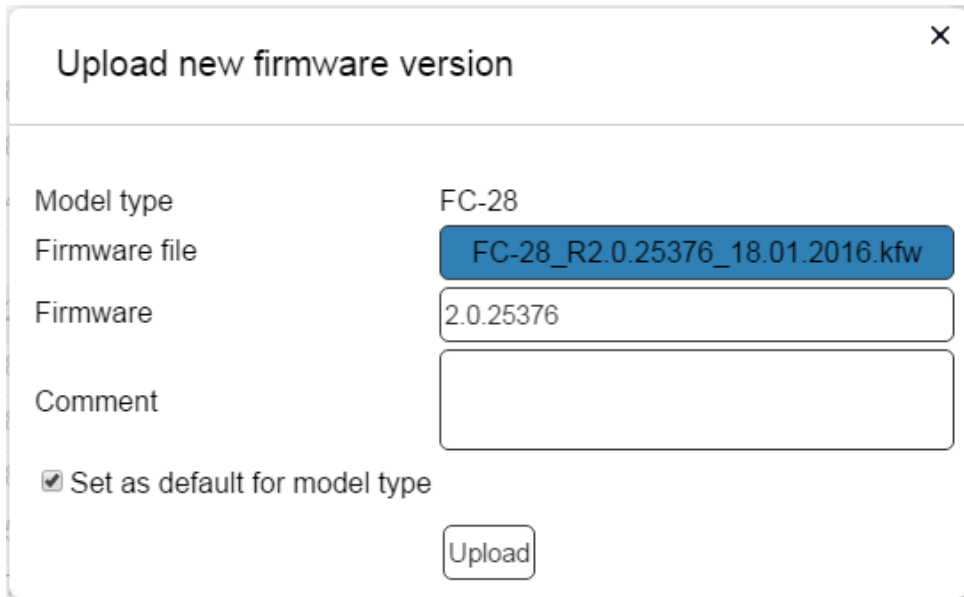
Comment

☐ Set as default for model type

Upload

Figure 87: Uploading a New Firmware Version

2. Fill in the details, check the box if you want this version to be your default one and click Upload.



Upload new firmware version

Model type FC-28

Firmware file FC-28\_R2.0.25376\_18.01.2016.kfw

Firmware 2.0.25376

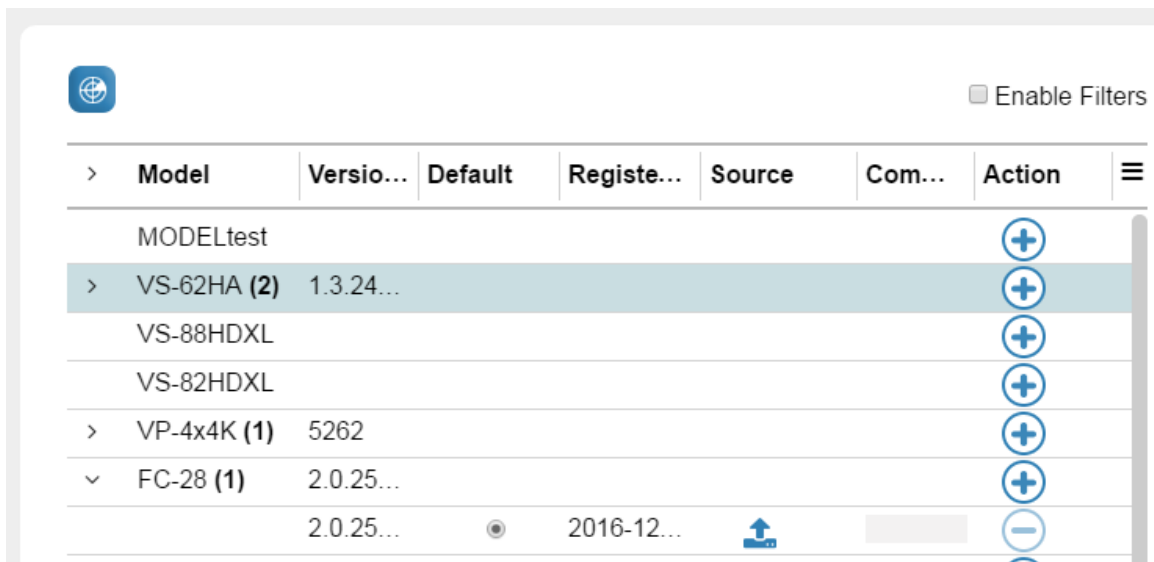
Comment

☒ Set as default for model type

Upload

Figure 88: Uploading New Firmware Manually

The new firmware appears in the Versions list:



Enable Filters

>	Model	Versio...	Default	Registe...	Source	Com...	Action	≡
	MODELtest						+	
>	VS-62HA (2)	1.3.24...					+	
	VS-88HDXL						+	
	VS-82HDXL						+	
>	VP-4x4K (1)	5262					+	
✓	FC-28 (1)	2.0.25...	<input checked="" type="radio"/>	2016-12...	↑		+	
		2.0.25...	<input type="radio"/>				-	

Figure 89: FC-28 Firmware Version Manually Uploaded

3. Set the default firmware by:
  - Selecting the radio button corresponding to that version, or by
  - Checking "Set as default for this model type" when uploading a version

After setting the default, it can no longer be automatically changed; newer versions are still downloaded, but the default remains as you set it.

When selecting the latest version downloaded from the Kramer server as the default, the following message appears:



Figure 90: Automatic Firmware Download Message



# 9 Reports Page

The Reports page includes the following four tables:

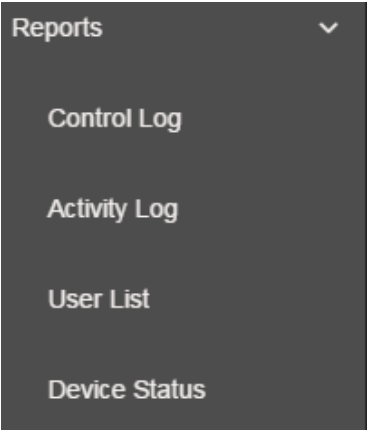


Figure 91: Reports List

## 9.1 Control Log

The Control Log presents all the events related to the **KRAMER NETWORK** control module. Once a room is assigned with Virtual Master configuration, the logging begins.

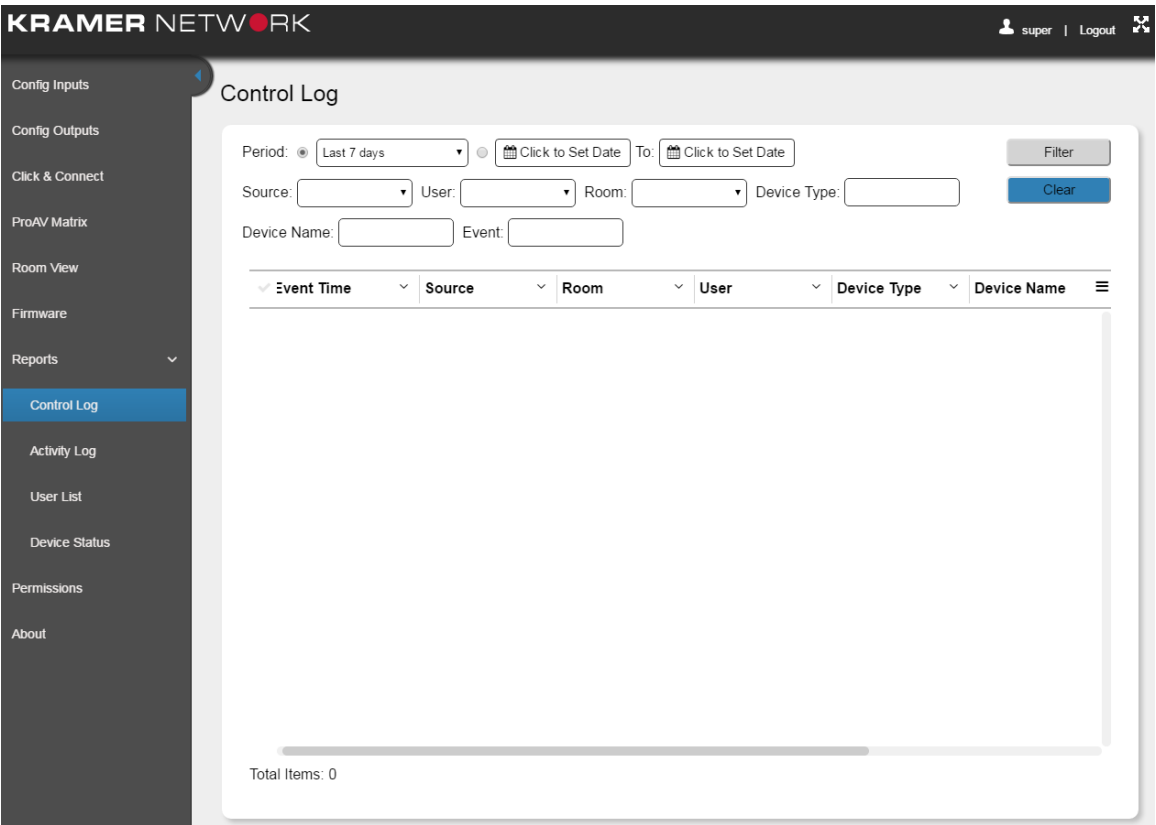


Figure 92: The Control Log

You can set the back log for which you wish to view the log or filter out certain dates to view. You can set the source, user, room, device type, device Name and/or an event to view.

The system reports:

- Panel button activity.
- The resulting events of this activity.
- Devices connectivity status.



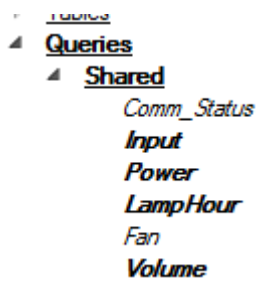
**IMPORTANT:** If Comm\_Status query has been defined by the **K-Config** device driver, **KRAMER NETWORK** checks the status of the device every 30 seconds when connected, and 3 times when disconnected, every 5 seconds. **KRAMER NETWORK** then sends the connect/disconnect message to the control log (the query is built into the krnt project).

### 9.1.1 Detecting Alerts

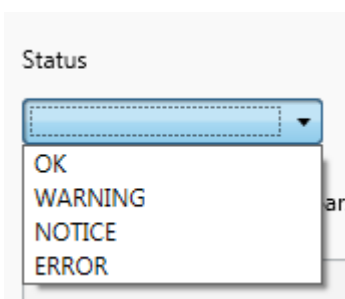
The system can detect Alert messages coming from Room-controller devices (such as the **RC-74DL**) and add them to the control log.

Alerts from virtual room controller projects are recorded in the control log, using the following logic:

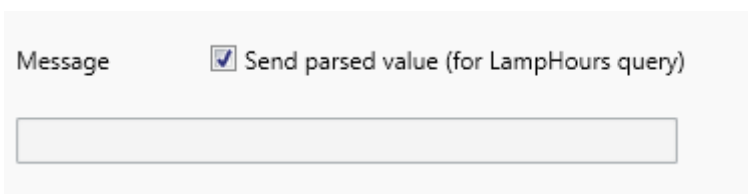
**An alert of a known query (shared):**



Status Value is:

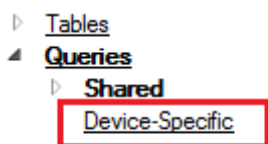


Status Message is:



The DisplayName is the name of the query name but in a readable format, for example: “LampHour” = Lamp Hour

**An alert of an unknown query (device-specific)**



- StatusValue –the same as above
- StatusMessage– the same as above
- DisplayName: the name of the query name

**An alert that does not belong to a query**

- StatusValue –the same as above
- StatusMessage– the same as above
- DisplayName: “Alert”

You can set the back log for which you wish to view the log, or filter out certain dates to view. You can set the source, user, room, device type, device Name and/or an event to view.

At this point, StatusValue will not be present, only the StatusMessage. For example: in the **Event** column will display: "Lamp Hour: 33.33% [1000/3000 h]".

The following is an example of a Control Log page:

✓ Event Time	Source	Room	Device Type	Device Name	Event
✓ 2016-11-16 15:11:37	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is stand by
✓ 2016-11-16 15:09:31	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is power on!!!
✓ 2016-11-16 15:06:56	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is stand by
✓ 2016-11-16 15:06:55	Room controller	KDS-3	Projector	NEC: NP-PA500U	Lamp Hour: 25.52% [49/192 h]
✓ 2016-11-16 15:05:47	Room controller	KDS-3	Generic	PJLink: PJLink	Lamp Hour: 25.80% [903/3500 h]
✓ 2016-11-16 15:05:23	Room controller	KDS-3	Generic	PJLink: PJLink	Lamp Hour: 0.00% [0/3500 h]
✓ 2016-11-16 15:04:45	Room controller	KDS-3	Generic	PJLink: PJLink	Lamp Hour: 25.80% [903/3500 h]
✓ 2016-11-16 15:04:21	Room controller	KDS-3	Generic	PJLink: PJLink	Lamp Hour: 0.00% [0/3500 h]

Figure 93: Log Page Example

## 9.2 Activity Log

The activity log reports changes in the system that are not related to the control of the room-assigned devices. For example:

- Adding / removing a user.
- Creating / removing / changing groups.
- Adding/ removing devices.
- Device configuration changes (connection. switching).
- Device connectivity.
- You can set the back log for which you wish to view the log or filter out certain dates to view. You can set the source, user, room, device type, device Name and/or an event to view.

The following is an example of an activity log

3	Device Notification	DVD	DVD Stopped
9	Device Notification	DVD	DVD Stopped
0	Device Notification	DVD	DVD Stopped
9	Device Notification	Kramer DIP-30	Kramer DIP-30 Video routing set: input 1 to output 1
9	Device Notification	Kramer VS-62HA	Kramer VS-62HA Video routing set: input 1 to output 1
8	Device Notification	Kramer VS-62HA	Kramer VS-62HA Video routing set: input 1 to output 1
7	Device Notification	DVD	DVD Stopped
2	Device Notification	Kramer DIP-30	Kramer DIP-30 Video routing set: input 3 to output 3
9	Device Notification	Kramer VS-62HA	Kramer VS-62HA Video routing set: input 5 to output 5

Figure 94: Activity Log Example

You can also export the data as csv (comma separated values):

	A	B	C	D	E	F	G	H	I	J
1	Event Time	Source	User	Device Name	Device Type	Event				
2	2016-12-1	User Action	super			Pro-AV scan initiated				
3	2016-12-1	User Action	super			Pro-AV scan initiated				
4	2016-12-1	User Action	super			Pro-AV scan initiated				
5	2016-12-1	Administrative	super			User super logged on				
6	2016-12-1	Administrative	super			User super logged off	Session Timeout			
7	2016-12-1	Device Notification		DESKTOP- Audio Str		DESKTOP-R9GBISL Input-1 Connection restored				
8	2016-12-1	Device Notification		Kramer SL Generic		Kramer SL-280 Connection restored				
9	2016-12-1	Device Notification		Kramer SL Generic		Kramer SL-280 Connection lost				
10	2016-12-1	Administrative	super			User super logged off	Session Timeout			
11	2016-12-1	Administrative	super			User super logged on				
12	2016-12-1	Administrative	super			User super logged off	Session Timeout			
13	2016-12-1	Administrative	super			Room Main floor layout changed				
14	2016-12-1	Administrative	super			Room Main floor layout changed				
15	2016-12-1	User Action	super	Kramer SL Generic		Add device Kramer SL-280 to room Main floor				
16	2016-12-1	Administrative	super			Room Main floor layout changed				
17	2016-12-1	Administrative	super			Room Main floor layout changed				
18	2016-12-1	Administrative	super			Room Main floor layout changed				
19	2016-12-1	Administrative	super			Room Main floor layout changed				
20	2016-12-1	Administrative	super			Room Main floor layout changed				
21	2016-12-1	Administrative	super			Room Main floor layout changed				
22	2016-12-1	Administrative	super			Room Main floor layout changed				
23	2016-12-1	Administrative	super			Room Main floor layout changed				
24	2016-12-1	Administrative	super			Room Main floor layout changed				
25	2016-12-1	Administrative	super			Room Main floor layout changed				
26	2016-12-1	Administrative	super			Room Main floor layout changed				

Figure 95: Activity Log – Exported Excel Table

### 9.3 User List

This report lists the users and their permission level:

User List					
✓ User	✓ Permission Level	✓ Created at	✓ Last Login	✓ Status	≡
✓ super	Super User	2016-09-26 01:28:28	2016-12-13 7:29:50	Active	
✓ steve	Admin	2016-12-12 22:41:22	Never	Active	
✓ user1	User	2016-12-12 22:42:22	Never	Active	
✓ user2	User	2016-12-12 22:42:39	Never	Active	
Total Items: 4					

Figure 96: User List

## 9.4 Device Status

The Device Status page displays the current device status and firmware version. Device status indication:

- Green – online
- Orange – awaiting connection
- Red – disconnected

### Device Status

Room	Device	Device Type	Status Updated	Firmware Version
Main floor	SL2800	Generic	2016-12-13 08:04:01	01.01.0016
	DVD 1	IP Encoder	2016-12-12 12:38:58	1.05.00.010
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
	DESKTOP-R9...	Audio Streamer	2016-12-12 18:50:48	Unknown
Total Items: 18				

Figure 97: Device Status

## 10 Permissions Page

Three types of users can control and operate the system with different access permissions:

Users	Permissions	Menu Access	
Super	<b>The System Administrator/Network Manager:</b> Defines the topology, manages the devices, creates Admin/User, creates the Room View, the video and the audio matrix, creates scenarios, grants Admin access to groups	All the menu items	
Admin	<b>The Site Administrator:</b> Creates the Room View, has partial access to the virtual matrix, creates scenarios, creates users, grants user access to rooms/scenarios	Function	Description
		<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
		<input checked="" type="checkbox"/> Click and Connect	Access Click and Connect Menu
		<input checked="" type="checkbox"/> ProAV Matrix	Manage ProAV Matrices
		<input checked="" type="checkbox"/> Room View	Access Room View Menu
		<input checked="" type="checkbox"/> Firmware	Manage devices firmware
		<input checked="" type="checkbox"/> Control Log	View log of control events
		<input checked="" type="checkbox"/> Activity Log	View log of system activity
		<input checked="" type="checkbox"/> User List	View status of all registered users
		<input checked="" type="checkbox"/> Device Status	View status of all devices
		<input checked="" type="checkbox"/> Permissions	Access Permissions Menu
User	<b>The Operator:</b> Can log in to specific rooms (authorized by the Super/Admin), operates the room view, uses the scenarios, can drag and drop inputs to outputs in the room view	Function	Description
		<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
		<input checked="" type="checkbox"/> Room View	Access Room View Menu

The Super user has full access to all of **KRAMER NETWORK** features.

The Super can give permissions and set access limits separately for each Admin that is added to the system and similarly, the Admin can set permissions for different Users.

For example, the Super can be the company IT manager, the Admins can be managers of different offices and the users can manage a room or a set of rooms.

Select the Permissions page:

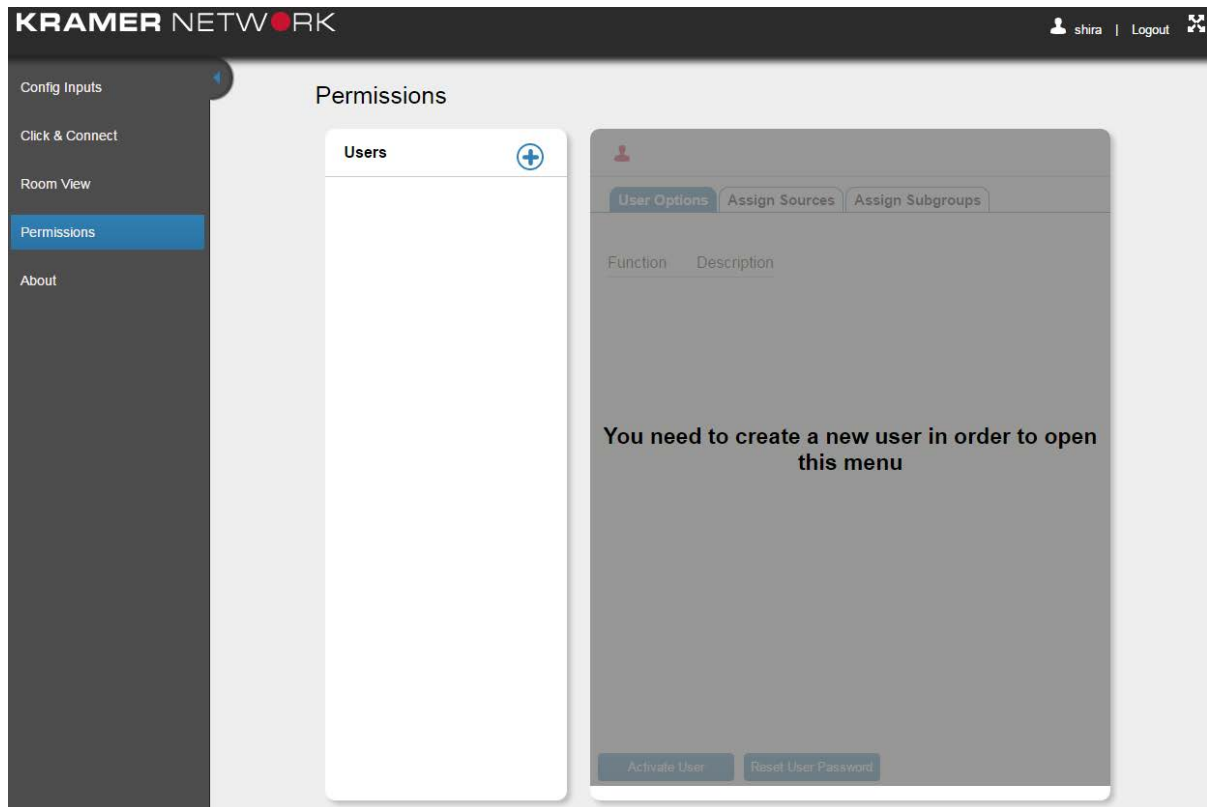



Figure 98: The Permissions Page

Click . The following window appears:

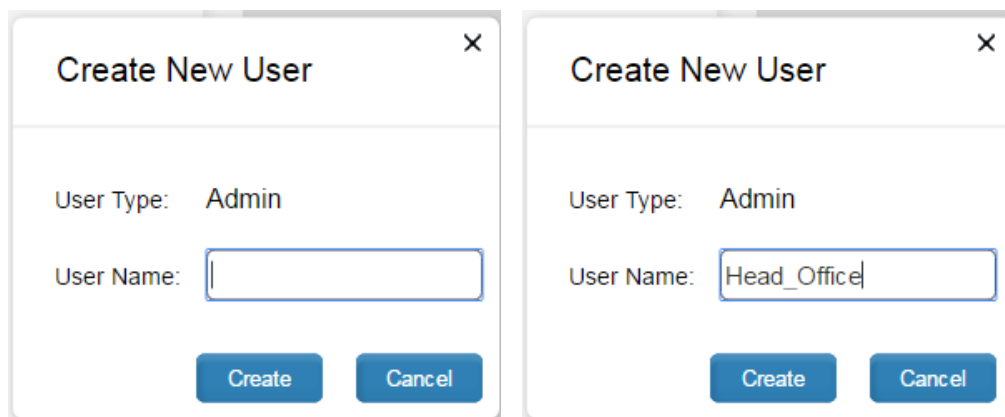




Figure 99: Creating a New Admin User


Click **Create**. The new Admin is added to the list:


## Permissions

### Users

✓  steve (admin)

 user1

 user2

 **steve**

User OptionsAssign InputsAssign Groups

Function	Description
<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
<input checked="" type="checkbox"/> Click and Connect	Access Click and Connect Menu
<input checked="" type="checkbox"/> ProAV Matrix	Manage ProAV Matrices
<input checked="" type="checkbox"/> Room View	Access Room View Menu
<input checked="" type="checkbox"/> Firmware	Manage devices firmware
<input checked="" type="checkbox"/> Control Log	View log of control events
<input checked="" type="checkbox"/> Activity Log	View log of system activity
<input checked="" type="checkbox"/> User List	View status of all registered users
<input checked="" type="checkbox"/> Device Status	View status of all devices
<input checked="" type="checkbox"/> Permissions	Access Permissions Menu

Deactivate User

Reset User Password

Figure 100: Adding an Administrator User

To create additional Admins and Users:

Create New User

User Type:

Admin

User

User Name:

Create

Cancel

Figure 1: Creating a New User or Admin (by the Super)



Select the Admin under which the user will be defined:

The screenshot shows the 'Create New User' modal window. The 'User Type' is set to 'Admin'. The 'User Name' field is empty. The 'Assign to Admin' dropdown menu is open, showing 'head\_office' as the selected option, with 'head\_office' and 'london\_branch' as other visible options. The background interface shows the 'head\_office' user profile with the 'Assign Groups' tab selected, displaying a list of 'Assigned Groups' including 'Floor 1' and 'Floor 2'.

Figure 101: Selecting the Admin for the new User



The Admin can create his/her own Users but cannot create other Admins.

In the User Options tab you can set the access to menus.

The screenshot shows the 'Permissions' interface for user 'steve'. The 'User Options' tab is active, displaying a table of functions and descriptions. All functions are checked. The 'Users' list on the left shows 'steve (admin)' selected. The 'User Options' tab displays a table of functions and descriptions, all with checkboxes selected. At the bottom are 'Deactivate User' and 'Reset User Password' buttons.

Function	Description
<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
<input checked="" type="checkbox"/> Click and Connect	Access Click and Connect Menu
<input checked="" type="checkbox"/> ProAV Matrix	Manage ProAV Matrices
<input checked="" type="checkbox"/> Room View	Access Room View Menu
<input checked="" type="checkbox"/> Firmware	Manage devices firmware
<input checked="" type="checkbox"/> Control Log	View log of control events
<input checked="" type="checkbox"/> Activity Log	View log of system activity
<input checked="" type="checkbox"/> User List	View status of all registered users
<input checked="" type="checkbox"/> Device Status	View status of all devices
<input checked="" type="checkbox"/> Permissions	Access Permissions Menu

Figure 102: Adding Several Admins and Users

You can also reset the user password or deactivate/activate the user (if needed) by selecting a user (Michael in this example) and clicking the **Deactivate User** button, see [Figure 103](#):

## Permissions

The screenshot shows the 'Permissions' interface. On the left, a 'Users' sidebar lists several users, with 'london\_branch (admin)' selected. The main panel shows the 'User Options' tab for 'london\_branch'. It contains a table of functions and their descriptions, all of which are checked. At the bottom, there are buttons for 'Deactivate User' and 'Reset User Password'.

Function	Description
<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
<input checked="" type="checkbox"/> Click and Connect	Access Click and Connect Menu
<input checked="" type="checkbox"/> ProAV Matrix	Manage ProAV Matrices
<input checked="" type="checkbox"/> Room View	Access Room View Menu
<input checked="" type="checkbox"/> Firmware	Manage devices firmware
<input checked="" type="checkbox"/> Control Log	View log of control events
<input checked="" type="checkbox"/> Activity Log	View log of system activity
<input checked="" type="checkbox"/> User List	View status of all registered users
<input checked="" type="checkbox"/> Device Status	View status of all devices
<input checked="" type="checkbox"/> Permissions	Access Permissions Menu

Figure 103: The User Options Tab – for the Admin

Select the Assign Inputs tab to set the access to inputs by selecting a device/s and clicking the appropriate arrows. The Super assigns the inputs to the Admin and the Super and Admin can assign from his/her available list the inputs to the user:

The screenshot shows the 'Assign Inputs' tab for the 'head\_office' user. The 'Users' sidebar on the left has 'head\_office (admin)' selected. The main panel shows two columns: 'Available Devices' and 'Assigned Devices'. The 'Available Devices' column lists several device IDs. The 'Assigned Devices' column lists a subset of these devices. Between the columns are four arrows: a double right arrow, a single right arrow, a single left arrow, and a double left arrow, used for moving devices between the two lists.

Available Devices	Assigned Devices
Ult4-0a2168 #2	Ult4-0a2168 #1
Ult4-0a2168 #3	Ult4-0a2168 #4
Ult4-0a219f #1	Ult4-0a219f #2
Ult4-0a219f #4	Ult4-0a219f #3
Ult4-0a214a #1	BP20662
Ult4-0a214a #2	
Ult4-0a214a #3	
Ult4-0a214a #4	
BQ67575	

Figure 104: The Assign Inputs Tab – Assigning Sources to the Admin

The Admin can use only the inputs that were assigned to him/her by the Super:

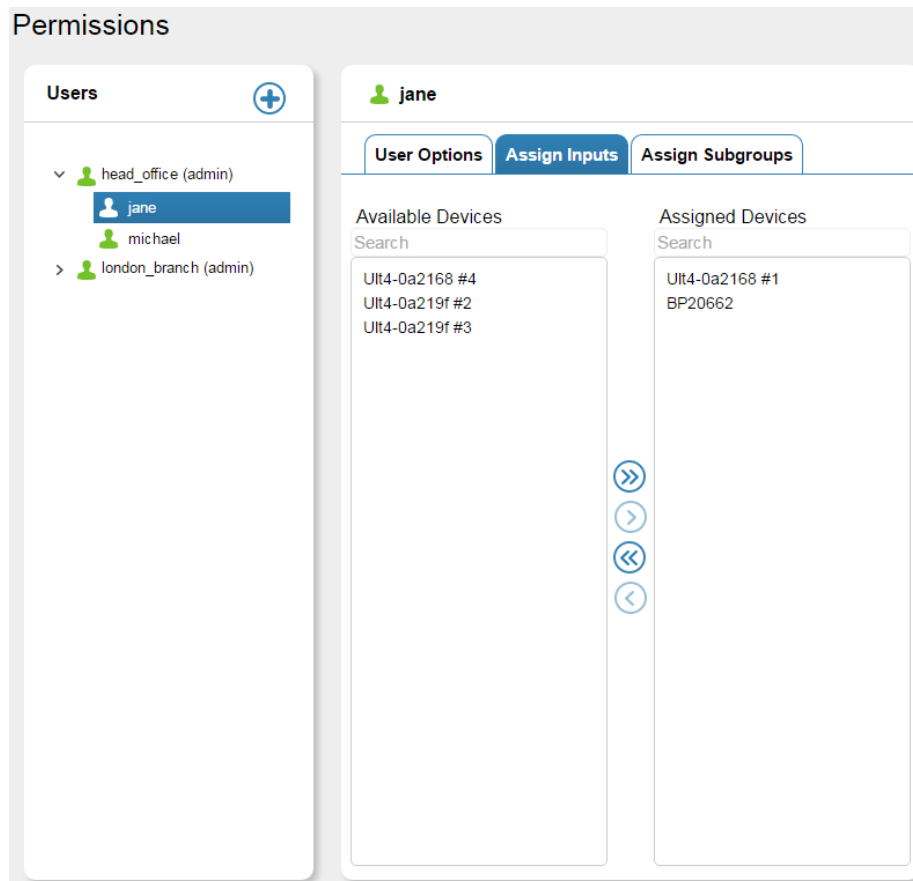


Figure 105: The Assign Inputs Tab – Assigning Sources to the User

The Super assigns groups of rooms to the Admin via the Assign groups tab:

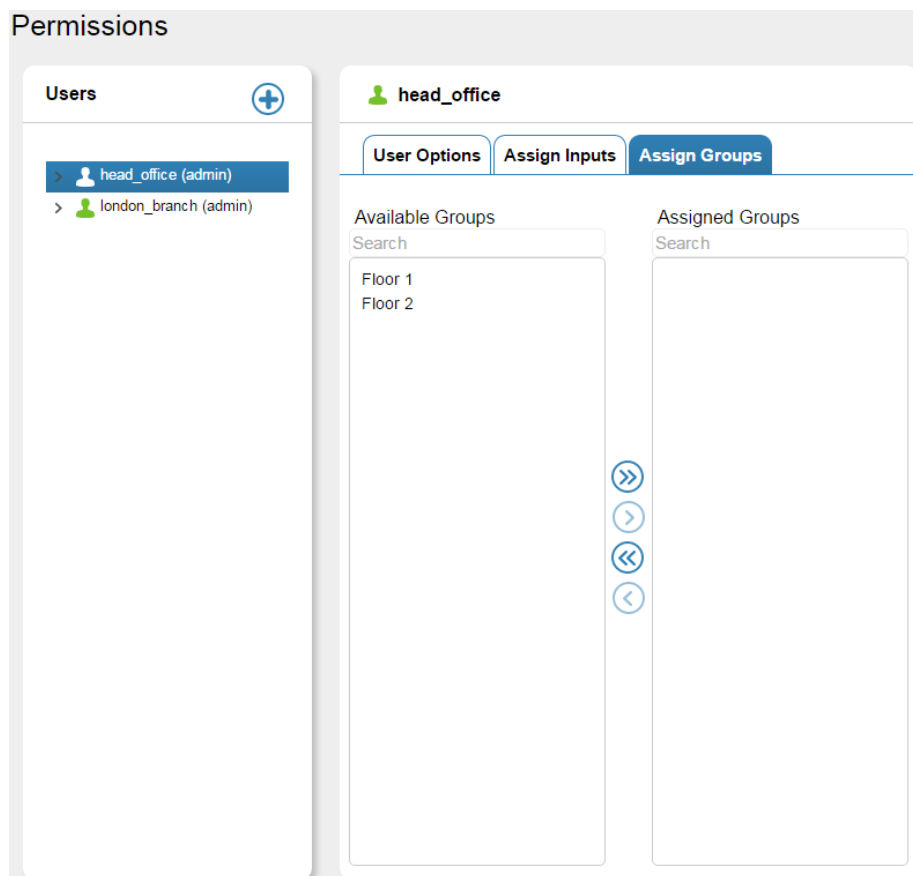


Figure 106: The Assign Group Tab

A Super and Admin can assign rooms (outputs, subgroups) to the user:

## Permissions

The screenshot shows the 'Permissions' interface. On the left, a 'Users' panel lists 'head\_office (admin)', 'jane', 'michael' (highlighted), and 'london\_branch (admin)'. On the right, the 'michael' user profile is shown with three tabs: 'User Options', 'Assign Inputs', and 'Assign Subgroups' (selected). The 'Assign Subgroups' tab displays two columns: 'Available Subgroups' and 'Assigned Subgroups'. 'Available Subgroups' contains 'Room 2' and 'Boardroom2'. 'Assigned Subgroups' contains 'Room 1' and 'Boardroom1'. Between the columns are four navigation arrows: a double right arrow, a single right arrow, a double left arrow, and a single left arrow.

Figure 107: Assigning Subgroups to the User

### 10.1 Creating Users

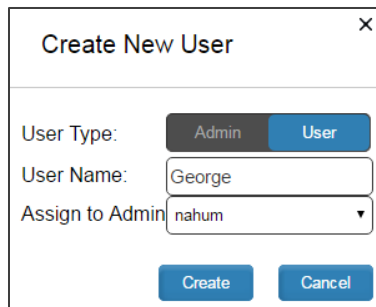
To create a user (Admin or User) click the button. The Create New User window appears:

The first screenshot shows the 'Create New User' dialog with 'User Type' set to 'User' and 'Assign to Admin' set to 'nahum'. The second screenshot shows the same dialog with 'User Type' set to 'Admin'.

Figure 108: Creating a New User (Admin or User)

Select the type of user. If you are selecting a User, you need to also select the Admin to assign the User to. Note that Admin will always be under Super and User will always be under a selected Admin.

Fill in the User details and click the **Create** button (note that you can type the user's name or the name of the room that is controlled):

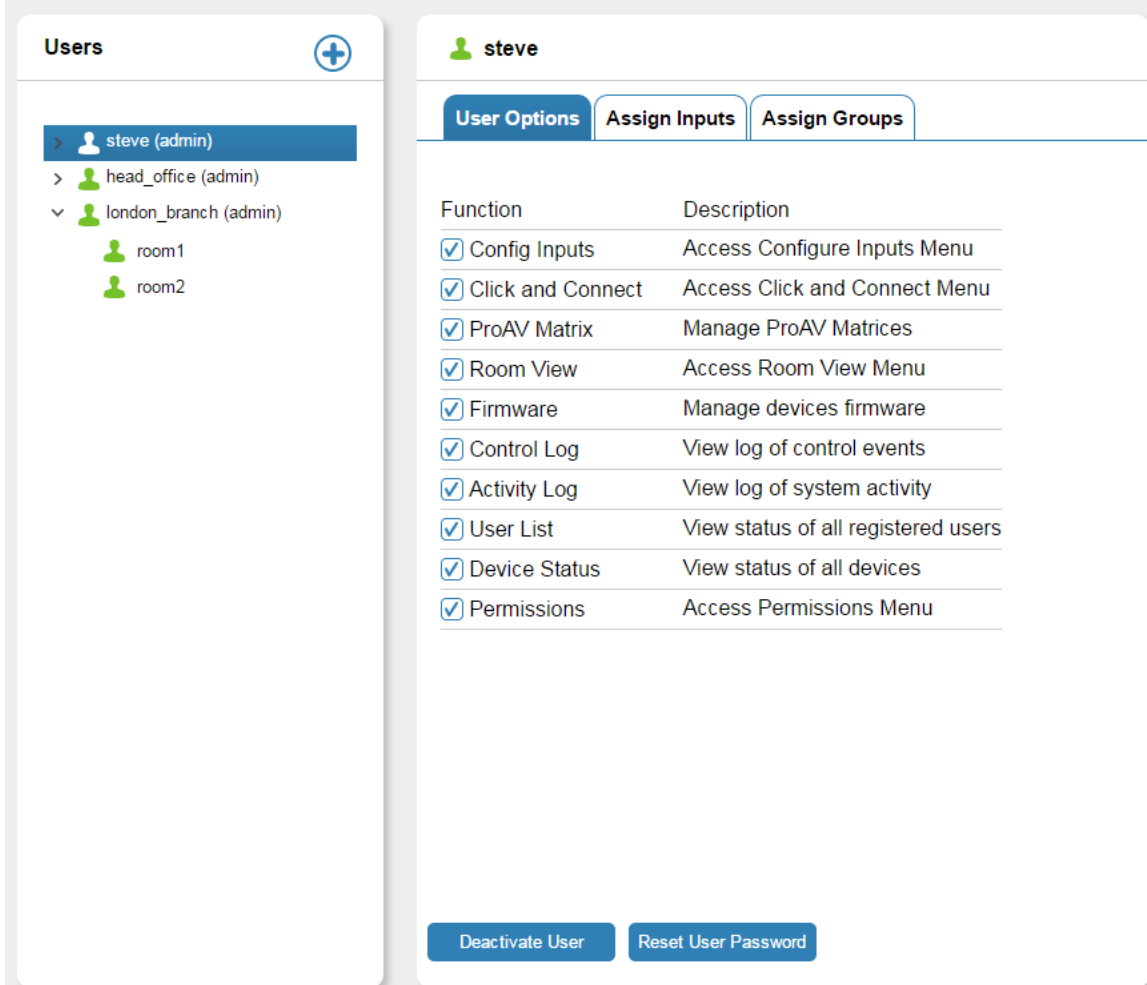


A dialog box titled "Create New User" with a close button (X) in the top right corner. It contains three input fields: "User Type" with radio buttons for "Admin" and "User" (where "User" is selected), "User Name" with a text box containing "George", and "Assign to Admin" with a dropdown menu showing "nahum". At the bottom are "Create" and "Cancel" buttons.

Figure 109: Creating the Conference Room New User

The Conference room user is created under the administrator (Nahum in this example):

## Permissions



The interface shows a "Users" sidebar on the left with a tree view: "steve (admin)" (selected), "head\_office (admin)", and "london\_branch (admin)" which contains "room1" and "room2". The main panel is for user "steve" and has three tabs: "User Options" (active), "Assign Inputs", and "Assign Groups". Under "User Options", there is a table of permissions:

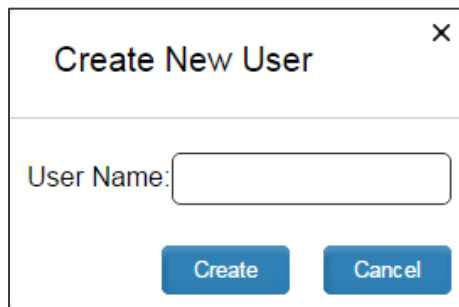
Function	Description
<input checked="" type="checkbox"/> Config Inputs	Access Configure Inputs Menu
<input checked="" type="checkbox"/> Click and Connect	Access Click and Connect Menu
<input checked="" type="checkbox"/> ProAV Matrix	Manage ProAV Matrices
<input checked="" type="checkbox"/> Room View	Access Room View Menu
<input checked="" type="checkbox"/> Firmware	Manage devices firmware
<input checked="" type="checkbox"/> Control Log	View log of control events
<input checked="" type="checkbox"/> Activity Log	View log of system activity
<input checked="" type="checkbox"/> User List	View status of all registered users
<input checked="" type="checkbox"/> Device Status	View status of all devices
<input checked="" type="checkbox"/> Permissions	Access Permissions Menu

At the bottom of the main panel are two buttons: "Deactivate User" and "Reset User Password".

Figure 110: Creating a New User (Admin or User)

The user in the higher hierarchy can define the limits (access to pages, sources and subgroups) for the user/s in the lower hierarchy.

The Admin can create users only:

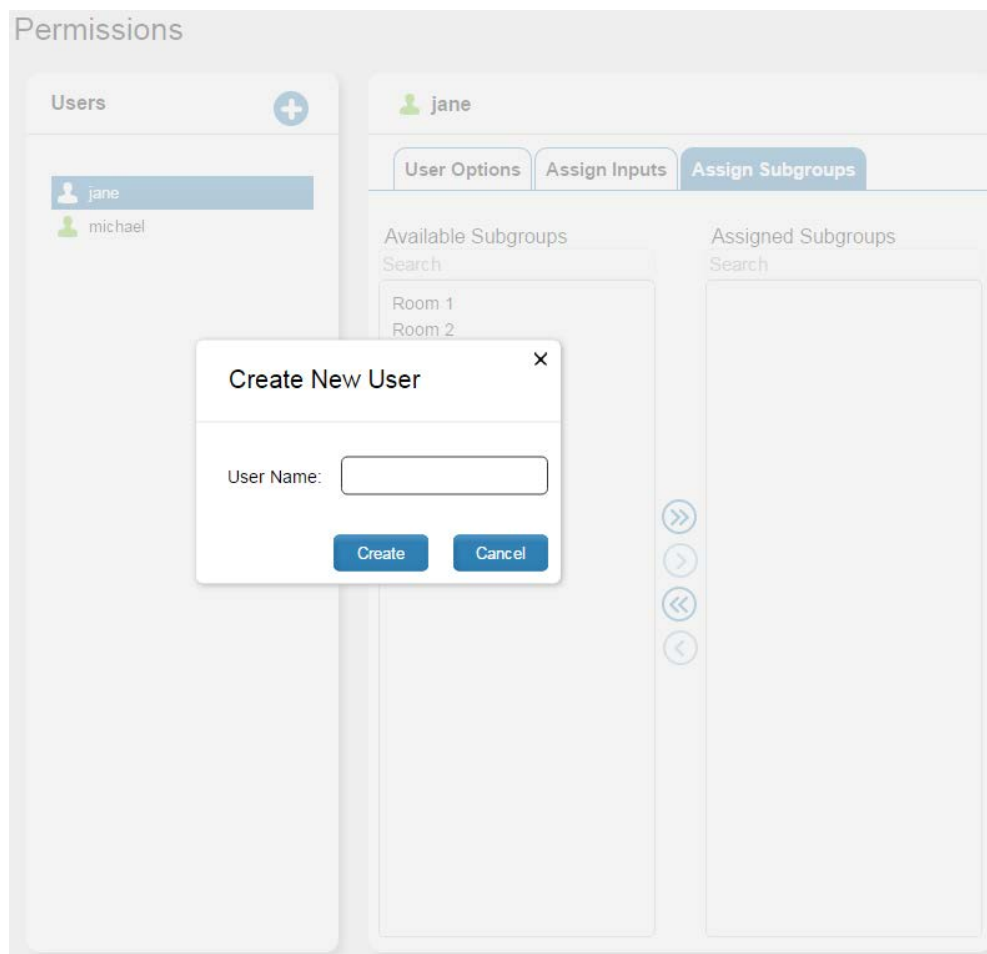


A modal dialog box titled "Create New User" with a close button (X) in the top right corner. It contains a text input field labeled "User Name:" and two buttons at the bottom: "Create" and "Cancel".

Figure 111: Create New User Window

## 10.2 Admin Access

The Admin can create new users within his group:



The "Permissions" page shows a list of users on the left (jane, michael) and a detailed view for user "jane" on the right. The detailed view has tabs for "User Options", "Assign Inputs", and "Assign Subgroups". The "Assign Subgroups" tab is active, showing "Available Subgroups" (Room 1, Room 2) and "Assigned Subgroups". A "Create New User" dialog box is overlaid on the page, identical to the one in Figure 111.

Figure 112: Admin Creating a New User

The Admin can assign subgroups to his users:

## Permissions

The screenshot displays the 'Permissions' management interface. On the left, a 'Users' sidebar lists 'jane' (selected) and 'michael'. The main panel is titled 'jane' and contains three tabs: 'User Options', 'Assign Inputs', and 'Assign Subgroups' (which is active). The 'Assign Subgroups' tab is divided into two columns: 'Available Subgroups' and 'Assigned Subgroups'. The 'Available Subgroups' list includes 'Room 2', 'Boardroom1', and 'Boardroom2'. The 'Assigned Subgroups' list includes 'Room 1'. Between these two lists are four circular navigation buttons: a double right arrow (>>), a single right arrow (>), a double left arrow (<<), and a single left arrow (<).

Figure 113: Admin Assigning Subgroups to a User

## 11 About Page

The About page displays the web page, server and software versions, as well as Kramer Electronics Ltd details:



Figure 114: The About Page

Click **Update License** to access the registration screen (see [Section 2.1](#))



## 12 Supported ProAV Devices

The following are the supported Kramer ProAV devices:

Product	Kramer Network Support			Product	Kramer Network Support		
	Auto Discovered	ProAV Matrix	FW Upgrade		Auto Discovered	ProAV Matrix	FW Upgrade
691	✓	-	✓	VP-445	✓	-	-
692	✓	-	✓	VP-4X1CS	✓	-	✓
908	✓	✓	✓	VP-4x4K	✓	✓	✓
DIP-20	✓	✓	✓	VP-4x8AK	✓	✓	✓
DIP-20M	✓	✓	✓	VP-553	✓	-	-
DIP-30	✓	✓	✓	VP-553XL	✓	-	-
DIP-30M	✓	✓	✓	VP-558	✓	✓	-
DIP-31	✓	✓	✓	VP-732	✓	-	-
DIP-31M	✓	✓	✓	VP-734	✓	-	-
FC-132ETH	✓	-	✓	VP-770	✓	-	✓
FC-22ETH	✓	-	✓	VP-771	✓	-	✓
FC-24ETH	✓	-	✓	VP-772	✓	-	✓
FC-26	✓	-	✓	VP-773	✓	-	✓
FC-28	✓	-	✓	VP-773A	✓	-	✓
FC-404Net	✓	-	-	VP-774	✓	-	✓
FC-54	✓	-	✓	VP-774A	✓	-	✓
FC-54P	✓	-	✓	VP-778	✓	-	✓
FC-54PW	✓	-	✓	VP-81K	✓	✓	✓
FC-6	✓	-	✓	VP-81KSI	✓	✓	✓
FC-6P	✓	-	✓	VP-81SID	✓	✓	✓
FC-6PW	✓	-	✓	VP-81SIDN	✓	✓	✓
FC-7	✓	-	✓	VP-8x4AK	✓	✓	-
FC-7P	✓	-	✓	VP-8x8AK	✓	✓	-
FC-7PW	✓	-	✓	VP-8x8TP	✓	✓	-
KADS-1	✓	✓	-	VS-1616D	Manually	✓	-
KADS-100	✓	✓	✓	VS-311UHD	✓	✓	-
KDS-DEC3	✓	-	-	VS-3232D	Manually	✓	-
KDS-DEC4	✓	-	-	VS-3232DN	Manually	✓	-
KDS-EN3	✓	-	-	VS-411DT	✓	✓	✓
KDS-EN4	✓	-	-	VS-411UHD	✓	✓	-
NT-52P	✓	-	✓	VS-41HDCP	✓	-	-
NT-52PW	✓	-	✓	VS-42HDCP	✓	✓	-
PL-50	✓	-	✓	VS-42HN	✓	✓	-
RB-6	✓	-	✓	VS-42UHD	✓	✓	✓
RC-2	✓	-	-	VS-44DT	✓	✓	-
RC-20TB	✓	-	-	VS-44FO	✓	✓	✓
RC-21TB	✓	-	-	VS-44H	✓	✓	-
RC-2C	✓	-	-	VS-44HDCP	✓	✓	✓
RC-43R	✓	-	-	VS-44HN	✓	✓	✓
RC-43SL	✓	-	✓	VS-44UHD	✓	✓	✓
RC-43T	✓	-	-	VS-44UHDA	✓	✓	✓
RC-52A	✓	-	-	VS-48HDCPXL	✓	✓	-
RC-52N	✓	-	-	VS-48HN	✓	✓	✓
RC-54DL	✓	-	-	VS-611DT	✓	✓	✓
RC-5B2	✓	-	-	VS-622DT	✓	✓	✓
RC-5B4	✓	-	-	VS-62D	✓	✓	-
RC-62	✓	-	-	VS-62DT	✓	✓	✓

Product	Kramer Network Support			Product	Kramer Network Support		
	Auto Discovered	ProAV Matrix	FW Upgrade		Auto Discovered	ProAV Matrix	FW Upgrade
RC-63A	✓	-	-	VS-62H	✓	✓	✓
RC-63DLN	✓	-	-	VS-62HA	✓	✓	✓
RC-712M	✓	-	✓	VS-6464DN	Manually	✓	-
RC-74DL	✓	-	✓	VS-66HDCP	✓	✓	-
RC-76M	✓	-	✓	VS-66HDCPXL	✓	✓	-
RC-76R	✓	-	✓	VS-66HN	✓	✓	✓
RC-78R	✓	-	✓	VS-82HDXL	✓	✓	✓
SL-10	✓	-	✓	VS-84HN	✓	✓	✓
SL-12	✓	-	✓	VS-88DT	✓	-	-
SL-1N	✓	-	✓	VS-88FO	✓	✓	✓
TP-590Rxr	✓	-	✓	VS-88HDCPXL	✓	✓	-
TP-590Txr	✓	-	✓	VS-88HDXL	✓	✓	✓
VM-212DT	✓	✓	✓	VS-88HN	✓	✓	-
VM-214DT	✓	✓	✓	VS-88UHD	✓	✓	✓
VP-16x18AK	✓	✓	✓	VSM-4x4HFS	✓	-	-
VP-31KSI	✓	✓	✓	WP-20	✓	✓	✓
VP-439	✓	-	-	WP-20E	✓	✓	✓
VP-440	✓	-	-	WP-20M	✓	✓	✓
VP-444	✓	-	-				