



USER MANUAL MODEL:

KRAMER NETWORK

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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!

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: <u>www.kramerav.com/manual/Kramer Network</u>.

New Features in Kramer Network Version 2.1

- Device discovery across the subnet.
- Management of devices that do not support P3K.
- Automatic detection of VIA devices.
- EDID management.
- Multi-deployment of matrix devices by replicating the configuration of one matrix to multiple devices with the same IN-OUT configuration.
- KDS-6 video streaming preview.
- KDS-4 video recording.
- Video-wall configuration and identification.
- Kramer Maestro new generic message trigger.
- 30-day device status report option.

New Features in Kramer Network Version 2.0

- Enhanced device management, including remote operation, FW upgrade and autodiscovery of modular matrices.
- Integrated Maestro room automation for use with any device or location.
- Email & SNMP trap notification.
- Increased security with LDAP authentication.
- Comprehensive integrated room scheduling.
- Fully customizable user scripts for endless applications & actions.
- Completely new look & feel.
- Multi-language support & online help.

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 and Pro AV matrix devices.
- Added Pro AV Master room controllers physical and virtual control panels for real-time control.
- Support for device firmware upgrade.
- Added report log for control, events, activity, users and device status.

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.

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**.

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 as well as LDAP authentication. 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.
- User-access management
- delegate user 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.
- Enhanced security with LDAP user authentication, SSL/TLS secure-connection option and advanced user management, enabling you to create different levels of access for different users.
- Powerful built-in room automation enhance any device or location with built in Kramer Maestro room and device automation, configuration and management.
- Detailed site topology easily drill down to visually examine a specific location.
- Live alert and response proactive notifications such as email and SMNP traps keep you informed of issues in your system.

- Fully customizable scripts increase the functionality of your system by creating custom scripts in almost any language to provide for the specific needs of a project.
- Integrated room scheduling and management synchronized with your Outlook.
- Multi-lingual Support.
- Online Help.
- 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).

Installation

To install KRAMER NETWORK:

1. open the installation wizard and follow the directions online:



Figure 1: KRAMER NETWORK Installation Wizard

- 2. Click NEXT.
- 3. Check Upgrade or Uninstall.



Figure 2: Upgrading KRAMER NETWORK

4. Click NEXT. The list of devices to upgrade (or install) appears to the left:



Figure 3: Upgrading KRAMER NETWORK Components

Following the installation of Kramer Network Components and while **K-Config** is installed, **KRAMER NETWORK** database is created (or updated) and the following info message appears:

	×
The DB was updated	
ок	

Figure 4: Data Base Updated

5. Click **OK** and wait for completion of the installation process. The **KRAMER NETWORK** Administrator Utilities program opens:

Services	Database	Users Settings Help	
0	* •	Kramer Network	
0	* •	Adapter Layer	
0	•	Web Server (Apache)	
Ø	•	MySQL	

Figure 5: Kramer Network Administrator Utilities Window

The following message also appears:



Figure 6: Installation is Complete

6. Click FINISH.

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 to be able to use it. When first logging in (as the Super user), a registration pop-up window appears:

First Name *	Last Name *
0/32	0/32
Company*	Select country*
0 / 32 E-mail *	Select country
E-mail	Phone number *
0/32	0/33
Select license type *	٣
Request N	lew License

Figure 7: Registration Window

To register KRAMER NETWORK:

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

K	egistration	
First Name "	Last Name *	
James Green	Green	
11	/ 32	5 / 32
Company *	Select country *	
EverGreen	Australia	
9	/ 32	
E-mall*	Phone number*	
James@evergreen.com	033676767	
19	/ 32	9/32
Select license type *		
Requ	est New License	

Figure 8: The Registration Form

- Select the license type.
 Go to <u>www.kramerav.com/product/Kramer Network</u> for further details.
- 3. Once selected, click Request New License. The license request window appears:

Lice	ense request for I	MAC: 00-0e-04-k	07-7e-6c
0A30333A7379	61640A303030303030303	313A736563697665640/	A6D6F632E6E65657
	06E656572673A6C6961		
	2747375413A7972746E7 356572673A656D616E5		
	63362D65372D37622D		
	ise, send the license key to: }	<pre>kramernetwork@kramerel.co</pre>	<u>m</u> , with one of the
ollowing options:	aboard - and nast it to the em	nail text	
ollowing options: Copy to clip Send by em	pboard - and past it to the em nail - will select the default er	mail on this computer.	
ollowing options: Copy to clip Send by em	nail - will select the default er e - will download the file to th	mail on this computer.	Send this file by email as
ollowing options: Copy to clip Send by em Save as file	nail - will select the default er e - will download the file to th	mail on this computer.	end this file by email as

Figure 9: License Request Window

- 4. 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.

1	∦ ∎ B 2 ∛ ®7 -	A - ≣	* 4 = *	* A* A*	Names	 Attach File Attach Item * Signature * Include 	 Follow Up High Importan Low Importan Tags 	Zoom	
	То	KramerNet	work@kramere	l.com					
Send	<u>⊆</u> c								
#7029010	S <u>u</u> bject:	New licen	e request for	james green	from eve	rgreen company			
0A303						7665640A6D6F6 0303A63616D0A		72657665	406
0A303	333A7379(772657665	406
0A303	333A7379(62D6537						772657665	406

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

Figure 10: Send License Request by Email

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

	<u>^</u>	Name	Date	Туре	Size	Tags	
		📕 QuickLook	12/29/2014 7:38 AM	File folder			
		📕 thumbs	12/29/2014 7:38 AM	File folder			
	E	Network_Australia	5/17/2016 9:54 AM	KNL File	1	KB	
	- 11						
ġ.	÷						
•	+ vork_Austra	alia_evergreen_17-05-2016.k	nl		- KNI	. File <mark>(</mark> .knl)	÷

Figure 11: The License Key File

Wait for the license to upload. The web page reloads and the login page appears.

KRAMER NETWORK is managed in three permission levels: Super, Admin and User (see <u>Users Management</u> on page <u>96</u>). When you first open the **KRAMER NETWORK** enter the default login for Super user:

User: super Pass: 12345

6. Change the default password and click CHANGE:

Change Default Password	
Old Password *	
New Password *	
	0/8
Retype new password *	
	0/8
	CHANGE

Figure 12: KRAMER NETWORK – Changing the Password

Logging In

To login:

1. Type your username and the new password and click LOGIN:

KRAN	VER N	ETWOR
Username *		
Super		
Password *		
	LOGIN	

Figure 13: KRAMER NETWORK Login

If the program requires a license update, the following message appears:



Figure 14: Updating License

For details, go to Registration on page 7.

The following page appears when opening for the first time:



Figure 15: KRAMER NETWORK Main Page – Opening for the First Time



You can use the tutorial as a quick reference guide for setting a streaming system or a modular matrix Pro AV matrix system.

2. Click CLOSE.



Click ② on the top right at any time to access the tutorial documents and other help issues.

The system automatically scans for connected devices as the main page appears:

KRAMER NETWORK	🝞 🗜 Super Logout 🚦
Q. Find a device by name or IP address	Image: A state of the state
T ALL DEVICES STREAMING GROUPS VIDEO WALLS	
Pro AV 17 devices)	
Video IP Rx (5 devices)	
Audio IP Rx (4 devices)	
Video IP Tx (2 devices)	
Audio IP Tx (4 devices)	

Figure 16: KRAMER NETWORK Main Page

Generally, at any point, you can:

- Click
 to search for help topics.
- Verify the current user.
- Click Logout to exit KRAMER NETWORK.
- Click 🛃 to enter/exit full screen mode.

Below the title bar, click \equiv to view the full name of each page and click \times to view icons only:



Figure 17: KRAMER NETWORK - Full Menu Names

System Configuration Page

The System Configuration page enables performing the following actions:

- <u>Configuring and Managing Devices</u> on page <u>13</u>.
- <u>Creating and Managing Locations</u> on page <u>35</u>.
- <u>Configuring the Rooms</u> on page <u>40</u>.

Configuring and Managing Devices

Once the **KRAMER NETWORK** main window (**System configuration** page) opens for the first time, the **ALL DEVICES** subtab in the **DEVICES** tab appears, and an automatic scan finds all the connected and supported devices in the system.



For each discovered device, you can go to the Supported Device list (see <u>Supported</u> <u>Devices List</u> on page <u>109</u>) to check which features are supported by **KRAMER NETWORK** for this device. For example, a device may be detected by the system, but routing via MATRIX VIEW is not supported.

The discovered devices are included within 5 built-in folders:

- Pro AV Lists all the AV devices such as room controllers, control gateways, matrices and so on.
- Video IP Rx Lists all the devices receiving video over IP.
- Audio IP Rx Lists all the devices receiving audio over IP.
- Video IP Tx lists all the devices transmitting video over IP.
- Audio IP Tx Lists all the devices transmitting audio over IP.

KRAMER NETWORK	🔞 💄 Super Logout 🚦
Pind a device by name or IP address	۵
ALL DEVICES STREAMING GROUPS VIDEO WALLS	
Pro AV (7 devices)	
Video IP Rx (5 devices)	
Audio IP Rx (4 devices)	
Video IP Tx (2 devices)	
Audio IP Tx (4 sevices)	



Device List

Select a device from the built-in folders to view its status. The following table defines the device status color key (same for audio and video devices):

Icon Color	Status Definition
10100	Ready (for example, the Pro AV device is ready).
	Awaiting Connection (for example, the video device is awaiting connection).
4	Disconnected from the Network (for example the audio device was disconnected from the network).

After selecting a device from the list, you can also edit its name.

Use the ALL DEVICES subtab as follows:

- Click ((scan) any time to add the latest devices that were connected to your system (Super only).
- Click limit to find unassigned devices (see <u>Finding Unassigned Devices in the Network</u> on page <u>15</u>).
- Filter out a device by typing its name or part of its name in the search text box.
- Click ••• to add a device manually (see <u>Adding a Device Manually</u> on page <u>16</u>).
- Configure several devices at once (see <u>Configuring Several Devices Simultaneously</u> on page <u>18</u>).

The source devices include Kramer encoder/decoder systems (such as the KDS-EN4, KDS-EN6 and so on) and Dante[™] encoder devices which are integrated into KRAMER NETWORK.

Finding Unassigned Devices in the Network

You can click is to discover the IP addresses of devices in the network that could not be associated with any device in the auto-scan. By default, only the list of the unknown devices appears in the Unknown devices window.



This operation can be performed by the Super only.

To discover unassigned devices:

- 1. Select System configuration > DEVICES tab.
- 2. Click 📋 . The Unknown devices window opens.

Show only new d	levices					
Paddress 🛧	Scan name	Scan date	Device protocol	Device name	Device type	Device
92.168.56.74	Base Scan (default scan)	17/12/2018 12:21:53 PM	N/A ~	12222	1111	12220
92.168.68.201	Base Scan (default scan)	17/12/2018 12:21:53 PM	N/A -			122221
		Page:		e 10 v 1-2		У
		Page:				K <
		Page:				K <

Figure 19: Unknown Devices Window



If you recognize the IP address you can associate it with the device (for example, to a VIA device).

- 3. In the discovered device line, open the drop-down list under Device protocol and select Via. Via device details (such as device type, vendor, protocol, port number and so on) are added to the device line.
- 4. Click ADD.

Adding a Device Manually

The following device types cannot be discovered via system scan and can be added manually:

- Offline devices.
- IP Kramer devices that do not support broadcast.
- Pro AV devices that are connected to I/O gateways.
- Non-IP devices (serial or IR).
- Certain non-Kramer devices.

To add a Kramer device manually:

1. Click •••• and select Add Device Manually. The following window appears:

dd device mar	nually				>
Device protocol			Communication ty	vpe	
Kramer Protocol 30	00 device	•	Ethernet		*
Some Kramer Pro AV d	levices do not sup	port auto-discovery			
Protocol *		Port number *		IP *	
TCP	*	5000		192 . 168 . 1	. 39
					ADD

Figure 20: Add Device Manually Window - Ethernet Communication

- 2. Select the **Device protocol** Kramer Protocol 3000 device for Kramer devices.
- 3. For Kramer devices that support protocol 3000, select the communication type: Ethernet, Serial or IR:
 - ETHERNET: select the Protocol (TCP or UDP), enter the port number and the IP address (see Figure 20).

 SERIAL: select the I/O gateway device for the serial communication (discovered automatically) and then select the serial port in this I/O gateway which you are using.

Add device manually			×
Device protocol		Communication type	
Kramer Protocol 3000 device Choose an I/O gateway to use for Serial communi	• ication	Serial	•
Kramer Network will automatically discover the d	evice		
FC-28 (FC-28-0038)			*
 Serial port #1 Serial port #2 			
C Scharport#2			
			ADD

Figure 21: Add a Kramer Device Manually - RS-232 Communication

 IR: type the device Name, select the Device type, Device vendor and Device model. Choose the I/O gateway device from the list and then select the IR port to which the device is connected.

Add device m	nanually			×
Device protocol		Communication ty	De	
Kramer Protoco	1 3000 device	* IR		*
Device name * Projector	Device type * Projector	Device vendor* Samsung	Device model * SP-800	
Choose an I/O gat 10-gateway device FC-28 (FC-28-00		ation		Ŧ
 IR port #1 IR port #2 				
O IR port #3				
O IR port #4				
			1	ADD

Figure 22: Adding a Kramer Device Manually – IR Communication

4. Click ADD.

To add a generic (non-Kramer) device manually:

- 1. Click •••• and select Add Device Manually.
- 2. Set the Device protocol to **Generic device**.
- 3. Select the communication type: Ethernet, Serial or IR:
 - ETHERNET: select the Protocol (TCP or UDP), type the Port number and the IP address.

Type the device name and then select the **Device type**, **Device vendor** and **Device model**.

• SERIAL: Type the device name and then select the Device type, Device vendor and Device model.

Select the I/O gateway device for serial communication (discovered automatically) and the serial port in this I/O gateway which you are using.

- IR: Type the device name and then select the Device type, Device vendor and Device model. Choose the I/O gateway from the list and then select the IR port to which the device is connected.
- 4. Click ADD.

To add a VIA device manually:

- 1. Click •••• and select Add Device Manually.
- 2. Set the Device protocol to VIA.
- 3. Check **Use default credentials** or uncheck if you are adding the Username and Password manually.
- 4. Enter the IP address.

Configuring Several Devices Simultaneously

Use Multi-deployment for efficiently configuring **VS-1616** matrix devices by replicating the configuration of one matrix to multiple matrices with the same IN-OUT configuration simultaneously.



This operation can be performed by the Super only.

To replicate an existing configuration:

1. Click •••• and select Multi-Device Deployment. The following window appears:

Multi-deployment			×
Sources		Destinations	
> VS-1616DN-EM	Drag and drop to copy Or copy to selected devices	Please select a source	
Configuration name * SAVE			

Figure 23: Multi-Deployment Window

2. Click the device type to open to view the configured devices list.

ources		Destinations	
✓ VS-1616DN-EM		KRAMER_016D	Ø
KRAMER_016D		KRAMER_216	Ø
Manual Manu Manual Manual Manu		KRAMER_216	1
192.168.117.216 192.168.117.216 KRAMER_016D 192.168.117.116 KRAMER_216 192.168.117.216 KRAMER_6677	Drag and drop to copy	192.168.123.133	9
192.168.123.133			
3434 6565	Or copy to selected		
	devices COPY		
		Select all * incompatible configuration detected	

Figure 24: Multi Deployment Window

- 3. Drag a source (configured) device to a destination device (that needs to be configured). you can also check a device or click **Select all** to copy the source configuration to the selected devices in the destination list.
- 4. Type the received configuration name and click **SAVE**.

Viewing the Device Web Page

To view a device web page (for example, for FC-28):

1. Select **System configuration > DEVICES** tab **> ALL DEVICES** subtab.



Figure 25: Viewing the Device Web Page – The ALL DEVICES Tab

2. Click the **Pro AV** folder.

Q. Find a device by name or IP addi	ress	6		FC-28 (FC-28-0038)	
ALL DEVICES STREAMING GROUPS	VIDEO WALLS			GENERAL SETTINGS NETWORK EDID	
Pro AV (113 devices)			_	Device infomation	
DIP-31 (33)	+- select room *		0	Firmware version	2.6.29067
FC-28 (FC-28-0038)	select room			Model name	FC-28
RC-74DL (KRAMER_0000)	+- select room *			Name	FC-28-0038
RC+74DL (KRAMER_15)	+ select room *			12	
5L-240C (SL-240C-8800151)	+ select room *				

Figure 26: Viewing the Device Web Page – GENERAL Tab

3. Click the IP address below **FC-28** (on the top of the device details window). The **FC-28** web page appears:



Figure 27: Viewing the Device Web Page - FC-28 Embedded Web Pages

4. Perform any desired operations via the web pages.

Select the Location

Before selecting the physical location of the device, you need to define the locations via the **LOCATIONS** tab in the **System configuration** page (see <u>Creating and Managing</u> <u>Locations</u> on page <u>35</u>).

Once the list of locations is prepared, click the drop-down box next to the device name and select the correct location.

KRAMER NETWORK		⑦ ▲ Super Logout 53
C Find a device by name or IP address		
ALL DEVICES STREAMING GROUPS		•
H10 (asdasdas) Connet ted via VS-02201-Evoemy Senal #2	- Select location -	
H10 (Device name) Connected via FC-28 (FC-28038) (R 41 Gonocted via VS-5207E-vgany. Setale #1 DiP-21 (DIP-21-Vgany. Setal	FLOOR 6 Room 8 Room 9 Room 10 Room 11 Room 12 Room 13 Room 14 Room 9	
152:165:574 VS-622DT (VS-622DT-) 152:068:165 VS-622DT-Evgeny	- Select location -	•

Figure 28: Selecting Device Location

Editing Device Parameters

To view and edit the device parameters (for example, the FC-28):

- 1. Select System configuration > DEVICES tab > ALL DEVICES subtab.
- 2. Click the device name (FC-28). The parameter page opens:

Q. Find a device by name or IP address	FC-28 (FC-28-0038)	×
ALL DEVICES STREAMING GROUPS VIDEO WALLS	GENERAL SETTINGS NETWORK EDID	
Pro AV (7 devices)	Device infomation	
DIP-31 (33) select roo *	Firmware version 2.6.29067	
FC-28 (FC-28-0038) select roo	Model name FC-28	
■ RC-74DL (KRAMER_0000) ↔ select roo *	Name FC-28-0038	
RC-74DL (KRAMER_15) ++ select roo *	10	
SL-240C (SL-240C-8800151) select roo *		
V5-1616DN-EM (KRAMER_0002A2j) select roo *		
VSM-4x4HFS (Kramer VSM-4x4HFS) select roo *		
Video IP Rx (3 devices)		
Audio IP Rx (4 devices)		
Video IP Tx (2 devices)		
Audio IP Tx (4 devices)		

Figure 29: Device Parameters

- 3. Perform the following operations (optional):
 - Hover over the photo of the device to enlarge details or click the device image to show it in a separate window.
 - Click the IP address to connect web pages.
 - Change the device name: click the device name (for example FC-28 (FC-28-0038)) and type the new name.
 - In the GENERAL tab, view Device Information and when viewing the streamer manage the recording feature.
 - In the **SETTINGS** tab, view and change parameters.
 - In the NETWORKS tab, view network parameters.
 - In the EDID tab, to acquire the EDID, see <u>Managing the EDID</u>, on page <u>23</u>.

The **GENERAL**, **SETTINGS NETWORKS** and **EDID** tabs are specific for each device.

Managing the EDID

Copy the EDID from the inputs, outputs, default or an EDID file to the inputs using the EDID Management feature. You can read the EDID only for devices that support EDID (for example, **DIP-31**).



This operation can be performed by the Super only.

Each EDID configuration can be saved to the Files area by clicking 🗟. The file is saved in the Files area.

To acquire the EDID from an input, output or read the default EDID:

- 1. Select **System configuration > DEVICES** tab **> ALL DEVICES** subtab.
- 2. Open the ProAV folder and select a device from the list.
- 3. Click the EDID tab.

0	 Find a device by name or IP 	address	۲	٢	DIP-31 (33) () 192.168.117.30					
ALL	DEVICES STREAMING GROU	PS VIDEO WALL	.5		GENERAL SETTINGS	NETWORK	EDID			
	Pro AV (7 devices)				Select EDID card from Re	ad from section a	nd then select one or m	ore EDID card	s from Copy	r to section
-	💷 DIP-31 (33)	- select roo			Read from			Copy to		
1	FC-28 (FC-28-0038)	++ select roo			Input	>		Inplit F	• 8	
1	RC-74DL (KRAMER_0000)	++ select roo			Output.	>	-	TD2220-2 1920x1080		
	RC-74DL (KRAMER_15)	++ select roo			Default	>	F		t2H	
1	5L-240C (SL-240C-880015	1) select roo	•				Drag and drop to copy	Inplat 2	• 8	
1	VS-1616DN-EM (KRAMER_	0002A2j)select (roo *		Files	>		TD2220-2 1920x1080		
1	VSM-4x4HFS (Kramer VSM	1-4x4HF5) select	roo *				Or copy to selected EDID cards		128	
	Video IP Rx (3 devices)						COPY	Input 3 DIP-31	• 8	
	Audio IP Rx (4 devices)							1280x720		
	Video IP Tx (2 devices)								128	
				_				Select all	128,	

Figure 30: EDID Tab

4. Click an arrow in the **Read from** column to select an EDID source: Input, Output or Default.

5. Select the EDID source (for example, Default).

192.168.117.30					
NERAL SETTINGS NETWORK	EDID				
ect EDID card from Read from section	and then select one of	r more EDID cards from Copy to s	ection		
Read from			Copy to		
Input	>		input T 🔷 🔂	I Inplis 2 🔷	9
Output	>		TD2220-2 1920x1080	DIF-31 1286x720 Audio	
Default	. ~	đ	121	د ال	256
Default 1		Drag and drop to copy	Imput 3 •• 🗗		
256		Or copy to selected EDID cards			
Files	>	COPY			
			Select all		

Figure 31: Selecting Default EDID

- 6. To copy the EDID to an input, do one of the following:
 - Drag the selected EDID source to the Copy to column and drop it over the desired input.
 - Select an input or several inputs (or check Select all) and then click COPY.



Figure 32: Copying the Default EDID

The EDID is copied to the input/s.

To acquire an EDID from a file:

- 1. Select **System configuration > DEVICES** tab **> ALL DEVICES** subtab.
- 2. Open the ProAV folder and select a device from the list.
- 3. Click the EDID tab.
- 4. Click an arrow in the **Read from** column to select an EDID source: Input, Output or Default.
- Select the Files EDID source.
 Before copying the EDID from the file, you can check Prevent device modification data if you do not want the input configuration to be changed by the EDID that was copied (for example, retaining the EDID Force RGB feature on the input).

lect EDID card from Read from section and then s	elect one or	r more EDID cards from Copy to s	ection			
Read from			Copy to			
Input	>		Input I	• 8	Implat 2	- 8
Output	>		702220-2 1920x1080		DIP-31 1280x720 Audio	
Default	>	P		128		256
Files	Ŷ	Drag and drop to copy	Input 3 DIR-31	• 8		
Prevent device modification data			1280x720	128		
mport file		Or copy to selected EDID cards	1			
6		COPY				

Figure 33: Selecting Default EDID

- 6. If you need to upload an EDID file:
 - a. Click 🛐 to upload a file.
 - b. Select the EDID file from your folders and click **Open**. The Save EDID window opens.

Save EDID		
Name* DIP-31.bin		
		10/50
	SAVE	CANCEL
		Same Sectors

Figure 34: Saving EDID Window

c. Optionally, change the file name and click **SAVE**. The DIP-31 EDID file is saved.

Input)
Output	>
Default)
Files	~
5.3	
DP-31.bn 🗶	
DP-31 bin C DP-31 1290x720 Deep Calor, faito Audio 256	

Figure 35: EDID File Added

7. Select the EDID bin file.

- 8. To copy the file to an input, do one of the following:
 - Drag the selected EDID source to the Copy to column and drop it over the desired input.
 - Select an input or several inputs (or check **Select all**) and then click **COPY**.



Figure 36: Copying the EDID from a File

The EDID is copied to the input/s.

Each EDID file can be deleted by clicking .

Creating Streaming Groups

The streaming group includes all the streaming devices. Initially the STREAMING GROUP subtab displays the following message:



Figure 37: Streaming Group Message

To create a streaming group:

1. Select System configuration > DEVICES tab > STREAMING GROUPS subtab.

2. Click CREATE A STREAMING GROUP. The SETUP sub-tab appears:

Q Find a device by name or IP address	۲		My streaming group Customize your Virtual Matrix by adding TX over IP devices to your groups
L DEVICES STREAMING GROUPS VIDEO WALL	S		SETUP DEVICES
My streaming group (No device)		>	Group name *
			My streaming gro
			Description
			0/
			REMOVE GROUP SAVE

Figure 38: Adding Streaming Group

3. Enter the streaming group name (for example, Streaming A) and if required add a description to the streaming group.

ustomize	your Virtual Matrix by adding TX over	IP devices to your groups
SETUP	DEVICES	
Group na	me *	
Stream	ing A	
Descrip	tion	
		0 / 150
DEMO		SAVE
REMO	VE GROUP	SAVE

Figure 39: Adding Streaming Group – Entering Streaming Group Name

4. Click SAVE. The streaming group appears in the left column:

Q Find a	device by name or IP add	iress		Streaming A Customize your Virtual Matrix by adding TX over IP devices to your groups	×
ALL DEVICES	STREAMING GROUPS	VIDEO WALLS	•••	SETUP DEVICES	
Streami	ng A (No device)		>	Group name * Streaming A Description	
				REMOVE GROUP	0 / 150 WE

Figure 40: Adding Streaming Group – Streaming Group Added

5. Add a Description to the new streaming group.

Ì

Click **REMOVE GROUP** to remove a group from the list.

6. In the DEVICES sub-tab, click 📩 to add streaming devices to the group.



Figure 41: Streaming Group – Devices

7. Click a device to add it to the streaming group. You can select more than one device.



Figure 42: Streaming Group – Device List

You can:

- Select one or more devices and click emove them.
- Move a device/s to a different group or add more devices to the group.
- Add another streaming group, by clicking ●●● and selecting ④ Add streaming group.

Creating Video Walls

Use KRAMER NETWORK to configure, edit and test video walls.

 (\mathbf{i})

This operation can be performed by the Super and the Admin (upon permission) only.

To configure a video wall:

- 1. Select System configuration > DEVICES tab > VIDEO WALLS subtab.
- 2. Click •••• and select Add Video Wall. The Video Wall Editor window opens:

Video Wall Editor				×.
Video Wall nano * Video Wall 1 12/35				
Choose Layout 242 🎫 🔹 💋 Vertical Screens Horizontal Screens 🗸 🗙	Decoders 8058 -		Layout Preview	
2 2 Screen becel and gap: mm (1971)	ADD4-clamb0riD36034633 0utpu Hot Hamilton Koz6-clamb0riD36034633 0utpu Koz6-clamb0riD36034870 0utpu Hitton Hamilton Hot6-clamb0riD36054820 Dutpu Hitto-LamboriD36054820 Dutpu	7		
knotly contensant of all interest Children Screen I + Auster Wilcon 1800 Ostar Height 700		Digatory	3	34
View Hegist 820			S The configuration to incomplete.	
ADDLY				IDENTIFY TEST SAVE

Figure 43: Video Wall Editor

- 3. Enter the Video Wall name (Video-Wall-1 in this example).
- 4. Set the layout from the drop-down list or configure a custom layout (2x2 in this example):

name *				
Vall-1				
			12/	35
Layout	2x2 💵	*		0
creens	Horizontal S	creens	~	×
\$	2			
	Vall-1 Layout creens	Vall-1 Layout 2x2	Vall-1 Layout 2x2 💵 👻	Vall-1 12 / Layout 2x2 💵 👻

Figure 44: Video Wall - Name and Layout

- 5. Click \checkmark to save the layout or \times to cancel it.
- 6. Set the screen bezel and gap and select mm or inch for measuring.

7. Check **Apply dimensions to all screens**, or **Choose Screen** and set each screen resolution separately.

Apply dimensio	ns to all screens	i
O Choose Screen	1	*
Outer Width	1300	
Outer Height	700	
View Width	1280	
View Height	680	
APPLY		

Figure 45: Video Wall – Setting Bezel and Gap

8. Click APPLY.

The video wall layout is ready.

To assign the decoders to the screens in the layout:

9. From the **Decoders** list, drag and drop a decoder to its correct position in the screen layout.

The decoders should be assigned according to the real, physical setup of the screens they are connected to.

Video Wall Editor			×
Video-Wall-1 12/35			
Chobse Layout 243 11 · · ·	Decoders KD56 -	Layout Preview	
2 Xemical Screent Honzontal Screent X X	(192.168.73.130 Screen KDS8-client001D5603AE20 Outpu 192.168.73.148		
	Screen: , KD56-client001D5603ADC7 Outpu 152.168.73.113 Screen: ,	K054-01em001056034220 Outpu 102118a731148 560-000	2
Screen bezel and gap: mm inch	KD56-client01D5603AE7D.Outpu_ 192.168.73.121 Screent_	Drag and drep	
Choose Screen 1 * Outer Width 1300		2	4
Outer Height 700		2	
View Height 680		A The configuration is incomplete.	
APPLY			IDENTIFY TEST SAVE

Figure 46: Video Wall – Assigning a Decoder to a Screen

10. Hover over an assigned screen with the mouse to view the model name, IP address and status of the decoder.

An assigned screen turns from gray to white.



Figure 47: Video Wall – Decoder Status

- 11. In the same way assign the remaining screens.
- 12. Click **SAVE**. The video wall configuration appears:



Figure 48: Video Wall – List of Decoders

To create a custom video wall (for example, 2x1):

- 1. Select **System configuration > DEVICES** tab **> VIDEO WALLS** subtab.
- 2. Click •••• and select Add Video Wall.
- 3. Set the number of vertical and horizontal screens.

Video Wall name *		
Video-Wall-2		
		12/35
Choose Layout	Custom 🔀 👻	0
Vertical Screens	Horizontal Screens	✓ ×
2	1	

Figure 49: Video Wall – Defining the 2x1 Video Wall

- 4. Click \checkmark to save the layout or \times to cancel it.
- 5. Set the screen bezel and gap and select **mm** or **inch** for measuring.
- 6. Check **Apply dimensions to all screens**, or **Choose Screen** to set each screen separately.
- 7. Click **APPLY**. The video wall layout is ready.
- 8. From the **Decoders** list, drag and drop a decoder to its correct position in the screen layout.
- 9. Click SAVE.

Video Wall Editor					×
VideolWatiname* Video-Watt-2					
12/35					
Chaose Läydut - tunn 🖬 - 📀	Decoders KDS6 +	Layout Preview			
Versical Screens Horizontal Screens 🗸 🗙	KDS8-client001D5603ADC7 Outpu 192.168.73.113 Screen: 1			14	
	KD56-client001D5603AE7D Outpu 192,168,73.121 Screen:2				
	KDS6-client001D5603AE33 Outpu 192.168.75.130 Scroon:_				
Screen bezel and gap: mm inch	KDS6-client001D5603AE20 Outpu 192.168.73.148 Screen:				
Choose Screen 1 *			2		
Outer Width 1300					
Outer Height 700					
View Width 1280					
View Height 680		42			
APPLY				IDENTIFY T	EST SAVE

Figure 50: Video Wall - Placing the Decoders
For a given number of decoders you can define more than one video wall. In this example, the VIDEO WALLS tab includes two video wall configurations:

- 2x2 with four screens that are connected to four decoders.
- 2x1 with two screens connected to two decoders which are also part of the 2x2 video wall.

0.5		
Q Find a	device by name or IP add	ress
L DEVICES	STREAMING GROUPS	VIDEO WALLS
KDS6 12	video walis)	
🖽 Video-	Wall-1 (4 decoders)	
-	DS6-client001D5603ADC7	Output-1
-	(D56-client001D5603AE7D)	Output-1
-	(DS6-client001D5603AE33 (Dutput-1
-	(DS6-client001D5603AE20 (Dutput-1
H Video-	Wall-2 (2 decoders)	
-	DS6-client001D5603ADC7	Output-1
- 1	(DS6-client001D5603AE33 (Dutnit-1

Figure 51: Video Wall Setups

You can get a preview the video wall via MATRIX VIEW in the Manage web page (see <u>Routing Streaming Devices</u> on page <u>75</u>).

Creating and Managing Locations

Before assigning a location to each device, you need to create the locations in **KRAMER NETWORK**.

To create a location:

1. Select **LOCATIONS** tab. When setting locations for the first time, the following message appears:

KR	AMER NETWORK	Ø	1 Super Logout	55
Ξ				
°	Q. Search for a location			1
Ŧ				
	You do not yet have any locations!			
E	CREATE A LOCATION			

Figure 52: Creating a Location for the First Time

2. Click CREATE A LOCATION.

Q Search for a location	My first location	×
My first location (No room)	SETUP ROOMS	
	Location parent None	
	Location name My first location	
	Location type Floor	17 / 30
	Description	
		0 / 250
	REMOVE LOCATION	SAVE



3. Under Location name, enter the Location name (Floor 6) and Description.

Q Search for a location	Ð	My first location	×
My first location (No room)	>	SETUP ROOMS	
		Location parent None Location name	
		Floor 6 Location type Floor Description Rooms 8 to 14	7/30
			13 / 250
		REMOVE LOCATION	SAVE

Figure 54: Renaming My First Location

4. Click SAVE.

			Success × Settings have been updated successfully
Q Search for a location	Ð	Floor 6	×
Floor 6 (No room)	>	SETUP ROOMS	
		Location parent None	
		Location name Floor 6	
		Location type Filoor Description Rooms 8 to 14	7/30
			13/250
		REMOVE LOCATION	SAVE

Figure 55: Location Defined

5. Select the **ROOMS** tab (in Floor 6).

Q Search for a location	•	Floor 6			×
Floor 6 (No room)	>	SETUR ROOMS			
		Add/Remove or move rooms from current location. In order to see the devices in a room, select a room in the left pane	+ ADD	REMOVE	MOVE TO
		Rooms in Floor 6			

Figure 56: Defining Rooms

6. Click 📩 to add a new room to Floor 6 and type the new room name:

Create New Room	Create New Room
Room name *	Room name *
	Room 8
Required.	
AL	ADD

Figure 57: Creating a New Room

7. Click ADD. The room is added to floor 6.

Q Search for a location	Ð	Floor 6			×
Floor 6 (1 room)	>	SETUP ROOMS			
		AddRemove or move rooms from current location. In order to see the devices in a room, select a room in the left pane	+ ADD	REMOVE	MOVE TO
		Rooms in Floor 6			
		Room 8			

Figure 58: Adding Rooms to the Location

8. Add the remaining rooms to Floor 6:

Floor 6 (7 rooms)	>	SETUP ROOMS			
Room 8 (No device)	۲				
Room 9 (No device)	۲	Add/Remove or move rooms from current location.	+		4
Room 10 (No device)	۲	In order to see the devices in a room, select a	ADD	REMOVE	MOVE TO
	۲	room in the left pane			
	۲	Rooms in Floor 6			
	۲	Room 8			
Room 14 (No device)	۲	Room 9			
		Room 10			
		Room 11			
		Room 12			
		Room 13			
		Room 14			

Figure 59: Adding Rooms 8 to 14

- 9. Once the rooms are added, you can:
 - Check a room and click **REMOVE** to remove it from the list.



Figure 60: Removing a Room

- Click

 to access the room view (see <u>Arranging and Designing</u> the ROOM VIEW on page <u>57</u>).
- Click ^t to add a floor.
- Click iii to drag a room to a different floor (location).



Figure 61: Moving Rooms to a Different Location

 Click **REMOVE LOCATION** to remove it from the location list. The following message appears:

Warning	
This action will delete the Floor 7 location. This action will release all the devices assigned Do you want to continue?	to this location
ок	CANCEL

Figure 62: Remove Location Warning

Configuring the Rooms

The LOCATIONS tab enables performing the following actions:

- <u>Setting up the Room</u> on page <u>40</u>.
- Adding Devices to a Room on page 41.
- <u>Meeting Room Scheduling</u> on page <u>42</u>.
- <u>Applying Room Automation via Maestro</u> on page <u>44</u>.

Setting up the Room

Choose a room and select **SETUP** to change room name, enter the room description, upload a K-Config virtual control panel and, if required, download K-Config or remove the room.

Q Search for a location	•	Room 8
Floor 6 (7. rooms)	>	SETUP DEVICES SCHEDULING MAESTRO - ROOM AUTOMATIO
I Goom 8 (No device)	۲	Location parent
III 🏠 Room 9 (No device)	۲	Floor 6
iii 🏠 Room 10 (No device)	۲	
I GRoom 11 (No device)	۲	Room Name Room 8
III 🏠 Room 12 (No device)	۲	6
I G Room 13 (No device)	۲	
I GRoom 14 (No device)	۲	Description
		0/
		Upload K-Config virtual control panel.
		UPLOAD DOWNLOAD K-CONFIG
		REMOVE ROOM SAVE

Figure 63: Room Setup

Adding Devices to a Room

To add devices to a room:

1. Choose a room (for example, Room 8) and select **DEVICES** to add (move or remove) streaming devices, Pro AV devices or video walls to this room.

Image: Constraint of the second s	Image: Room 8 (No device) Image: Room 9 (No device) Image: A Room 10 (No device) Image: Room 10 (No device) Image: A Room 11 (No device) Image: Room 12 (No device) Image: A Room 12 (No device) Image: Room 13 (No device) Image: A Room 13 (No device) Image: Room 13 (No device)	Q Search for a location	Ð	Room 8			×
Image: Constraint of the second o	A Room 10 (No device) A Room 10 (No device) A Room 11 (No device) A Room 12 (No device) A Room 13 (No device) A Room 14 (No device)	Floor 6 (7 rooms)	>	SETUP DEVICES SCHEDULING	MAESTRO - ROO	M AUTOMATIC	DN
i i i i i i i i i i i i i i i i i i i	i	Room 8 (No device)	۲		1	<u>.</u>	
Image: State of the device	i i i i i i i i i i i i i i i i i i i	Room 9 (No device)	۲	Devices in Room 8	ADD	REMOVE	MOVE TO
A Room 11 (No device) Add/Remove or move devices from current room. Add/Remove or move devices from current room. Add/Remove or move devices from current room. STREAMING Pro AV	A Room 11 (No device) Image: Add/Remove or move devices from current room. Image: Add/Remove or move devices from current roo	Room 10 (No device)	۲				
i 合 Room 13 (No device) Pro AV	A Room 13 (No device) ● A Room 14 (No device) ●	Room 11 (No device)	۲	Add/Remove or move devices from currer	nt room.		Select all
Pro AV	Pro AV ∴	Room 12 (No device)	۲	STREAMING			
04225351	A Room 14 (No device)	Room 13 (No device)	۲	Pro AV			
	Video Wall	🗄 🎧 Room 14 (No device)	۲	1000			
Video Wall				Video Wall			

Figure 64: Adding Devices to a Room

2. Click 📩 The list of devices in your Network appears.



Figure 65: Adding devices to a Room – Device List

3. Select the devices that are assigned to Room 8.

Q, Search for a location	•	Room 8		>
Floor 6 (7 rooms)	>	SETUP: DEVICES SCHEDULING MAESTRO-ROOM AUTOMATION		
🟠 Room 8 (9 devices)	•		13	-
Room 9 (No device)	۲	Devices in Room 8	+ ADD	REMOVE MOVE TO
Room 10 (No device)	۲			
Room 11 (No device)	۲	Add/Remove or move devices from current room.		Select all
Room 12 (No device)	۲	STREAMING		
Room 13 (No device)	۲	KD56-client001D5603ADC7 Output-1		
Room 14 (No device)	۲	 192.188.73.113 KDS6-client001D5603AE20 Output-1 122.188.73.148 		
		KD56-client001D5603AE33 Output-1		
		KD56-client001D5603AE7D Output-1		
		Pro AV		
		FC-28 (FC-28-0038) 192.168.117.28		
		RC-74DL (KRAMER_0000) 192.168.117.74		
		PL-50 (KRAMER_0036) 192.168.117.250		
		Video Wall		
		Uideo-Wall-1		
		Video-Wall-2		

Figure 66: Adding devices to a Room – Devices Assigned to a Room

These include: 3 Pro AV devices (FC-28, RC-74DL and PL-50), 4 streaming devices (KDS-DEC6 devices) and 2 video-wall configurations.



The color of the $\widehat{\mathbf{m}}$ icon next to the room name indicates the status of the devices in the room (orange indicates that at least one device is awaiting connection and red means that at least one device is disconnected from the Network).

4. In the same way you can add devices to each of the meeting rooms on floor 6.



Devices that are already assigned to a room do not appear on the list. You can also move devices to different rooms by checking the box to the right of the device in a room and clicking **MOVE TO**.

Meeting Room Scheduling

Each meeting room can be associated to a selectable scheduler. Before doing so, you need to define your LDAP (Lightweight Directory Access Protocol) connection, see <u>Creating LDAP</u> <u>Connections</u> on page <u>112</u>. Once LDAP is defined, you can set the SCHEDULING.

To set the schedule for a room (for example, a training room):

1. In the navigation pane click **System configuration** and then select the **LOCATIONS** tab.

2. Select the SCHEDULING subtab. The following window appears.

Floor 6 (7 rooms) > SETUP DEVICES SCHEDULING Mathematical Training Room (8 devices) Image: Connect your Kramer Network locations to a scheduler	
Connect your Kramer Network locations to a scheduler	
Connect your Kramer Network locations to a scheduler	
A Room 9 (No device)	
CDAP connection None	¥
Contraction Contr	
Calendar room	¥
Room 13 (No device) O	
Room 14 (No device) O Password *	

Figure 67: Room Scheduling

3. Select the LDAP connection ("Kramer LDAP" in this example) and wait for the calendar room list to be uploaded:

	ing Room			
SETUP	DEVICES	SCHEDULING	MAESTRO - ROOM AUTOMA	TION
Connect y	our Kramer Ne	twork locations to a s	scheduler	
LDAP cor	nection			
Kramer	LDAP			*
Kramer	LDAP			*
	LDAP			•
Kramer Calend	lar room			•
Calend	lar room			•
Calend	lar room			•

Figure 68: Room Scheduling Selecting LDAP Connection

4. Select a room to associate to your room (KN_test_room1 in this example).

5. Enter the room password.

Training Room	×
SETUP DEVICES SCHEDULING MAESTRO - ROOM AUTOMATION	
Connect your Kramer Network locations to a scheduler	
LDAP connection Kramer LDAP	٣
Calendar room KN_test_room1	
Password *	
CONNECT	

Figure 69: Room Scheduling Details Added

6. Click **CONNECT**.

Applying Room Automation via Maestro

Room automation involves creating a trigger (such as a certain day of the week) which activates a script that includes a sequence of actions. Actions may include device commands (such as turning on a projector), sending an email, activating DSP over IP and so on.

To trigger scripts:

- Enter actions through MAESTRO ROOM AUTOMATION (see <u>Creating</u> <u>Actions</u> on page <u>44</u>).
- Add a sequence of actions to a script (see <u>Creating Scripts</u> on page <u>51</u>).
- Create a trigger to initialize a script or a list of scripts (see <u>Creating</u> <u>Triggers</u> on page <u>54</u>).

Creating Actions

You can create several different types of actions to be activated by your room automation. Each action can be edited, tested or deleted at any stage.

The following action types are available: Device command, DSP-Over-IP, Email, Scenario, SNMP Trap, Upload Maestro Device Configuration, User script and WOL.

To add an action:

- 1. Select a room in a floor.
- 2. Select MAESTRO ROOM AUTOMATION.

3. Check that Maestro active slider is enabled or slide to enable it.

Room 8				×
TUP DEVI	ICES	SCHEDULING	MAESTRO - ROOM AUTOMATION	
Maestro ac	tive			
Actions (0)			•
Scripts (0)	D)			•
Triggers	(0)			•
				Ŭ

Figure 70: Maestro Room Automation Sub-tab

4. Click 🕒 next to **Actions** to add a new action.

Room 8	×
SETUP DEVICES SCHEDULING MAESTRO	ROOM AUTOMATION
Maestro active	
Actions (0)	Add new action
Scripts (0)	Type" Device command - Name*
Triggers (0)	Q SEARCH COMMANDS FF HEX CR Command editor
	Command format is invalid 0 / 1000
	TEST On De - CLEAR ALL ADD

Figure 71: Maestro Room Automation Sub-tab – Actions Window

5. Select the new action **Type** (for example, a **Device command**).

ETUP DEVICES SCHEDULIN	MAESTRO - ROOM AUTOMATION	
Maestro active	Add new action	
 Actions (0) Scripts (0) 	Add new action	
Triggers (0)	DSP-over-IP Email Scenario SNMP trap Upload Maestro device configuration User script WOL	FF HEX CR
	Command format is invalid	0 / 1000
	TEST On De +	CLEAR ALL ADD

Figure 72: Maestro Room Automation Sub-tab – Adding a Device Command

6. Enter the command Name and then either search a command or type the command (click FF, HEX or CR to add common characters).

×
AESTRO - ROOM AUTOMATION
Add new action
Type * Name * Device command
Device command +
Q SEARCH COMMANDS FF HEX CR
Command editor #NAME room-8-1,0x0D
1971000
TEST On De CLEAR ALL ADD

Figure 73: Maestro Room Automation Sub-tab - Entering a Command

7. Click ADD.

The Action is added to the list:

n 8			×
DEVICES	SCHEDULING	MAESTRO - ROOM AUTOMATION	
aestro active			
ctions (1)			e
cripts (0)			Ð
riggers (0)			e
	DEVICES aestro active ctions (1) cripts (0)	DEVICES SCHEDULING aestro active ctions (1) cripts (0)	DEVICES SCHEDULING MAESTRO - ROOM AUTOMATION aestro active ctions (1) cripts (0)

Figure 9: Maestro Room Automation Sub-tab - Action Added

To search a command:

- 1. Click 🔂.
- 2. Click **SEARCH COMMANDS**. The Search commands table appears:

	Free Search								
Type *			Vendor*			Model *		Revision *	
Proje	ctor	•	3M		•	H10	•	Α -	
	Туре	Vendor		Model		Revision		Command 个	
	Projector	3M		H10		A		Aspect_Ratio_16by9	
	Projector	ЗM		H10		A		Aspect_Ratio_4by3	
	Projector	ЗM		H10		A		Auto_Off_Decrement	
	Projector	ЗM		H10		A		Auto_Off_Increment	
	Projector	ЗM		H10		A		Auto_Search_Off	
	Projector	3M		H10		A		Auto_Search_On	
	Projector	3M		H10		A		Blank_Color_Black	
	Projector	3M		H10		A		Blank_Color_Blue	
	Projector	3M		H10		A		Blank_Color_White	
	Projector	3M		H10		A		Blank_Off	
	Projector	3M		H10		A		Blank_On	
	Projector	3M		H10		A		Brightness_Decrement	
	Projector	3M		H10		A		Brightness_Increment	
	Projector	3M		H10		A		Brightness_Reset	

Figure 74: Maestro Room Automation Sub-tab – Searching for a Command

3. Select the Type, Vendor, Model and Revision. For example, select Control, Kramer, PL-50 and Revision A:

—	Norman -					
Type "	Vendor*		Model*		Revision*	
Control	* Kramer	*	PL-50	*	A	
Туре	Vendor	Model	Revision		Command	
Control	Kramer	PL-50	A		Port1_Off	
Control	Kramer	PL-50	A		Port1_On	
Control	Kramer	PL-50	A		Port2_Off	
Control	Kramer	PL-50	A		Port2_On	
Control	Kramer	PL-50	A		Port3_Off	
Control	Kramer	PL-50	A		Port3_On	
Control	Kramer	PL-50	A		Port4_Off	
Control	Kramer	PL-50	A		Port4_On	
Control	Kramer	PL-50	A		Port5_Off	
Control	Kramer	PL-50	A		Port5_On	
Control	Kramer	PL-50	A		SWITCH_STAT	US



You can also:

Check Free Search to perform a free search.

Click **UPLOAD DEVICE DRIVER** and follow the instructions to add a new device driver.

4. Select a command.

Type *		Vendor*		Mode!*		Revision*	
Contr	rol	* Kramer		PL-50	*	A	
	Туре	Vendor	Model	Revisio	n	Command 🛧	
~	Control	Kramer	PL-50	A		Port1_Off	
	Control	Kramer	PL-50	A		Port1_On	
	Control	Kramer	PL-50	A		Port2_Off	
	Control	Kramer	PL-50	A		Port2_On	
\Box	Control	Kramer	PL-50	A		Port3_Off	
	Control	Kramer	PL-50	A		Port3_On	
	Control	Kramer	PL-50	A		Port4_Off	
	Control	Kramer	PL-50	A		Port4_On	
	Control	Kramer	PL-50	A		Port5_Off	
	Control	Kramer	PL-50	A		Port5_On	
	Control	Kramer	PL-50	A		SWITCH_STATU	IS

Figure 76: Maestro Room Automation Sub-tab – Selecting an Action

- 5. Click **SELECT**. The new action is added to the command editor.
- 6. Enter the command name:



Figure 77: Maestro Room Automation Sub-tab - Action Name

7. Click ADD.

In the same way add all the commands to the action list.

The number of commands in the Actions list appears next to **Actions**. Click the arrow next to Actions to view the list of commands:

P	DEVICES SCHEDULING	MAESTRO - ROOM AUTOMATION	
)	Maestro active	- 19	
Ų	Actions (8)		(
	Name	Туре	
Ħ	Display power ON	Device command	3
Ш	PL-50 Port 4 on	Device command	2
Ш	Port 1 OFF	Device command	3
Ш	Projector aspect ratio 16x9	Device command	2
Ш	Projector Blank color blue	Device command	C
Ħ	Projector brightness	Device command	凸
Ш	Send email	Email	3
Ш	Set machine name	Device command	凸
8 :	Scripts (0)		
	Friggers (0)		(

Figure 78: Maestro Room Automation Sub-tab – Actions List

You can drag-and-drop an action from the Action list to the Scripts action list.

Other types of actions require the following data:

Ī

Action Type	Enter the following Data
DSP-over-IP	Name, audio channel, DSP action (enable or disable).
Email	Name, Send to and cc.
Scenario	Name, Run scenario (select a scenario).
SNMP Trap	Name, select SNMP trap name, select Alert level, Message. You need to configure SNMP settings first.
Upload Maestro device configuration	Name, Select Maestro device; select Maestro configurations for the selected device.
User script	Name, click LOAD SCRIPT.
WOL	Name, add the MAC address of the device, select the port.

Creating Scripts

A script includes a sequence of actions. This section describes how to create scripts from the list of actions.



In this section, the script examples show actions that are different than the actions obtained in <u>Creating Actions</u> on page <u>44</u>.

To create a script:

1. Click 😌 next to **Scripts**. The Scripts window appears:

Maestro active	Add new script		
Scripts (0)	Name *		
Triggers (0)	÷		0/3
	Description		
	Actions	+ ADD ACTION	O ADD DELAY
	Name Typ	pe Parameters	
	TEST		A

Figure 79: Maestro Room Automation Sub-tab – Scripts Window

2. Enter the Script Name and Description and click + ADD ACTION (an Action line appears).

Actions (8)	e	Add new script		
Scripts (0)	O	Name * Activate projector	6	
Triggers (0)	•	Description prepare Projector	8	18/3
		Actions Name Ty	+ ADD ACTION	O ADD DELAY
		•		

Figure 80: Maestro Room Automation Sub-tab - Adding an Action Line

- SETUP DEVICES SCHEDULING MAESTRO - ROOM AUTOMATION 0 Maestro active • Add new script Actions (8) 0 Name." Scripts (0) Activate projector • 18/35 Triggers (0) Description prepare Projector Actions + ADD ACTION (ADD DELAY Send Email Parameters Select PC input Select HDMI 1 input Î Select HDMI 2 input Port 1 Off Projector aspect ratio ADD Projector Blank off Projector mute off
- 3. Click the Name drop-down-box to select an action (the action type appears).

Figure 81: Maestro Room Automation Sub-tab – Selecting an Action

Maestro active					
 Actions (8) 	•	Add new script			
► Scripts (0)	•	Name* Activate proj	ector		
Triggers (0)	¢	Description prepare Proj	ector		18735
		Actions Name	Туре	+ ADD ACTION Parameters	O ADD DELAY
		III Projector	 Device command 	VS-88UT (VS-88UT	r-1) <u>*</u>

4. Select **Parameters**.

Figure 82: Maestro Room Automation Sub-tab – Selecting the Parameter

5. Add any number of Actions and delays to the script. If required, click iii to move an action/delay line up or down.

	ATION	MAESTRO - ROOM AUTON	SCHEDULING	DEVICES	ETUP
				laestro active	O M
	ŧ.	Add new scrip		ctions (8)	► A
	ector	Activate pro		cripts (0)) s
:18/35	ector	Description prepare Pro		itiggers (0)	≻ 1
+ ADD ACTION O ADD DELAY		Actions			
+ ADD ACTION ③ ADD DELAY Parameters	Туре	Actions Name			
Parameters	Type Device command	2003			
Parameters	_ Device	Name			
Parameters VS-88UT (VS-88UT-1)	_ Device	Name			

Figure 83: Maestro Room Automation Sub-tab – Actions Added to the Script

You can open the Action list and then drag-and-drop an action from the list to the Scripts action list.

6. Click ADD.

You can edit a script by standing on the script line.



Figure 84: Scripts List

Creating Triggers

A script is carried out by a trigger.

To create a trigger:

- Click next to **Triggers**.
 The Triggers window appears:
- 2. Select the trigger Type from the list (for example, recurring event).

		Edit trigger	Ð		Actions (8)
	Name*	Device notification	•		Scripts (2)
07		Room schedule	•		Triggers (1)
		Scenario execution Recurring event	Status	Туре	Name
		Device *			
		Device 1			
		Run script *			

Figure 85: Maestro Room Automation Sub-tab – Triggers Window

3. Enter the trigger name and select the trigger status.

4. Set the scheduling type to weekly (select the days and time) or a one-time event (select the date and time).

nos" Recurring even	t		Name* Activate Room		
					13/35
Roberstatus " Enabled during	business hours				
icheduling type " Weekly event					
Sun +	Mon +	Tue +	Wed +	Thu +	Fri +
	O 09:36 -	O 08:36 -	() 08:38 -		
Run script *					•

Figure 12: Maestro Room Automation Sub-tab - Creating a Trigger

5. Select the script from the list.

Actions (8)		÷	Edit trigger
Scripts (2)		٠	Troe: Name* Recurring event - Activate Room
Triggers (1)		•	
Name	Туре	Status	Tripper status"
Activate Room	Recurring event	Enabled 🔋	Enabled during business hours
			Scheduling hos ⁴ Weekly event Sun + Mon + Tue + Wed + Thu + Fri + () 09:36 - () 08:36 -
			Run scipt" Activate projector

Figure 86: Maestro Room Automation Sub-tab – Adding the Run Script

6. Click ADD.

In the same way, add as many triggers as required.

Available trigger types include:

- Device notification The script is triggered once the selected device connectivity is ON/OFF or if an incoming generic message from the device is sending a predefined value (a device control software sends a certain value to KRAMER NETWORK via port 3340, by default – this default port number can be changed via the utilities software).
- Room schedule The script is triggered before/after a meeting.
- Scenario execution The script is triggered once a selected scenario is carried out (within/out office hours).
- Recurring event The script is triggered once a weekly (day and time) or one-time (date and time) event occurs.

Manage Page

The Manage page enables performing the following:

- Arranging and Designing the ROOM VIEW on page 57.
- <u>Managing Pro AV and AV Streaming Devices</u> on page <u>73</u>.

Arranging and Designing the ROOM VIEW

Use the Room View tab to arrange and design the room view.

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Admins can be granted permission to access a group of rooms from the Super. Users can be granted permission to access specific rooms from Admins.

In the ROOM VIEW you can:

- Select rooms (to edit) and Pro AV devices (to add to a room) from the left-side column.
- Create or edit the room view within the center window.
- Associate scenarios (created in the MATRIX VIEW tab, see <u>Managing Pro AV and AV</u> <u>Streaming Devices</u> on page <u>73</u>) via the Scenarios column to the right.

To access the ROOM VIEW:

1. In the navigation pane click **Manage** and then select the **ROOM VIEW** tab. The following window appears:



Figure 87: Room View

2. Click +to open the room view.

Creating Room View Design Elements

To create the room view design elements:

- 1. In the navigation pane click **Manage** and then select the **ROOM VIEW** tab.
- 2. Click \bigotimes to open the ROOM VIEW editing options. All the editing options are displayed:

	0	A					S-VGA ((800x600)	•
Edit	Preview	Text	Box	Circle	Action	Design	800	× 600	Resolution

Figure 88: Room View Edit Bar

3. Click being to download the images that you will use. The manage images window appears:

Manage Images	×
Search ③	
Upload image	_
Image name	
Click to select file (up to 10Mb)	
Upload	

Figure 89: Downloading Images

- 4. Click Click to select file.
- 5. Select a background and click **Open**.

6. In the **Image name** text box, type its name and click **Upload**. In the same way select all the background images you need.

Manage Imag	jes	×
Search Boardroom 1	white room Control room Image: State of the state of th	
Upload image Image name Click to select file	Control room 4.jpg (up to 10Mb) Upload	

Figure 90: Uploaded Images

7. Click **x** at the top right to exit the **Manage Image** window.

Designing the Room View

To design the room view (Room 8 on Floor 6 in this example):

- 1. In the navigation pane click **Manage** and then select the **ROOM VIEW** tab.
- 2. Click + to view the list of available rooms on floor 6.



Figure 91: Floor 6 Room List

3. Select room 8. Room 8 appears and displays the associated devices.

Ξ		Edi Dereveau	
۰.	Rooms —		Scenarios 💮
Ŧ	> Im Floor 5 > Im Floor 6 Room 8		Search ()
	 ✿ Room 9 ✿ Room 10 ✿ Room 11 		
E	會 Room 12 會 Room 13 會 Room 14	FC-26	
(1)	Pro AV +		
4			

Figure 92: Devices in a Room

5. Right-click the room-view window. The background dialog box appears:

Preset:	Custom 🔻
Resolution	1280 X 800
Background color:	
Background image:	
Background repeat:	no-repeat 🔻
Background size:	cover 🔻
Border color:	
Border size:	

Figure 93: Creating a Background

- 6. Set the following:
 - Click Preset Resolution to select the resolution: either a custom resolution, or a pre-defined resolution:

Background				
Preset:	Custom 🔻			
Resolution	Custom Kramer KT-10 KT-107 (1280x800)			
Background color:	VGA (640x480) S-VGA (800x600) XGA (1024x768)			
Background image:	WXGA (1366x768) XGA+ (1152x864)			
Background repeat:	WXGA+ (1440x900) S-XGA (1280x1024)			
Background size:	HD 720 (1280x720) WS-XGA (1600x1024) S-XGA+ (1400x1050)			
Border color:	WS-XGA+ (1680x1050)			
Border size:	U-XGA (1600x1200) Full-HD 1080 (1920x1080) WU-XGA (1920x1200)			
	QHD (2560x1440)			
	Q-XGA (2048x1536) WQ-XGA (2560x1600) 4K UHD (3840x2160)			

Figure 94: Setting the Resolution

• Click **Background color** to select the background color.

Basic colors:					ſ
ustom colors:					
		Hue:	160	Red:	255
		Hue: Sat:		Red: Green:	
ustom colors:	Color Solid		0		255

Figure 95: Setting Background Color

 Click **Background image** to insert a background image and also other images that you can use later (such as on/off buttons).

Manage Im	ages	×
Search Boardroom 1	white room	
power off		
Upload image Image name		
Click to select file	e Click to select file (up to 10Mb)	
	Upload	

Figure 96: Selecting an Image

Click Background repeat to select no repeat, repeat, repeat-x or repeat-y.

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.

Click **Background size** to select **Initial**, **contain** or **cover**.

Background Size Options	Definition
Initial (or empty)	Leave the image at its initial size and crop it.
Contain	Scale the image so that both its width and its height can fit inside the content area.
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.

- Click Border color and Border size.
- 7. Click **Close** after setting the background.

Backgro	×
Preset:	Kramer KT-10 KT-107 (1 🔻
Resolution	1280 X 800
Background color:	
Background image:	Boardroom 1
Background repeat:	no-repeat
Background size:	cover T
Border color:	
Border size:	8
	Close

Figure 97: Background Setup Complete

The room view appears accordingly:



Figure 98: Designed Room View

- 8. If required, click + to open the Pro AV list and add a device to the room.
- 9. Move the devices to place them next to their physical location (or any other convenient location).
- 10. Right-click a device to open its location parameters (left and top), and change the numbers to align the devices.
- 11. Hover over a device to see its details and double-click the icon to open its web page.



Figure 99: Device Details in Room View

12. If required, add the following elements to the room view:

- Text, see <u>Adding Text</u> on page <u>65</u>.
- Box and/or Circle, see <u>Adding a Box or a Circle</u> on page <u>66</u>.
- Action, see <u>Adding an Action</u> on page <u>67</u>.

13. Click 🧟 to view the designed room.

Adding Text

Click \bigotimes_{Text} 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 (distance from Left and Top), the font size, Opacity (0 is transparent and 100 opaque) the font Color and appearance (Bold, Italic or Underline).
- Click location to remove the text from the room view.

You can drag-and-drop the text anywhere in the room view.

Text - Te	xt	×
Text:	Text	
Left:	0	
Top:	0	
Font size:		
Opacity:		
Color:		
Bold:		
Italicize text		
Underlined:		
	Close	

Figure 100: Adding Text

Adding a Box or a Circle

Click $\bigcup_{box} / \bigcup_{circle}$. A box/circle appears in the room view. To edit the circle right-click the box area (this example shows a circle, but the same applies to a box).

- Type the Title.
- Set the distance of the title from the **Top** and **Left**.
- Select the Title color.
- Link **Destination**. Set a link in the page to any of the other rooms in the system, letting you go from one room to another by clicking the link in the box.
- Set **Opacity** (0 is transparent and 100 opaque).
- Define the **Width** and the **Height** of the circle.
- Set the location of the circle (distance from Left and Top).
- Set the circle's Background color or Background image.
- Choose **Background repeat** (no repeat, repeat-x, repeat-y) and **Background size** (initial, contain, cover).
- Choose the **Border color** and type the **Border size**.
- Click to remove the circle from the room view.

You can drag-and-drop the circle anywhere in the room view.

Title:	New circle	
Title top:		
Title left:		
Title color:		
Destination:	No linked destination •	
Opacity:		
Width:	100	
Height:	100	
Left:	0	
Top:		
Background color:		
Background image:	[]1	Ĩ
Background repeat:	no-repeat 🔹	
Background size:	cover 🔻	
Border color:		
Border size:		
	Close	

Figure 101: Adding a Circle/Box

Adding an Action

The action button can activate a script (see <u>Applying Room Automation via</u> <u>Maestro</u> on page 44) and/or a scenario.

To select scenarios for the action button:

1. Click 📀 to open the Scenario selection window:



Figure 56: Scenario Selection Window

2. Check the scenarios to add to the room view and click **OK**. The selected scenarios appear under the scenario list.



Figure 56: Room View Scenario List

You can run the scenarios or add them to an action button.

To add an action button (to run a script and/or a scenario):

- 1. Click (3). An Action circle appears in the room view.
- 2. Right-click the Action button to edit it.
 - Select a Scenario type from the drop-down list.
 - Select a Script type from the drop-down list.

Scenario:	Morning Setup	•
Maestro	select sources	

- script: _____
 Type the Title.
- Set the distance of the title from the **Top** and **Left**.
- Select the **Title color**.
- Link Destination.
 Set a link in the page to any of the other rooms in the system, letting you go from one room to another by clicking the link in the box.
- Set **Opacity** (0 is transparent and 100 opaque).
- Define the Width and the Height of the circle.
- Set the location of the circle (distance from Left and Top).
- Set the circle's Background color or Background image.
- Choose **Background repeat** (no repeat, repeat-x, repeat-y) and **Background size** (initial, contain, cover).
- Choose the **Border color** and type the **Border** size.
- Type the Border radius.

Click **I** to remove the circle from the room view. You can drag-and-drop the circle anywhere in the room view.

Script/S	Scenario - action	×
Scenario:	No scenario 🔹	
Maestro script: Title:	No script	
Title top:		
Title left:		
Title color:		
Destination	No linked destination 🔻	
Opacity:		
Width:	60	
Height:	60	
Left:	308	
тор:	28	
Background color:		✓
Background Image:		Î
Background repeat:	no-repeat 🔻	
Background size:	cover 🔻	
Border color:		
Border size:		
Border radius:	60	
	Close	

Figure 102: Add a Circle/Box

Device Operations in the Room View

Right-click a device to set its exact location in the room view. You can load projects such as virtual panels to room controllers.

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

- 1. Select Manage > ROOM VIEW.
- 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.

RC-74DL KRAMER_0000	×
Device - F	RC-74DL 🔋
Left:	337
тор:	165
Device setup:	Load Project
	Close

Figure 103: Loading a Room Controller Project

5. 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 104: Loading Room Controller Panels

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.

RC-74DL RAMER_3500	SOURCES			DISPLAY	
	1	2 3	4	5	6
		ROOMS		Volu	me
	7	8	9	000	2
	10	11	12	0	

Figure 105: RC-74DL Control Panel

Selecting a Decoder Source

In the Room view you can preview and select a decoder source.

To select a decoder source:

- 1. Select Manage > **ROOM VIEW**.
- 2. Select an encoder and click **select a source**.



Figure 106: Selecting a Decoder
The following window appears:

Source for 4K JPEG2k	(D1 ×
	Active only
Search 😡	✓ Show unassigned
V No source	
KDS-EN4 streaming group	
KDS-EN4-IT IP address: 192.168.0.214	Channel: 1 MAC: 00-1d-56-02-e9-e4
KDS-EN5 streaming group	
 4K JPEG2K Encoder IP address: 192.168.0.205 	Channel: 1 MAC: 00-1D-56-04-6B-61
V IP address: 192.168.0.200	Channel: 1 MAC: 00-1D-56-04-6B-E2
* Unassigned *	

Figure 107: Source List and Preview

3. Check the desired source and close the window.

Room Schedule

Before you can manage room scheduling, check the room availability and schedule a meeting in a room via ROOM VIEW, you need to:

- Configure your LDAP authentication connection (see <u>Creating LDAP</u> <u>Connections</u> on page <u>115</u>).
- Connect the rooms defined in LOCATIONS to a scheduler (see <u>Meeting Room</u> <u>Scheduling</u> on page <u>42</u>).

To schedule a meeting:

- 1. In the navigation pane, click Manage > ROOM VIEW.
- 2. Access the room.

The room status icon appears, on the top right side, with the room schedule on its right:



Figure 108: Room Availability and Schedule

3. Click Room schedule. The following message appears:



Figure 109: Scheduling Message

4. Click Add new meeting. The following window appears:

Create a new event
Event title Reserved meeting
Date <u>Today</u>
TIME (S) 15:00 - (S) 15:30
:00 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00 16:30 17:00 17:30 18:00 18:30 19:00
CANCEL

Figure 110: Creating a New Event

5. Type the meeting title, set the date and the time.

						Cre	ate	a n	ew	eve	ent					
								Event <u>kly r</u>	title neet	ing						
						I	<u>hu, /</u>	Dat Apr	te <u>12, 2</u>	2018						
							0	TIM 4:30 -	10 10	6:00						
00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00
													CAN	ICEL	CRE	ATE

Figure 12: Meeting Details

6. Click **CREATE**. The event is created and a notification appears.

The room schedule for the current day appears as follows:

Reserved meeting 15:30 - 16:	00 Room schedule 11-04-2018 ▼
11/4/2018	Today 😗 🚺
15:30 - 16:00	Reserved P
16:00 - 16:30	Free
16:30 - 18:00	Reserved meeting
18:00 - 1 4:30	Free

Figure 111: Room Schedule for the Day

Managing Pro AV and AV Streaming Devices

Use the MATRIX VIEW tab to manage PRO AV and AV streaming devices.

You can:

- Route PRO AV devices or AV streaming from the lists in the left-side column and switch the selected device's audio or video inputs to outputs within the selected matrix, see <u>Routing Inputs to Outputs</u> on page <u>73</u>.
- Create scenarios via the Scenarios column on the right side, see <u>Creating and Using</u> <u>Scenarios</u> on page <u>79</u>.

Routing Inputs to Outputs

You can route PRO AV devices or streaming devices to the outputs in various rooms. In the following example, **VS-88UT** is assigned to a Matrix Room.

To route VS-88UT video signals:

- 1. In the navigation pane click **Manage > MATRIX VIEW**.
- 2. Click + to open the Pro AV device list.



3. Select **VS-88UT** from the list.

Ξ						
。 ↑ □	Pro AV VS-88UHD (VS-88UHD) 192168.139 VS-88UT.1 192.168.110.125 AV streaming Video over IP	VS-88UT-1 (VS-88UT) Video Audio	Output	HDMI.1 - TopR HDMI.2 - ButR HDMI.3 - ButL HDMI.3 - ButL HDMI.4 - TopL HDMI.7 HDBT.6 - WCam HDBT.6 HDMI.7 HDMI.8 - Encoder	æ	Scenarios Save current view snapshot Name
	Audio over IP	Input HDMI.1 - Baseball HDMI.2 - Bike HDMI.3 - PC HDMI.4 HDMI.5 - Dec4 HDMI.6 - Dec3 HDMI.7 - Dec2 HDMI.8 - Dec1	Ő			133%

Figure 112: Matrix View – Pro AV Video Routing

4. Click an empty cross-point to connect an input to an output (for example, in Figure <u>112</u> HDMI 1 input is routed to HDMI 1 output but not to HDMI 2 output).

Cross-point Icons	Description					
	Signal is detected and routed (Pro AV and AV Streaming).					
8	The device is disconnected from the Network therefore routing is not possible (A) <u>Streaming).</u>					
	Warning. Routing is disabled. (AV Streaming).					
\bigcirc	Cross-point is not selected (Pro AV and AV Streaming).					

 (\mathbf{i})

Each selected matrix displays its special characteristics. For example, for **VS-88UT** you can set audio-follow-video or breakaway mode per output.

To route VS-88UT audio signals:

- 1. In the navigation pane, click **Manage > MATRIX VIEW**.
- 2. Click + to open the Pro AV device list.
- 3. Select VS-88UT from the Pro AV list.
- 4. In the Matrix view, select Audio.

5. Route the audio inputs to the outputs.

Specifically for **VS-88UT**, you can set audio-follow-video or breakaway mode and set the volume for certain inputs and outputs. Other devices may show different characteristics.



Figure 113: Matrix View – Pro AV Audio Routing

Routing Streaming Devices

To route streaming devices (for example, Video over IP):

- 1. In the navigation pane, click Manage > MATRIX VIEW.
- 2. Click + to open the AV streaming list.
- 3. Select Video over IP from the Pro AV list.

4. Click an empty cross-point 🔵 to connect an input to an output.



Figure 114: Matrix View - Video Streaming Routing

You can also:

• Hover over a device to view its details and video preview.



Figure 115: Viewing Device Details and Video Preview

• Click a Video wall (H) for a video preview.



Figure 116: Video Wall Preview

Recording Streaming Content via the Encoder

You can use the streamer recording features to record content via KRAMER NETWORK.

To record the content running on an encoder:

- 1. In the navigation pane, click **Manage > MATRIX VIEW**.
- 2. Click + to open the AV streaming list.
- 3. Select **Video over IP** from the Pro AV list. The content recording icon appears next to a connected **KDS-EN4** device.



Figure 117: Matrix View – Recording Feature

4. Hover over an indication button to check its status and carry out any required action:

Recording Indication	Description	Action
KDS-EN4,	The device is disconnected and recording is disabled.	N/A
KDS-EN4	The device is not receiving content and recording is disabled.	N/A
KDS-EN4	The device is connected and recording is enabled.	To start a recording: Click the green indication button.
🗢 📑 KDS-EN4	The device is connected and is currently recording (the red indicator flashes).	To stop recording: Click the red indication button. The following message appears Stop recording
		Do you want to stop recording?
		Click OK .

Recording Indication	Description	Action
🕚 📑 KDS-EN4	The device is connected and a recording is scheduled.	To check recording schedule (if required): Click the clock indication button. The following message appears:
		This recording is scheduled ×
		Inis Recording is scheduled.
		Start Recording date 19-04-2018
		Start Recording time 00:00:00
		Total duration 01:10:00
		EDIT CANCEL SCHEDULE RECORD NOW
		Click x to close window, EDIT to edit schedule details, CANCEL SCHEDULE to cancel the recording, or RECORD NOW to cancel the scheduled recording and start the recording presently.
🔇 📑 KDS-EN4	The device is connected, the clock indication button is flashing, and the device is currently recording, as	To check the recording status, if required: Click the flashing indication button. The following message appears:
	scheduled.	This schedule is recording ×
		Inis Recording is scheduled.
		Start Recording date
		Start Recording time
		Total duration 01:10:00
		EDIT CANCEL SCHEDULE
		Click x to close window, click EDIT to edit schedule details, CANCEL SCHEDULE to cancel the recording.

Although you can manage the recording via System configuration (see <u>Editing Device</u> <u>Parameters</u> on page <u>22</u>), we recommend that you use the streamer's embedded web pages to configure the recording (For example, the Kramer **KDS-EN4** embedded web page):

General	Encoding	Streaming	Recording	Tunneling
Recording		Disable	ł	•
Recording s	tatus	Stop	ped	
Schedule re	ecording			
This device scheduled re	does not have ecording.	а	Schedul	e
Storage cor	nfiguration			
URI		usb://		
Username				
Password				
File prefix		video-'	1	
Storage file	time limit		00:01:0	00
Storage max files	kimum	5	Unlimite	ed
		Save		

Figure 118: Streamer Recording in the Embedded Web Page

Creating and Using Scenarios

Scenarios are routing setups that can be saved and then loaded whenever needed. You can create scenarios in the following methods:

- <u>Snapshot Scenario</u> on page <u>79</u>, to save the current setup as a scenario.
- <u>Recorded Scenario</u> on page <u>81</u>, to create a setup offline (without affecting the current setup).

Scenarios can be used as actions in scripts, added to the room view as part of an action button or used in MATRIX VIEW to quickly apply a setup.

Snapshot Scenario

To create a snapshot scenario:

- 1. In the navigation pane click **Manage > MATRIX VIEW**.
- 2. Click + to open the Pro AV device list.

3. Select **VS-88UHD** from the Pro AV list.

VS-88UHD (VS-88UHD) (VS-88UHD) Video Audio	Output	output 1	output 2	Coutput 3	e output 4	output 5	Contput 6	output 7	output 8		VS-88UHD (VS-88UHD) (VS-88UHD) Video Audio	Output	output 1	output 2	output 3	output 4	output 5	output 6	output 7	output 8
Input											Input									
e input 1		Ø	Ø	Ø	Ø		0	0	~	2	e input 1			•					0	
input 2		0	0	D		C)	e input 2		Č	D	\square		M	\square	\square	ŏ.
input 3		0	\bigcirc	D)	@ input 3		Ø	Ø	Ø	Ø	Ø	0	Ø	Ø
input 4		0	0	D	C	C		C)	e input 4		6	8	5	Ō	0	0	$\overline{\mathbf{O}}$	5
input 5		0	0	D			C)	input 5		(D	\bigcirc	Õ	$\left(\right)$	\bigcirc	\overline{O}	Õ.
input 6		0	0	\bigcirc			C)	@ input 6			\Box	\bigcirc	0	\Box	\bigcirc	0	\bigcirc
@ input 7		0	0	\bigcirc	O		C	C)	e input 7		(\Box		$\overline{\mathbf{O}}$	õ.
input 8		0	0	\bigcirc	\bigcirc	0	0	C	X)	input 8		0	D	O	Ó	O	Õ	Õ	Ő

Current Video and Audio Setup

4. In the **Scenarios** box, enter the Scenario name to the text box under **Save current view snapshot**.

Scenarios	
Save current view sna	aps
same source	
Search	0

Figure 119: Snapshot Scenario

5. Click (1). The scenario is saved in the scenario list.

Save current view	rsnaps 🕑
Search	0
same source	
00	

Figure 56: A Scenario Saved to the List

You can click:

- 0 to change the scenario details offline (switch to the recording method).
- () to upload the scenario.
- 🗐 to save updates to the scenario.
- (i) to delete the scenario.

Recorded Scenario

The recorded scenario is created offline and can include multiple Pro AV and streaming devices in one setup. Once saved, an entire configuration can be uploaded with one press of a button.

To record a setup:

- 1. In the navigation pane click **Manage** > **MATRIX VIEW**.
- 2. Click + to open the Pro AV device list and + to open the AV streaming list.
- 3. Click ⁽¹⁾. The matrix turns offline.

Figure 56: Recording a Scenario

4. Set the device (for example, VS-88UHD).

			Name Scenario
VS-88UHD (VS-88UHD) (VS-88UHD) Video Audio	Output	output 1 output 2 output 4 output 5 output 6 output 7 output 8	1 VS-880HD (VS-88UHD (VS-88U audio: 3) 5 2 VS-880HD (VS-88UHD (VS-88U audio: 6) 5 3 VS-880HD (VS-88UHD (VS-88U audio: 7) 4 VS-880HD (VS-88UHD (VS-88U audio: 1) 1
Input input 1 input 2 input 3 input 4 input 5 input 6 input 7 input 8			 5 VS-88UHD (VS-88UHD (VS-88U audio: 2) 2 6 VS-88UHD (VS-88UHD (VS-88U audio: 3) 3 7 VS-88UHD (VS-88UHD (VS-88U audio: 4) 4 8 VS-88UHD (VS-88UHD (VS-88U audio: 5) 5 9 VS-89UHD (VS-88UHD (VS-88U video: 1) 1 10 VS-88UHD (VS-88UHD (VS-88U video: 2) 2 12 VS-88UHD (VS-88UHD (VS-88U video: 3) 3 13 VS-88UHD (VS-88UHD (VS-88U video: 3) 5 14 VS-88UHD (VS-88UHD (VS-88U video: 3) 5 15 VS-88UHD (VS-88UHD (VS-88U video: 4) 4 14 VS-88UHD (VS-88UHD (VS-88U video: 5) 5 15 VS-88UHD (VS-88UHD (VS-88U video: 5) 7 16 VS-88UHD (VS-88UHD (VS-88U video: 6) 6 17 VS-88UHD (VS-88UHD (VS-88U video: 5) 8

Figure 56: Recording Process (Pro AV)

The matrix shows the setup and the specific setups are list under Scenario recording on the right.

5. Select another Pro AV device from the list and set its configuration and/or open AV streaming devices (for example, under Video over IP) and configure them too.



Figure 56: Recording a Scenario (Pro AV and Streaming)

6. Once the recording is complete, enter the Scenario name.

Mo	orming Setup
	audio: J 2 5
2	VS-88UHD (VS-88UHD (VS-88 audio: 6 > 6
3	VS-88UHD (VS-88UHD (VS-88 audio: 7 > 7
4	VS-88UHD (VS-88UHD (VS-88 audio: 1 > 1
5	VS-88UHD (VS-88UHD (VS-88 audio: 2 > 2
6	VS-88UHD (VS-88UHD (VS-88 audio: 3 > 3
7	VS-88UHD (VS-88UHD (VS-88 audio: 4 > 4
8	VS-88UHD (VS-88UHD (VS-88 audio: 5 > 5
9	VS-88UHD (VS-88UHD (VS-88 audio: 8 > 8
10	VS-88UHD (VS-88UHD (VS-88 video: 1 > 1
11	VS-88UHD (VS-88UHD (VS-88 video: 2 > 2
12	VS-88UHD (VS-88UHD (VS-88 video: 3 > 3
13	VS-88UHD (VS-88UHD (VS-88 video: 4 > 4
14	VS-88UHD (VS-88UHD (VS-88 video: 5 > 5
15	VS-88UHD (VS-88UHD (VS-88 video: 7 > 7
16	VS-88UHD (VS-88UHD (VS-88 video: 6 > 6
17	VS-88UHD (VS-88UHD (VS-88 video: 8 > 8
18	Video Streaming KDS6-TX-23 > KDS6-32
19	Video Streaming KDS6-TX-23 > KDS6-33
20	Video Streaming KDS6-TX-23 > KDS6-34
24	Video Chenmina

Figure 56: Recorded Scenario List

7. Click (). The recorded scenario is saved and added to the scenario list.



Figure 56: Recording a Scenario

While recording or after saving a scenario, you can click:

- Image: Ima
- Image: second sec
- (m) to save/save updates to the scenario.

Reports Page

The Reports page includes three types of reports:

- DEVICE STATUS Report on page 85.
- ACTIVITY LOG Report on page 88.
- <u>CONTROL LOG Report</u> on page <u>92</u>.

DEVICE STATUS Report

The **DEVICE STATUS** report displays the current device (associated to a room or not) status and firmware version. The device status is indicated by the color of the icon: a green IP device icon indicates that it is connected; orange indicates a connection problem; and red indicates a disconnected device.

Room ~	Device ~	Device type 🛛 🗸	Firmware version $\qquad \qquad \equiv$	
Room 8	📑 4KJPEG2K D1	IP Decoder	03.00.51234	
Room 8	DIP-31-0030	Routing	2.11.47548	
Room 8	DIP-31	Routing	2.16.50915	
Room 8	FC-28-0038	IO Gateway	2.6.29067	
Room 8	IPD7000S-001D560510B4 Output-1	IP Decoder	-sh: grabversion: not found	
Room 8	KDS-DEC4-1 Output-1	IP Decoder	03.00.49829	
Room 8	KDS6-client001D5603ADC7 Output-1	IP Decoder	A2.8	
Room 8	KDS6-client001D5603ADCD Output-1	IP Decoder	A2.4	
Room 8	KDS6-client001D5603AE20 Output-1	IP Decoder	A2.4	
Room 8	KDS6-client001D5603AE33 Output-1	IP Decoder	A2.4	
Room 8	KDS6-client001D5603AE7D Output-1	IP Decoder	A2.8	
Room 8	RC-74DL (KRAMER_0000)	Room Controller	04.00.45.49251	
Room 8	RC-74DL (KRAMER_15)	Room Controller	04.00.45.49251	
Room 8	KRAMER_0036	Generic	01.02.00.9140	
Room 8 Device status over:	Last 30 days		01.02.00.9140	

Figure 120: Device Status Report

You can sort each column in ascending or descending order or remove it from the table.



Figure 121: Device Status Menu

You can:

- Enable/disable table filters to filter data.
- Export all data as CSV (Comma Separated Values).
- Export selected data as CSV.
- Export filtered data (visible data).
- Select the columns in the table.

The lower part of the page lets you monitor the activity of a selected device by showing its activity over different periods of time:

- Open the drop-down box to select the Last 60 minutes up to Last 30 days.
- Hover over a bar to see the statistics:



Figure 122: Device Activity – Last 7 Days

• Click a bar to see the status per hour on a certain day.



ACTIVITY LOG Report

The **ACTIVITY LOG** displays all Kramer Network activities in your network 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.

DEVICE ST		ROLLOG					
F	Period						
0	Predefined			User		10	FILTER
	Last 7 days *						
0	Fran	To				SELECT EVENTS	CLEAR
1	Event time ~	Source ~	User ~	Device name v	Device type ~	Event	*
-							
	2017-12-08 13:52:58	Device notification		DESKTOP-4BRRH	Generic	DESKTOP-IBRRHVT Output-6 Warning unknown state reported: 6	
	2017-12-08 13:52:58	Device notification		DESKTOP-4BRRH	Generic	DESKTOP-4BRRHVT Output-7 disconnected from input	
	2017-12-08 13 52 48	Device notification		DESKTOP-48RRH	Generic	DESKTOP-48RRHVT Output-21 Connection restored	
	2017-12-06 04:05:42	Device notification		VS-622DT- Output-1	Generic	VS-622DT- Output-1 Video routing set: output 1 to input 3	
	2017-12-08 04:05:42	Device notification		VS-622DT-	ProAVMatrix	VS-622DT- Connection restored	
	2017-12-08 04:05:42	Device notification		V8-622DT-	ProAVMatrix	VS-622DT- Video routing set: output 2 to input 2	
	2017-12-08 04 03 46	Device notification		VS-622DT-	ProAVMatrix	VS-622DT- Connection last	
	2017-12-07 23 12:00	Device notification		ShmuelKoen-PC O	Generic	ShmuelKoen-PC Output-1 Connection restored	
	2017-12-07 23 10 36	Device notification		ShmuelKoen-PC 0	Generic	ShmuelKoen-PC Output-1 Connection lost	
	2017-12-07 23 07:04	Device notification		ShmuelKoen-PC O	Generic	ShmuelKoen-PC Output-1 Connection restored	
	2017-12-07 23 06 08	Device notification		ShmuelKoen-PC O	Generic	ShmuelKoen-PC Output-1 Connection lost	
	2017-12-07 22 53 44	Device notification		ShmuelKoen-PC O.	Generic	ShmuelKoen-PC Output-1 Start decoding	
	2017-12-07 22 53 20	Device notification		ShmuelKoen-PC O	Generic	ShmuelKeen PC Output-1 Connection restored	
	2017-12-07 15:42:21	Administration	super			User super logged off Session Timeout	
	2017-12-07 15:19:19	Device notification		KDS6-gateway0010	Generic	KDS6-gateway0010 Input-1 Connection lost	
	2017-12-07 15 19 19	Device notification		KDS6-client001D56	Generic	KDS6-client001D5603ADEE Output-1 Connection lost	
	2017-12-07 15:19:19	Device notification		KDS6-gateway0009	Canada	KDS6-pateway0009 Input-1 Connection lost	

Figure 125: Activity Log Report

You can:

 Check the **Predefined** radio button to set the back-log period or filter out certain dates to view.

By default, the back-log time is set to 7 days but you can set the back-log time from today to last month (last 31 days). Click **APPLY FILTER** to apply and click **CLEAR FILTER** to clear the filter.

 Check the From/To button below Predefined to set a time period (by setting From and To dates). Click APPLY FILTER to apply and click CLEAR FILTER to clear the filter. Open the User drop-down box to select a user and then filter logs by user. Click APPLY FILTER to apply and click CLEAR FILTER to clear the filter.

	User	FILTER
	john_smith mary_jane	CLEAR
i,	super system	≡

Figure 126: Activity Log Report - Filtering by User

- Click SELECT EVENTS button to view selected events (see <u>SELECT EVENTS</u> <u>Window</u> on page <u>90</u>).
- Enable/disable table filters to filter data.
- Export all data as CSV (Comma Separated Values).
- Select the columns in the table.



Figure 127: Activity Log Report - Selecting Columns

SELECT EVENTS Window

You can filter out events from the event list via the **SELECT EVENT** window.

To use the SELECT EVENTS window:

- 1. In the navigation pane, click **Reports** and then select the **ACTIVITY LOG** tab.
- 2. Click **SELECT EVENTS**.

 Administration Device notification User action 	
✓ User action	
✓ System action	

Figure 128: Activity Log Report – Selecting Events

- 3. Perform any of the following:
 - Uncheck next to an Event category (Administration, Device notification, User action and System action) to filter out a specific category.

				×
>	~	Event source	Event text 🔺	
>	~	Administration		
>	~	Device notification		
>		User action		
>		System action		

Figure 129: Filtering Out an Event Category

Click > next to an Event category to expand it and select specific events

 Device notification Audio routing set: output to input Connected to Connection lost Connection removed Connection restored Set encoding mode to Set streaming method to Set streaming protocol to 		> V Event source		>
 Audio routing set: output to input Connected to Connection lost Connection removed Connection removed Set encoding mode to Set streaming method to 	_			
 Connected to Connection lost Connection removed Connection removed Connection restored Set encoding mode to Set streaming method to 		 Device notification 		~
 Connection lost Connection removed Connection restored Set encoding mode to Set streaming method to 				
 Connection removed Connection restored Set encoding mode to Set streaming method to 		~	~	
 Connection restored Set encoding mode to Set streaming method to 		×	~	
 Set encoding mode to Set streaming method to 		×	~	
 Set streaming method to 				
-		v	~	
 Set streaming protocol to 				
		v	~	
✓ Start decoding		×	~	

Figure 130: Expanding an Event

• Use the **Event source** and **Event text** text boxes to filter specific events.

				×
>	~	Event source	Event text 🔺	

Figure 131: Filtering Specific Events

- 4. Click **CLOSE** to exit the window.
- 5. Click **FILTER** to apply the selection of events on the list and click **CLEAR** to clear the filter.

CONTROL LOG Report

The **CONTROL LOG** presents all the events related to the **KRAMER NETWORK** control module which includes **K-Config** virtual control and monitoring of devices. Once a room is assigned with Virtual Master configuration, the logging begins.

1. In the navigation pane click **Reports** and then select the **CONTROL LOG** tab.



Figure 132: Control Log Report

You can set the LOG Period:

- Check the **Predefined** radio button to set the back-log time period or filter out certain dates to view.
 By default, the back-log time is set to 7 days but you can set the back-log time from today to last month (last 31 days). Click **APPLY FILTER** to apply and click **CLEAR**
- FILTER to clear the filter.
 Check the From/To button below Predefined to set a time period (by setting From and To dates). Click APPLY FILTER to apply and click CLEAR FILTER to clear the filter.

Filtering Control Events

You can filter **CONTROL LOG** data by using one or a combination of filters that are available (**Source**, **User**, **Room**, **Device type**, **Device** name and/or **Event**) and then click FILTER to apply or click **CLEAR** to clear the filter.

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).

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):	Queries Queries Shared Comm_Status Input Power LampHour Fan Volume
Status Value is:	Status OK WARNING NOTICE ERROR
Status Message is:	Message Send parsed value (for LampHours query)

<u>The DisplayName</u> 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)

- ▶ <u>Tables</u>
 ▲ <u>Queries</u>
 ▶ Shared
 ▶ Device-Specific
- <u>StatusValue</u> the same as above
- <u>StatusMessage</u> the same as above
- DisplayName: the name of the query name

An alert that does not belong to a query

- <u>StatusValue</u> the same as above
- <u>StatusMessage</u> 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, <u>StatusValue</u> will not be present, only the <u>StatusMessage</u>. 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 ~ E
~	2016-11-16 15:11:37	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is stand by
\sim	2016-11-16 15:09:31	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is power on!!!
\checkmark	2016-11-16 15:06:56	Room controller	KDS-3	Projector	NEC: NP-PA500U	Power: Is stand by
V	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]
V	2016-11-16 15:04:21	Room controller	KDS-3	Generic	PJLink: PJLink	Lamp Hour: 0.00% [0/3500 h]

Figure 133: Control Log Example

Click the menu to:

- Enable/disable table filters to filter data.
- Export all data as CSV (Comma Separated Values).
- Export filtered data (visible data) as CSV.
- Select the columns in the table.



Figure 134: Control Log Menu

Administration Page

The Administration Page manages system USERS, DEVCIES and other system settings.

Users Management

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

Users	Permissions	Menu Access	
Super	System Administrator/Network Manager:	All the menu items.	
	Defines the topology.		
	Manages devices.		
	 Adds users and credentials (Admin/Users). 		
	Grants Admin access to groups.		
	Creates Maestro room automation.		
	Grants scheduling permissions.		
	• Creates the Room View, scenarios the video and the audio matrix.		
	 Manages rights to room view, matrix view, configuring of locations, all logs and device statuses. 		
Admin	The Site Administrator (once granted	Permissions	
	access by the Super) can:	Room view	Access Room View Menu
	 Access/manage the Room View. 	Matrix view	Access Matrix View Menu
	 Access/manage the matrix, routing of physical/virtual matrix. 	Config Locations	Access to locations in configure system View log of control events
	Access/export control/activity logs.	Activity log	View log of system activity
	View/Manage devices.	Device status	View status of all devices
	Generate and manage scenarios.	Users	Manage users and permissions
	Add users.	Firmware	Manage devices firmware
	 Grant users (operators) access to room scenarios. 		0
	Manage device firmware.		
User	The Operator (once granted access	Permissions	
	by the Super/Administrator) can:	Room view	Access Room View Menu
	 Log in to granted rooms. 		
	Manage room view.		
	Use the scenarios.		
	 Manage room routing (physical or virtual). 		

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.

Creating Users

To create a user:

- 1. In the navigation pane click Administration > USERS.
- 2. Click 🕀 to open the Pro AV device list. Select the Administration page (USERS tab):



Figure 135: The Permissions Page

Click 🕀. The following window appears:

Create a new user	×	Create a new user	
Share Kramer Network and manage permissions User type		Share Kramer Network and manage pe User type	rmissions
Admin		Admin	
User name *		user name * Office Manager	
Required.	0/20		14 / 20
Auth mode *		Auth mode *	
Internal	*	Internal	
	CREATE		CREATE

Figure 136: Creating a New Admin User

Auth mode can be set to internal or to LDAP.

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

Users	Ð	L Office manager		
A Office manager		PROPERTIES DEVICES LOC	ATIONS	
		General		
		User name	Office manager	3
		User type	Administrator	3
		Authentication	Internal [3
		Created	2018-12-31 09:08:45	
	_	Last login	Not Found	
	_	Permissions		
	- 1		Access Room View Menu	
	- 1	Matrix view	Access Matrix View Menu	
	- 1	Config Locations	Access to locations in config	gure system
		Control log	View log of control events	
	- 1	Activity log	View log of system activity	
		Device status	View status of all devices	
		Users	Manage users and permiss	ions
		Firmware	Manage devices firmware	
		DEACTIVATE	RESET PASSWORD	DELETE USER

Figure 137: Adding an Administrator User

The new user properties tab appears, indicating the date the user was created and the last login.

You can:

- Click 📝 to change the user's name, type and authentication.
- DEACTIVATE or DELETE USER.
- Click **RESET PASSWORD** to reset the user's password.
- Check 🗹 to change the User's permission to access Room View and Matrix View menus, view the different logs and devices status, access the locations and manage users and permissions.

To create additional Admins and Users, click (+):

Create a new user	
Share Kramer Network and manage permissions	
User type "	,
User name *	
Required	0/20
Auth mode *	
Internal	*
Assign to administrator *	÷
	CREATE

Figure 138: Creating a New User or Admin (by the Super)

You can create additional administrators and users.

To create a new user:

- 1. In the Administration page, select an administrator.
- 2. Click 🕂.
- 3. Type the User name and select the new user's administrator.

Create a new user	
Share Kramer Network and manage permissions	
User type *	
User	*
User name *	
Room 1 Coordinator	
	18/20
Auth mode *	
Internal	-
Assign to administrator *	
office manager	*
	CREATE

Figure 139: Creating a New User (by the Super or Admin)

4. Click **CREATE**.

The new User is now under the administrator:

Users	Ð	L Room 1 coordinator		
v 💄 Office manager		PROPERTIES DEVICES LO	CATIONS	
Room 1 coord	Inator	General		
> 👤 Floor manager		User name	Room 1 coordinate	or 🕑
		User type	User	ß
		Authentication	Internal	Z
		Administrator	Office manager	Ø
		Created	2018-12-31 10:40:3	36
		Last login	Not Found	
		Permissions		
		Room view	Access Room View Menu	1
		DEACTIVATE	RESET PASSWORD	DELETE USER

Figure 140: New User Properties

The new user properties tab appears, indicating the date the user was created and the last login.

You can:

- Click 📝 to change the user's name, type and authentication.
- Deactivate or delete the use.
- Change the user's password.
- Change the User's permission to access Room View.

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

Assigning Devices

To assign devices to an administrator or a user:

- 1. In the Administration page, select an administrator or user.
- 2. Click the **DEVICES** tab. The following window appears:

Users	\odot	L Office manager	
Office manager Office manager Floor manager	•	PROPERTIES DEVICES Available devices Search KDS6-Tx1	S LOCATIONS Assigned devices Search
			© ©

Figure 141: Assigning Devices to a User

3. Use the arrows to assign all the devices or selectable devices from the Available devices list.

Assigning Locations

i

To assign locations to an administrator or a user:

- 1. In the Administration page, select an administrator or user.
- 2. Click the LOCATIONS tab. The following window appears:

Users	\odot	L Office manager	
🔔 Office manager		PROPERTIES DEVICES	LOCATIONS
L Floor manager		Available locations Search	Assigned locations Search
		Kramer J Office	
		0	<i>w</i>
		Č	0 0 0 0
		0	୬

Figure 142: Assigning Locations to a User

A floor is assigned to an Administrator and a room to a User.

After the Super has assigned the floor to the administrator, the administrator has access to all the rooms on that floor and can then assign a room to his/her users.

3. Use the arrows to assign locations from the Available locations list.

Devices Management

Use DEVICES to manage Firmware Upgrade, Versions and view the Supported devices.

Firmware Upgrade Tab

The **Firmware upgrade** tab lists the Pro AV devices, their current firmware version, other available versions, status and Log (firmware upgrade history).

✓ Model ▲ Device Current version Salect version Status Leg ✓ FC.26 EC.28.0027 1.9.2400 2.8.3087 ●
✓ FC 28 ■ EC.28.0027 1.8.24040 2.8.30857 Imit Control (Control (Contro) (Control (Contro) (Control (Contro) (Control (Co
• R3-6 • K93AUER 0053 01 00 00 5094 2.0 12264 ID • V5-1615DN-EM • K5-1615DN-EM 05 00 0013 • ID • V5-68UT • V5-98UT-1 01.01 0014 No versions ID
US-16150N-EM (Ф. VS-16150N-EM 05.00.0013 -) VS-89UT (Ф. VS-98UT-1 01.01.0014 No versions (Ф)
VS-8801T I 01.01.0014 No versions I

Figure 143: Device Firmware Upgrade

You can:

• Check Enable filters to filter out models, devices, versions and so on.

	ere upgrade '	Versions Supported dev	vices				
	2					i Senable f	filters
*	Model •	Device	Current version	Select version	Status	Log	=
,	✔ FC-26	EC-26-0027	1.9.24040	2.8.30857			

Figure 144: Enabling Filters

• Click ≡ to select the columns in the table and clear filters if **Enable filters** box is checked.



Figure 145: Device Firmware Upgrade Menu

- Click any column to change the alphabetical order of the list.
- Click the hyperlinked name of a **Device** to open its embedded web pages.
- Click (to update the table. The system scans for new devices and new firmware updates.

Scanning
Scanning for Pro AV devices and firmware upgrades. This operation may take a few minutes to complete
··· • ·

Figure 146: Scanning for Pro AV Devices Message

- View the current firmware version (Current version) of a device.
- Check for available firmware versions and select the desired one (**Select version**) and then upgrade the firmware (see <u>Upgrading the Firmware</u> on page <u>105</u>).
- Click 🗊 in the device row to check the device firmware upgrade history in the Log.

Upgrading the Firmware

To upgrade the firmware:

- 1. In the navigation pane click Administration and then select the DEVICES tab.
- 2. In DEVICES select Firmware upgrade.
- 3. Check the models for which you want to perform a firmware upgrade (**PL-50** in this example).

You can upgrade the firmware of single or multiple devices simultaneously.

		Model 🔺	Device	Current version	Select version	Status	Log
1	ø	FC-26	FC-26-0034	1.5.22038	2.8.30857		
		FC-404NET	Ult4-0a214a	1.6.24409	No versions		
		FC-404NET	Ult4-0a2168	1.6.24409	No versions		
		FC-404NET	Emp Kmr-0a21a01	1.6.24409	No versions		
	/	PL-50	KRAMER_00.	01.02.00.9140	1.2.0.9140		
		RC-74DL	KRAMER_15	04.00.43.42085	4.0.37.31563		
		RC-74DL	KRAMER_891	04.00.43.42085	4.0.37.31563		
		VP-31KSI	KRAMER_00	00.09.00.5921	No versions		
		VS-622DT	WS-622DT-	2.0.42095	2		

Figure 147: Selecting Devices for Firmware Upgrade

- 4. Select the new firmware version (Select version).
- 5. Click 💋.

The following message appears:



Figure 148: Firmware Upgrade Message

6. Click OK.

Firmware upgrade process is initialized.

Model	Device	Current version	Select version	Status 🔻	Log
✓ FC-404NET	Emr-0a21a01	1.6.24409	No versions		
✓ FC-404NET	Ult4-0a2168	1.6.24409	No versions		
V FC-404NET	<u>Ult4-0a214a</u>	1.6.24409	No versions		
VS-622DT	WS-622DT-	2.0.42095	-		
 FC-26 	FC-26-0034	1.5.22038	2.8.30857		
V RC-74DL	KRAMER_15	04.00.43.42085	4.0.37.31563		
 PL-50 	KRAMER_00	. 01.02.00.9140	1.2.0.9140	Uploading firmwar	
RC-74DL	KRAMER_891	<u>1</u> 04.00.43.42085	4.0.37.31563		

Figure 149: Firmware Uploaded

7. Wait for completion of the process.

	Model 🔺	Device	Current version	Select version	Status	Log	
						-	
	FC-26	FC-26-0034	1.5.22038	2.8.30857			
	FC-404NET	<u>Ult4-0a214a</u>	1.6.24409	No versions			
	FC-404NET	Ult4-0a2168	1.6.24409	No versions			
	FC-404NET	Emr-0a21a01	1.6.24409	No versions			
~	PL-50	KRAMER_00	01.02.00.9140	1.2.0.9140	Upgrade completed		
	RC-74DL	KRAMER_15	04.00.43.42085	4.0.37.31563			
	RC-74DL	KRAMER_8911	04.00.43.42085	4.0.37.31563			
	VS-622DT	WS-622DT-	2.0.42095	-			

Figure 150: Firmware Upgrade Complete

Some devices may need power recycling following firmware upgrade.

i
8. If required, click (**b**) to check the history **Log**.

	Event	User	Version	Additional information
2017-12-05 13:27:24	Upgrade initiated	super	1.2.0.9140	
2017-12-05 13:27:47	Upgrade failed			Upload Error: TCP Response Ti
2017-12-05 13:27:47	Upgrade ended			
2017-12-05 13:28:44	Upgrade initiated	super	1.2.0.9140	
2017-12-05 13:29:46	Upgrade failed			Upload Error: TCP Response Ti
2017-12-05 13:29:46	Upgrade ended			
2017-12-05 13:30:59	Upgrade initiated	super	1.2.0.9140	
2017-12-05 13:34:38	Upgrade succeeded			
2017-12-05 13:34:38	Upgrade ended			

Figure 151: Firmware Upgrade Log

9. Click **OK** to exit the log.

Managing Firmware Versions

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 \mathbf{p} or by manual upload $\mathbf{1}$.

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).

	ec 5, 2017		13 34	oported devic	.05			
۲							Enable	filte
>	Model	Version	Default	Registered	Source	Comment 🝷	Action	
>	RC-74DL (1)	4.0.37.31563					(+)	
	VS-622DT						•	
~	PL-50 (2)	1.2.0.9140					•	
		1.2.0.9123	0	2017-12-05 15:0	<u>.</u>		$\overline{\bigcirc}$	
		1.2.0.9140	۲	2017-11-30 18:4	Ú		$\overline{\bigcirc}$	
	VP-31KSI						•	
	FC-404NET						•	
>	FC-26 (1)	2.8.30857					Ă	

Figure 152: Versions Tab

You can:

- Click
 to search for new firmware versions. The latest downloaded version for a given device model is marked as the default
 version for devices of that model.
- Click 🕀 to upload a new firmware file manually:

	FC-26	type	Model type
 No file chosen	Choose File	re file	Firmware file
		re	Firmware
		ent	Comment
		as default for model typ	🏾 Set as de
			20

Figure 153: Uploading New Firmware Manually

• Check **Enable filters** to filter out models, devices, versions and so on.

							Enable filt	iers
>	Model	Version	Default	Registered	Source	Comment	Action	≡

Figure 154: Filtering Devices



Figure 155: Versions Menu

• Type a comment under the **Comment** column.

Supported Devices List

The Supported devices tab lists all Kramer devices supported by KRAMER NETWORK.

nware upgrade	Versions Supported	ldevices		
2			6	Enable filter
Model 🔺	Туре	Matrix view	FW upgrade	=
691	Range Extender	No	Yes	
692	Range Extender	No	Yes	
908	Routing	Yes	Yes	
DGKat-IN8-F64	Module Board	No	Yes	
DGKat-OUT8-F64	Module Board	No	Yes	
DGKatA-IN2-F16	Module Board	No	Yes	
DGKatA-OUT2-F16	Module Board	No	Yes	
DIP-20	Routing	Yes	Yes	
DIP-20M	Routing	Yes	Yes	
DIP-22	Routing	Yes	Yes	
DIP-30	Routing	Yes	Yes	
DIP-30M	Routing	Yes	Yes	

Figure 156: Supported Devices List

Click 🔰 to upload the descriptor (issued by Kramer) to upload new devices.

Upload de	vice descriptors	×
Descriptor file	Choose File No file	chosen
	UPLOAD	

Figure 157: Uploading Device Descriptors

KRAMER NETWORK only allows uploading of a list with a higher version number than the current one.

Managing Settings

The **SYSTEM CONFIGURATION** tab (in the **Administration** page) enables performing the following actions:

- Defining General Settings on page 110.
- <u>Configuring the Email System</u> on page <u>112</u>.
- Creating LDAP Connections on page 115.
- Defining SNMP Server and Port on page 119.
- <u>Setting Business Hours</u> on page <u>120</u>.
- Defining the Device Scanning Method on page 121.

Defining General Settings

Use the **GENERAL** subtab to:

- <u>Select KRAMER NETWORK Language on page 110</u>.
- Define Dante Interfaces on page 111.
- <u>Add a Device Driver</u> on page <u>112</u>.

Select KRAMER NETWORK Language

To change KRAMER NETWORK language:

- 1. In the navigation pane click Administration and then select SETTINGS.
- 2. Select GENERAL.

KR	AMER NETWORK	0	L Super Logout	8.8 8.9
\equiv	USERS ETTINGS			
°°,	GENERAL EMAIL LDAP SNMP BUSINESS HOURS SCAN			
Ŧ	Languages			-
	Select Kramer Network language interface			
IΞ	English + English			
3	UPLOAD LANGUAGE PACKAGE			
	Dante interfaces			+
	Device Driver			+

Figure 158: Uploading a Language Package

3. Open the language drop-down box and select the desired language.

Languag	
Deutsch	
German	
English	
English	
français	
French	
العربية	
Arabic	
中文 (Zhōngwèn), 汉语, 漢語	
Chinese	
하구어	

Figure 159: Selecting a Language

4. Select the Language (for example, French). **KRAMER NETWORK** automatically reloads in the French version:

KR	AMER NETWORK	0	L Super Déconnexion	<u>n</u> 53
Ξ	LE E C LE			
°	GENERAL COURRIEL LDAP SNMP HEURES DE TRAVAIL. SCAN			
Ŧ	Langues			-
	Selectionnez la langue de Kramer Network			
IΞ	français v			
3	CHARGER LE PACKAGE DE LANGUE			
	Interfaces Dante			+
	Pilote du peripherique			+

Figure 160: KRAMER NETWORK in French

If the desired language does not appear in the **Language** drop-down box, contact your local Kramer office to request a translation.

To upload the new translation:

- 1. Download that file to your system.
- 2. Click UPLOAD LANGUAGE PACKAGE to upload this file to KRAMER NETWORK.
- 3. Open the Language drop-down box and select your language.

Define Dante Interfaces

To identify the network for communicating with other Dante devices, click + beside **Dante interfaces** and select Dante networks from the drop-down list.

Add a Device Driver

To add a device driver that will be controlled by Maestro room automation:

- 1. In the navigation pane click Administration and then select SETTINGS.
- 2. Select GENERAL.
- 3. Click + beside **Device Driver**.

Device Driver	-
Upload specific device drivers to enable controlling 3rd party devices with Maestro room automation.	
UPLOAD DEVICE DRIVER	
OFEOAD DEVICE DRIVER	

Figure 161: Adding a Device Driver

- 4. Click UPLOAD DEVICE DRIVER.
- 5. Select the device driver and follow the instructions on-screen.

Configuring the Email System

Use the **EMAIL** subtab, to set an email address from which you receive **KRAMER NETWORK** notifications via Maestro. You can use one of the two available options:

- sendmail email notifications are sent without the need to configure a specific SMTP.
- SMTP emails are sent by using your company mail server.

To set the notification email via sendmail:

1. In the navigation pane click Administration and then select SETTINGS>EMAIL.

2. Open the Mailing method drop-down box and select the sendmail mailing method.

GENERAL EMAIL	LDAP	SNMP	BUSINESS HOURS	SCAN	
alling method *					
endmail			•		
SEND A TEST EMAIL			SAVE		
e Sendmail method only su	poorte basic i atio r	baracters Non I	Paris Latin character		
	pports pasic cauri c	Hereuters, Nutre	Sasic Lauri Characters		
ll not be displayed in emails					
li not be displayed in emails					
ll not be displayed in emails					

Figure 162: Sending Mail Notifications via Sendmail

3. Click SAVE. The following message appears:



Figure 163: Saving Sendmail as the Default Configuration

- 4. Click **OK**.
- 5. Click SEND A TEST MAIL if required, and type your email address.

Send a test	email
Send to *	
SEND EMAIL	CANCEL

Figure 164: Sending a Test Email

Wait for the test email from: noreply@kramernetwork.com. Any email notifications will be sent from this address.

To set the notification email via SMTP:

- 1. In the navigation pane click Administration and then select SETTINGS>EMAIL.
- 2. Open the Mailing method drop-down box and select the SMTP mailing method.
- 3. Fill in all the details (Server, Port and HELO Domain).
- 4. Select the Authentication method.
- 5. Add the email Username and Password.
- 6. Check Use starttls for a more secure connection using SSL/TLS.

GENERAL	EMAIL	LDAP	SNMP	BUSINESS HOURS	SCAN
Mailing method *					
SMTP				•	
Server *					
mail.evergree	n.com				
Port "					
588					
HELO Domain *					
evergreen.cor	n				
Authentication *					
LOGIN				*	
Username					
James					
Password					
Send from email					

Figure 165: Sending Mail Notifications via SMTP

7. Click SAVE.



Figure 166: Saving SMTP as the Default Configuration

8. If required, click SEND A TEST EMAIL.

Creating LDAP Connections

Configure your LDAP authentication connection via the **LDAP** subtab so that you can add users from your LDAP without the need to manage additional users and passwords. In addition, you can associate your LDAP locations to your **KRAMER NETWORK** locations, manage and view the location's schedule.

More than one connection can be added to KRAMER NETWORK.



Figure 167: LDAP Connections Subtab

To select LDAP connections:

- 1. In the navigation pane click **Administration** and then select the **SYSTEM CONFIGURATION** tab.
- 2. In SYSTEM CONFIGURATION select LDAP.

3. Click 🕂.

	SNMP BUSINESS HOURS SCAN	
LDAP Connections	Name*	
	Host*	
	Port*	
	Account " Super	
	Password*	
	Domain *	
	Base domain name *	
	Mail server	
	🗌 Use SSL 🗹 Is active	

Figure 168: LDAP Connections

4. Fill in the details.

USERS DEVIS				
GENERAL	EMAIL	LDAP	SNMP BUSINESS HOURS SCAN	
_			Name *	
			Host *	
			Port*	
			Account *	
			Password *	
			Domain *	
			Base domain name *	
			Mail server	
			Use SSL 🔽 Is active	
			DELETE ADD	

Figure 169: LDAP Connections – Adding LDAP Details

5. Click ADD.

GENERAL EMAIL	LDAP	SNMP BUSINESS HOURS	
LDAP Connections	•	L CompanyLDAP	
A CompanyLDAP		Name * CompanyLDAP	
		Host*	
		Port *	
		Account *	
		Password *	
		Domain *	
		Base domain name *	

Figure 170: LDAP Connections – LDAP Added

Defining SNMP Server and Port

Configure the SNMP server. The SNMP connection allows you to create SNMP trap actions in your Room automation.

- 1. In the navigation pane click **Administration** and then select the **SETTINGS**.
- 2. Select **SNMP**:

KRAI	MER N	etwc	RK				0	👤 Super	Logout	23
	LUSERS DEVICE									
°•	GENERAL	EMAIL	LDAP	SNMP	BUSINESS HOURS	SCAN				
† □ ○	SNMP server	*								

Figure 171: SNMP Settings

3. Set SNMP server and port and click **SAVE**.

Setting Business Hours

Configure your organization's business hours. Setting the business hours can assist you in your Maestro room automation.

To set business hours:

- 1. In the navigation pane click **Administration** and then select **SETTINGS**.
- 2. Select **BUSINESS HOURS**.

GENERAL EMAIL	LDAP SNMP	BUSINESS HOURS	SCAN	
Start Time *	End Time *			
() 09:00	() 17:00			
Sunday				
Monday				
Tuesday				
Vednesday				
🔽 Thursday				
🔽 Friday				
Saturday				
SAVE				

Figure 172: Business Hours Settings

- 3. Check the relevant business days.
- 4. Type the **Start Time/End Time** the working hours or click () to set working hours:



Figure 173: Setting Working Hours

5. Click **OK**.

Business hours are updated.

SENERAL EMAIL	LDAP	SNMP	BUSINESS HOURS	
Start Time* 09:00		End Time* 17:30		
Sunday				
Monday				
Tuesday				
Vednesday				
Thursday				
Friday				
Saturday				
SAVE				

Figure 174: Working Days and Hours Settings Updated

6. Click **SAVE**.

Defining the Device Scanning Method

Following installation, **KRAMER NETWORK** scans the system automatically. This default base scan includes scanning for devices that support P3K, KDS6 and Dante[™] devices, as well as VIA devices.

 (\mathbf{i})

The base scan is read-only, cannot be changed, and is carried out after system installation, restart, when pressing the scan button or it can be scheduled via the scan scheduler.

For each scan you can define the scan segment which includes the IP address range for discovering devices, the scan methods and the probe methods:

Scan Segment	Parameter	Description
IP Address Range	First 2 digits: enter a number between 0 and 255. Last 2 digits: enter a range of numbers between 0-255.	Sets range of IP addresses to be scanned.
Scan Method	Ping, TCP Connect and/or Broadcast (the local subnet)	Defines method used to detect whether a device is active or not.
Probe Method	P3K or VIA	Checks if the detected IP address is supported by the system.

Generally, the scanning procedure includes the following steps:

- A range of IP addresses is defined, which includes the devices to be searched.
- The system attempts to connect to each IP address in the defined range, using ping or TCP connect methods.
- The system checks if the discovered devices are supported (by the recognized P3K or VIA protocols).



A scan segment can be shared by more than one configured scan.

Different IP address ranges (including overlapping addresses) can be used in different configured scan segments.

The SCAN tab enables performing the following actions:

- <u>Running Base Scan Operations</u> on page <u>122</u>.
- <u>Scheduling a Scan</u> on page <u>123</u>.
- <u>Configuring a New Scan</u> on page <u>124</u>.

Running Base Scan Operations

To access the base scan from the SCAN tab:

- 1. In the navigation pane click Administration and then select SETTINGS.
- 2. Select **SCAN**. The Scan list appears.

RAI	AMER NETWORK						👤 Super	<u>Logout</u>	53
) INGS							
	GENERAL EMAIL	LDAP SNMP	BUSINESS HOURS	SCAN					
	Scan list					TCP	SCAN PORT	'S SETTING	S
	Scan name	Scan description	Scan segments	Progress	Last scan	Actions	R		
	Base Scan (default)	Scans the local subn	Base Segment 🔹	0%	23/12/2018	0	1	0	ė
	+ Add new scan								

Figure 175: SETTINGS – SCAN Tab

- 3. You can view the scan name and description, the scan segments, the date of the latest scan and perform the following actions:
 - Click I to run a scan.
 - View the scan progress.
 - Click to stop a scan.

Click ¹ to view the scan results.

Managed device	IP address 🛧	Device name	Device model	Device type	Edit
~	① <u>192.168.1.141</u>	SL-240C-8800152	SL-240C	Room Controller, Brain	1
~	<u>192.168.54.88</u>	VS-88UT-1	VS-88UT	Routing	1
~	192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33 192.168.55.33	SL-240C-8800151	SL-240C	Room Controller, Brain	0
~	<u>192.168.56.74</u>	KRAMER_15	RC-74DL	Room Controller	1
~	① 192.168.73.113 ①	KDS6-client001D5603ADC7	KDS-DEC6	IP Decoder	0
×	⊕ <u>192.168.73.121</u>	KDS6-client001D5603AE7D	KDS-DEC6	IP Decoder	1
~	<u>192.168.73.130</u>	KDS6-client001D5603AE33	KDS-DEC6	IP Decoder	1
~	<u>192.168.73.146</u>	KDS6-client001D5603ADCD	KDS-DEC6	IP Decoder	1
~	192.168.73.201	KDS6-gateway0001	KDS-EN6	IP Encoder	1
		Page: 1	ber page: 10 ▪	1-9of9 K K	> >

Figure 176: Base Scan Results

- Click
 to configure a device in the list (see <u>Editing Device Parameters</u> on page <u>22</u>).
- Click ^C to duplicate a scan.
- Click is to delete a scan (disabled for base scan).
- Click ^(O) to view scan details.

Scheduling a Scan

To set the base scan scheduler to automatically scan the subnet:

- 1. In the Base scan row, click $^{\odot}$ to view scan details.
- 2. Click 🧭.
- 3. Enter Scan scheduler time and days and click **SAVE** to carry out scheduled scans.

	Name	IP address range	Scan method		Probe method	Ac	tions
1	Base Segment		Broadcast (local subnet)		Pro-AV , Streamers , Collaboration		
	New segment	· · · · · · · · · · · · · · · · · · ·	Broadcast (local subnet)	÷.	Pro-AV ·		

Figure 177: Base Scan Scheduler

Configuring a New Scan

The following example shows how to configure a scan for two separate floors in a company building.

To configure a new scan:

- 1. In the navigation pane click Administration and then select SETTINGS.
- 2. Select **SCAN**.
- 3. Click Add new scan.



Uncheck the box next to Base Segment if you do not need to use it.

- 4. Enter a scan name (Company HQ Building Scan) and description (find all the devices in the building, across VLANs).
- 5. In Scan segments, check the segments you want to include in the scan. The scan in this example includes two segments, one for each floor.
- 6. Add the IP address range/s per segment:
 - Under IP Address click +. The following window opens:

Paddress rang New addres			
		17/45	
192	. 168	. 1	1-255

Figure 178: Add IP Address Range Window

- Enter the IP address range name (this range can be used again for other configured scans).
- Click SAVE.

7. Under Scan method, open the drop-down box and select one or more scan method.



Figure 179: Selecting the Scan Method

In this example, select all the scan methods.

If TCP is selected as a scan method, click TCP SCAN PORTS SETTINGS. The following window appears:

TCP scan ports settings	×
Ports list 80	
+ Add TCP port	
REVERT	SAVE

Figure 180: TCP Scan Ports Settings

- Add/delete the relevant TCP ports.
- Click SAVE.
- 8. Under Probe method, open the drop-down box and select the device types you want to scan.

9. Set the scan scheduler.

can l	list						TCP SCAN PO	RTS SE	TTING
Scan i	name	Scan desc	ription	Scan segments	Progress	Last scan	Actions		
Base S	Scan (default)	Scans the	local subn	Base Segment 🔹	0%	24/12/2018	() = 1	6 1	0
New s	scan								
Scan na HQ B	^{ame *} Iuilding Scan		Description Find all the d	levices in the building					×
		16/45				36 / 120			
Scan	segments Name	16/45	IP addre	ss range	Scan method	36 / 120 Probe m	ethod	Acti	ons
Scan		16/45	IP addre	ss range	Scan method Broadcast (local sub	Probe m	ethod Streamers , C *	Acti	ons
Scan	Name	16/45		ss range Addresses * +	Broadcast (local sub	Probe m		ē	
	Name Base Segment	16/45			Broadcast (local sub	Probe m	Streamers , C., *	ē	

Figure 181: Setting the Scan Scheduler

10. Click SAVE.

You can click **SAVE** at any time during the scan configuration process.

LUSERS (~	HQ B	Scan uilding ssfully	Scan	ias be	en crea
GENERAL	EMAIL	LDAP SNMP	BUSINESS HOURS	SCAN	- 1					
Scan lis						T	CP SCA	N PORT	S SET	TINGS
Scan na	me	Scan description	Scan segments	Progress	Last scan	Actio	ns			
						1		10		0
	an (defauit)	Scans the local subn	Base Segment 🔹	0%	24/12/2018	0	1			~
Base Sca	an (defauit) ding Scan	Scans the local subn Find all the devices i	Floor 1 •	0%	24/12/2018 Never sca	0				0



To scan Floor 2, create the second segment in the scan.

1. In the HQ Building Scan line, click ⁽¹⁾ to view the scan.

can l	ist						тся	P SCAN	PORTS	SETTIN	NGS
Scan i	name	Scan description	Scan segments	Progress	Las	t scan	Action	5			
Base S	Scan (default)	Scans the local subn.	Base Segment 🔹	0%	24/	12/2018	0	1	Ō		0
HQ Bi	uilding Scan	Find all the devices i.	. Floor 1 -	0%	Ne	/er sca	0			(H))	0
HQ B	ullding Scan		edevices in the building								
Scan	segments	167.45				6/120					
Scan	segments Name		ress range	Scan method			nethod			Action	15
Scan			ress range	Scan method Broadcast (local si		Probei	nethod Stream			Action	
_	Name	IP add	ress range 1 Addresses 🔹 👻		ab	Probe 1 Pro-Al					
	Name Base Segment	IP add			ab	Probe 1 Pro-Al	Stream			6	8

Figure 183: [Figure Caption]

- 2. Click 🧭 to edit the HQ Building Scan.
- 3. Click 🛨 to add the second scan segment (for floor 2).
- 4. Add the IP addresses for floor 2 (in this example, 2 IP-address ranges are created for scanning the devices for this floor).
- 5. Open the IP address range drop-down box and check the relevant IP-address ranges for floor 2.

	Name	IP address range			Scan method	Probe method	Action	ns
	Base Segment				Broadcast (local sub 👻	Pro-AV. Streamers , C +	ē	
~	Floor 1	Floor 1 Addresses	1	Î	Ping , TCP Connect *	Pro-AV , Streamers *	ō	Î
~	Floor 2	Floor 2 addresses A	1	Î	ing , TCP Connect *	Pro-AV , Streamers *	ē	Î
Ŧ		Floor 2 Addresses B	0	Î				

Figure 184: Selecting the IP-Addresses

Scan segments

- 6. Set the scan, probe methods and scan schedule and then click **SAVE**. HQ Building Scan includes 2 scan segments.
- 7. If required, check the box next to Set as default.
- 8. Click **SAVE**.

can list							TCP S	CAN F	PORTS	SETT	TING
Scan name	Scan description	Scan segments		Progress	Last scan		ons				
Base Scan (default)	Scans the local subn	Base Segment	÷	0%	24/12/2018	۲	10	1	ē	1	0
HQ Building Scan	Find all the devices i	Floor 1, Floor 2	÷	0%	Never sca	۲	10		ē	Î	0
+ Add new scan											

Figure 185: HQ Building Scan Example Complete

You can now 🔮 to activate this scan (apart from the scheduled scans).

GENERAL EMAIL	LDAP SNMP	BUSINESS HOURS	SCAN						
Scan list					TCP	SCAN	PORTS	SETTI	INGS
acan nat									_
Scan name	Scan description	Scan segments	Progress	Last scan	Action				
	Scan description	Scan segments Base Segment *	Progress 0%	Last scan		s			0

Figure 186: Scanning HQ Building Scan

Once scan is complete view the scan results list.

You can also view edit and define other scanning methods via **Administration > SETTINGS > SCAN**.

About Page

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

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	KramerNetwork@Kramerel.com
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Figure 187: The About Page

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