

# Kaleido-X (7RU)

Unmatched picture quality and layout flexibility

## Quick Start Guide

M808-9905-110

12 January 2014



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A **BELDEN** BRAND

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## Safety Compliance



This equipment complies with the requirements of the following standards for safety of information technology equipment:

- CSA-C22.2 No. 60950-1-07
- UL 60950-1 (2<sup>nd</sup> Edition)
- EN 60950-1:2006
- IEC 60950-1:2005

### WARNING

**An appropriately listed/certified mains supply power cord must be used for the connection of the equipment to the mains voltage at either 120V~ or 240V~**

### CAUTION

**This equipment is meant to be installed in a restricted access location  
These servicing instructions are for use by qualified service personnel only**

To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel. Disconnect both power supply units before servicing. Servicing should be done in a static-free environment.

#### **Battery handling**

There is a danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Before disposing of your Miranda equipment, please review the "Disposal and Recycling Information" appendix, in the *Kaleido-X (7RU) Hardware Description & Installation Manual*.

## Electromagnetic Compatibility



This equipment has been tested for verification of compliance with FCC Part 15, Subpart B requirements for class A digital devices.

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**CE** This equipment has been tested and found to comply with the requirements of the EMC directive 2004/108/EC:

- EN 55022 Class A Radiated and conducted emissions
- EN 61000-3-2 Limits for harmonic current emissions
- EN 61000-3-3 Limitation of voltage changes, voltage fluctuations and flicker
- EN 61000-4-2 Electrostatic discharge immunity
- EN 61000-4-3 Radiated, radio-frequency, electromagnetic field immunity
- EN 61000-4-4 Electrical fast transient/burst immunity
- EN 61000-4-5 Surge transient immunity
- EN 61000-4-6 Conducted disturbances immunity
- EN 61000-4-11 Voltage dips, short interruptions and voltage variations immunity

# Kaleido-X (7RU)

## Setting Up Your Multi-Viewer

Welcome to the Kaleido family of multiviewers! This Quick Start Guide is designed to help you get your Kaleido-X (7RU) multiviewer up and running for the first time. The following sections will guide you through the installation of a Kaleido-X (7RU) system in its default configuration.

### Summary

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### Introduction

Miranda's Kaleido family of multiviewers ranges from quad-splits to large-scale, multi-room monitoring systems, with outstanding image quality and signal flexibility. The Kaleido multiviewers are available in different models: the new Kaleido-MX, the Kaleido-IP, the Kaleido-X (7RU), the Kaleido-X (4RU), the Kaleido-X16, and the Kaleido-XQUAD frames, as well as the new Kaleido-Modular-X cards, and the Kaleido-Modular KMV-3901/3911 cards.

The **Kaleido-X (7RU)** can display 96 3Gbps, HD, SD or analog inputs any number of times, in any size, across eight displays of any resolution and orientation. With its router option, the Kaleido-X (7RU) offers switching unprocessed inputs to 48 HD/SD outputs for feeding monitors, test equipment and master control or production switchers. By using an optional mid-plane expansion module, two Kaleido-X (7RU) frames can be configured into a fully interconnected 14 RU system to display up to 192 video inputs over up to 12 displays, and capable of switching unprocessed inputs to 96 HD/SD router outputs.

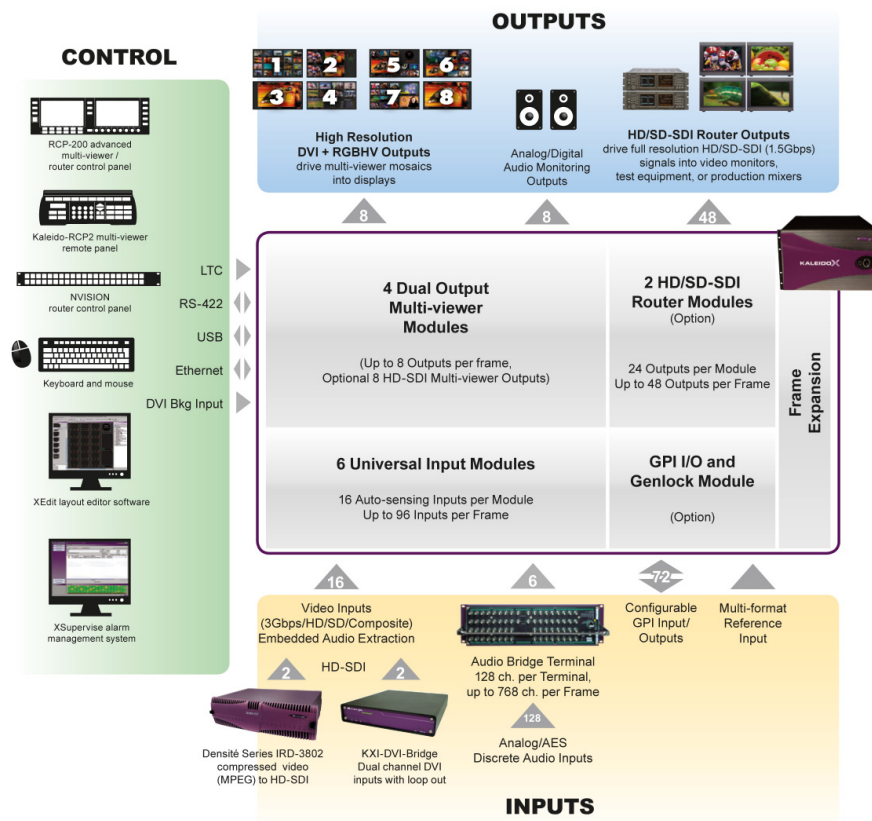
At the heart of every multiviewer system is the **Kaleido-X software**, which includes two client applications:

- **XAdmin** is a Web client that your system administrator will use to manage the multiviewer system.
- **XEdit** is a client application used to create layouts for the monitor wall, and to configure the multiviewer, from your PC or laptop.

A Kaleido-X multiviewer system in its default configuration includes a number of layout presets. Each preset shows the video signal from a specific input module (card). Each output card drives displays in either VGA or DVI-D at a default resolution of 1280 × 1024 @ 60Hz. Consult the *Kaleido-X User's Manual* (on the DVD that shipped with your multiviewer)

for instructions on how to create rooms and layouts according to your specific requirements.

The Kaleido-X (7RU) is a multi-room, multi-image display processor and router in a single, expandable chassis. Its unique mix of capabilities represents the most integrated monitoring and routing solution. As a multi-image processor, it offers the highest level of signal flexibility. Each chassis can display 96 HD, SD or Analog inputs any number of times, in any size, across 8 displays of any resolution and orientation. As a router, it offers switching of 96 unprocessed inputs to 48 HD/SD outputs for feeding monitors, test equipment and master control or production switchers.



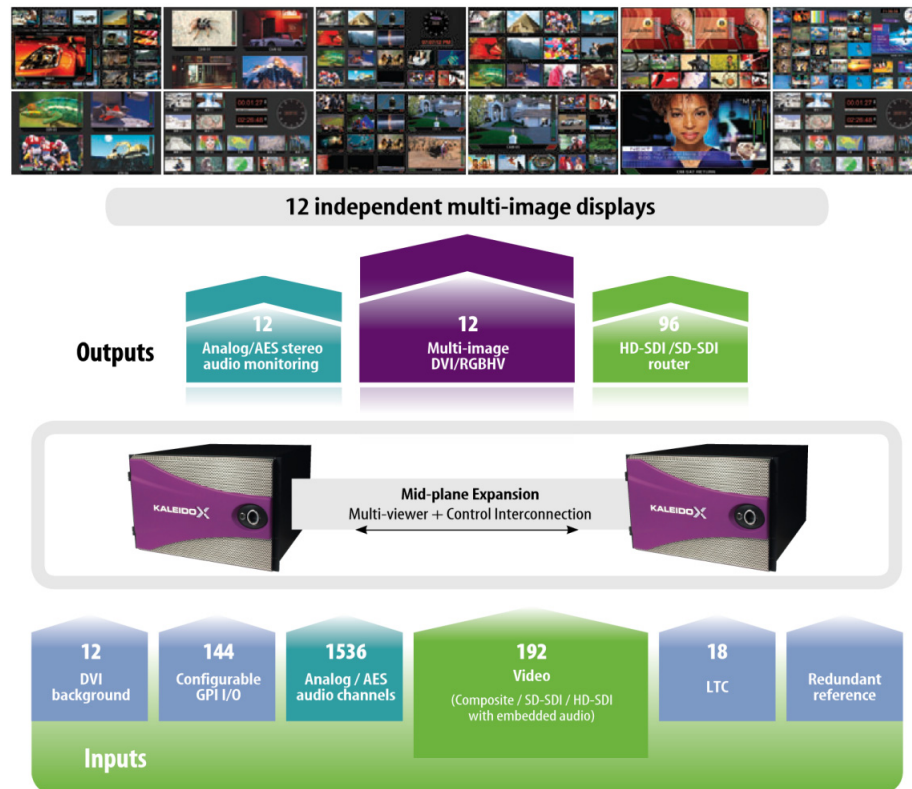
Kaleido-X (7RU) System Overview

## Kaleido-X (14RU) Expansion System Overview

It is possible to expand the input connectivity of one Kaleido-X (7RU) frame to include that of a second. The two frames, each with its own expansion (KXO-EXP) card, are connected by a high-bandwidth cable, such that all the output modules on each frame (up to 6 in total) have access to all inputs on each frame (up to 192 in total) without any blocking or bandwidth limitations.

Using Miranda's XEdit software, the two frames can be configured as a single system, allowing *rooms* to have a mixture of input modules from either frame. The expansion card interconnect allows seamless sharing of video, audio monitoring output, time code inputs, reference input, metadata information (CC, XDS, alarms, etc.), and audio level data. For more information, refer to the "Kaleido-X (7RU) Expansion" chapter in the *Kaleido-X (7RU)*

*Hardware Description & Installation Manual*, available on the DVD that shipped with your system.



*Kaleido-X (14RU) Expansion System Overview*

For more information about the Kaleido-X (7RU), refer to the Kaleido-X (7RU) Hardware Description & Installation Manual.

## Getting Organized

This section provides information about system requirements, and items shipped with your Kaleido-X (7RU).

## Required Materials

**Your Kaleido-X (7RU) system package includes the following:**

- A Kaleido-X (7RU) frame (enclosure) containing various input, output and option modules (cards)
- One keyboard
- One mouse

- Serial port adapters (one with straight cabling and one with crossover cabling for each output module in your multiviewer):

Part number	Adapter cabling	RS-422 pinout at the DE-9P connector
1737-3000-102	Straight	Controller (SMPTE master) mode
1792-3700-100	Crossover	Tributary (SMPTE slave) mode

- Two AC power cord per power supply
- The Kaleido-X (7RU) Quick Start Guide (this document)
- DVD including the Release Notes for the current version of the Kaleido-X software, the Kaleido-X User's Manual, database samples, Quick Start guides and hardware reference manuals for all multiviewer models

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**Note:** In line with our commitment to environmental preservation, only the Quick Start Guide for your multiviewer model, and some ancillary documents (e.g. welcome letters, warranty cards) are distributed in printed form. All manuals are available on the DVD that shipped with your multiviewer. See the "Documentation" section of the Release Notes for a complete list. You can obtain the latest version of the manuals, the Release Notes, as well as software and useful data, from the *Software and documentation* section of Miranda's support portal.

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**In addition to the above, you will need the following (not supplied):**

- Up to 12 displays
- A dedicated 100Base-T Ethernet switch with enough ports for the Kaleido-X, client PCs, Kaleido-RCP2, and Audio Bridge Terminals
- Client PC (see below for system requirements)
- Cables (to connect your multiviewer to video sources, to displays, and to the network):

Cable type	Purpose
CAT-5	For Ethernet connectivity
Display cables	Either extension modules—for example Miranda's DXF-200 (part number DXF-200-A)—or DVI cables
Video cables	Standard coaxial cables with BNC connectors

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**Note:** On all Miranda multiviewers, the network adapters are set to auto-negotiate. By default, the connection speed and duplex mode will be set automatically based on the corresponding port settings on the switch.

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## System Requirements for a Client PC

A client PC running Windows XP (or Windows 7) is required to access the XAdmin Web client, as well as to run the XEdit application.

Minimum configuration	1 GB of RAM Pentium 4 at 1 GHz
Recommended	At least 2 GB of RAM Core 2 Duo at 2 GHz, or better)
Hard disk	At least 125 MB free

## Step 1: Physical Setup

### Setting up the Kaleido-X (7RU) Hardware

To set up the Kaleido-X (7RU) hardware:

- 1 With the Kaleido-X (7RU) frame (enclosure) installed in its designated rack position, and before powering up the unit, verify that each card is securely seated in its slot.

#### IMPORTANT

There are two different models of 7RU frames, and two models of power supplies. If you have a frame model KXA-FR7-B (with the corresponding KXA-PSU-7-B power supply), you must ensure that a ground cable (not included) is connected between the frame and the rack before powering up the unit.



Connect a ground cable between this stud and the rack

The Kaleido-X has been configured to automatically detect the resolution of any connected display. If the required information is not available, then a fall-back resolution of 1280 × 1024 @ 60 Hz is used.

- 2 Connect outputs of the Kaleido-X to one or more displays that support this resolution, and connect one or more video sources to the frame (see [Cabling Diagram](#) on page 7). If you wish to use a different resolution, see [Changing the Output Resolution](#) below, for detailed instructions.
- 3 Make the network and other connections as shown in the cabling diagram (see [page 7](#)). Connect a client PC, the Kaleido-RCP2, one or more Audio Bridge Terminals, and every

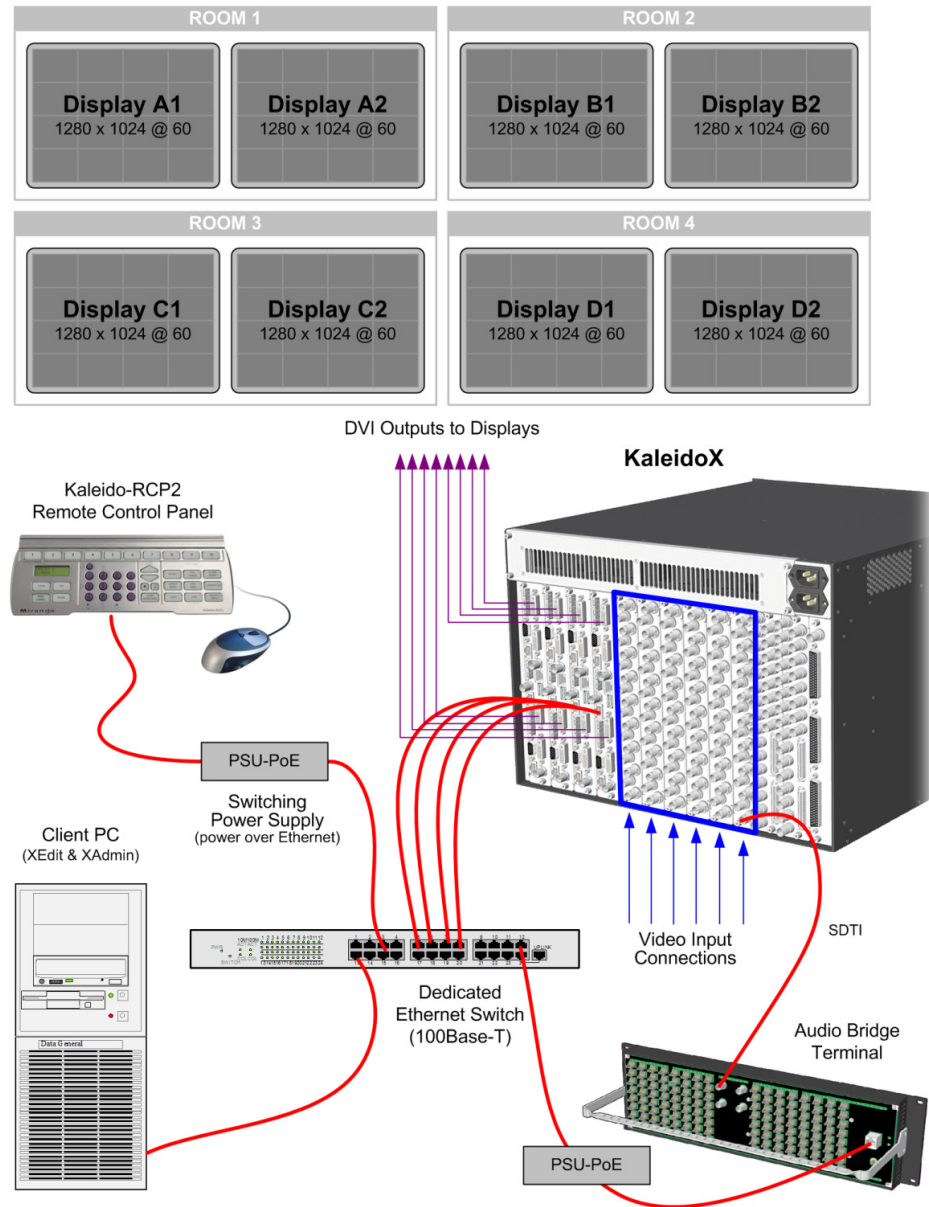
output module to a dedicated 100Base-T Ethernet switch. You can also connect a mouse and a keyboard to your Kaleido-RCP2.

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#### Notes

- The Kaleido-RCP2, and Audio Bridge Terminal (ABT) are optional devices, and may not have been shipped with your Kaleido-X (7RU) system. For information on these and other Kaleido-X options, please contact your Miranda sales representative.
  - You may need to upgrade your Audio Bridge Terminal and Kaleido-RCP2 devices (if available) to the latest firmware. The update files can be found on the DVD that shipped with your multiviewer, and on Miranda's support portal. Please refer to the *Kaleido-RCP2 Guide to Installation and Operation*, and to the *Audio Bridge Terminal Guide to Installation and Operation* (available on the DVD, and from the portal) for instructions on how to determine the firmware level, and how to perform the upgrade for these devices.
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## Cabling Diagram

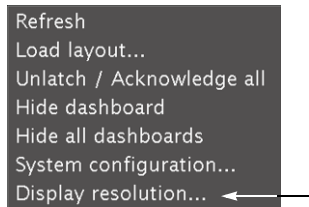


*Kaleido-X (7RU) cabling diagram*

## Changing the Output Resolution

To set a display's output resolution from the monitor wall:

- 1 Connect a mouse to an output card's USB connector.
- 2 Right-click anywhere on the monitor wall, point to **Monitor wall** (if you clicked a monitor), and then click **Display resolution**:



The **Display Resolution** window appears:



- If you would like the system to automatically select a resolution based on information from the connected display, select **Use detected monitor resolution**.
- If you would like to manually set (and fix) the resolution, select the desired resolution from the **Default DVI resolution** list:



3 Click **OK**.

The output resolution is adjusted accordingly.

## Powering Up the Kaleido-X (7RU)

### IMPORTANT

If you have a KXA-FR7-B frame, make sure a ground cable (not included) is connected between the frame and the rack before plugging any of the power cords into a power outlet (see [page 5](#)).

### To power up the Kaleido-X:

- Plug both power cords from the Kaleido-X into a grounded power outlet.

Note: The Kaleido-X (7RU) does not have power switches, and will start up as soon as it is plugged in.

The startup sequence takes approximately four minutes, during which time some video may appear on the displays. The startup is completed when the CPU LEDs of the output cards (second LED from the top) are solid green.

## Verifying that the Cards are Ready

To verify that the cards (modules) are ready:

- Check the status LEDs on each card installed in the Kaleido-X frame. Make sure that none are indicating an error condition (see table below).



Photograph of a Kaleido-X (7RU) frame showing LED indicators on modules.

CPU LED Color	Card Status	Action Required
Solid green	Ready	None
Red	Fault	Verify that the card is securely seated in the proper slot in the frame. If status remains unchanged, remove the card, reseat it and then reboot.
Flashing green	Rebooting	Wait for card to reboot before starting operations.

## Step 2: Networking Setup

For the Kaleido-X unit to join a TCP/IP network, it must be configured with an IP address, a network mask, a gateway, and a system name. In addition, a client PC must be configured to communicate with the Kaleido-X. You must also configure the Kaleido-RCP2 unit, and any Audio Bridge Terminal unit you may have ordered.

The Kaleido-X is shipped with the following default settings:

	Kaleido-X (7RU)	Kaleido-X (14RU)
Frame IP address	10.0.3.70	10.0.3.70
Network mask	255.255.0.0	255.255.0.0
Gateway	10.0.0.1	10.0.0.1

	Kaleido-X (7RU)	Kaleido-X (14RU)
Output A	10.0.3.66	10.0.3.66
Output B	10.0.3.67	10.0.3.67
Output C	10.0.3.68	10.0.3.68
Output D/EXP	10.0.3.69	—
Output A (frame B)	—	10.0.3.61
Output B (frame B)	—	10.0.3.62
Output C (frame B)	—	10.0.3.63

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**Note:** If the IP address of the Kaleido-X has been changed (i.e. it no longer corresponds to the as-shipped configuration), it is still possible to determine the IP address. To determine the IP address of your Kaleido-X, see [Finding the System IP Address, System Name, and Application Version](#) on page 10.

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## Changing the IP Address of a Kaleido-X from the Monitor Wall

The IP address, system name, and other parameters can be set via a control panel on the monitor wall.

### To change the IP address of the Kaleido-X from the monitor wall:

- 1 Connect a mouse to the USB connector of an output card.
- 2 Connect a USB keyboard to the USB connector of an output card.
- 3 Right-click anywhere on the monitor wall, point to **Monitor wall** (if you clicked a monitor), and then click **System configuration**.

The **System Configuration** window appears.

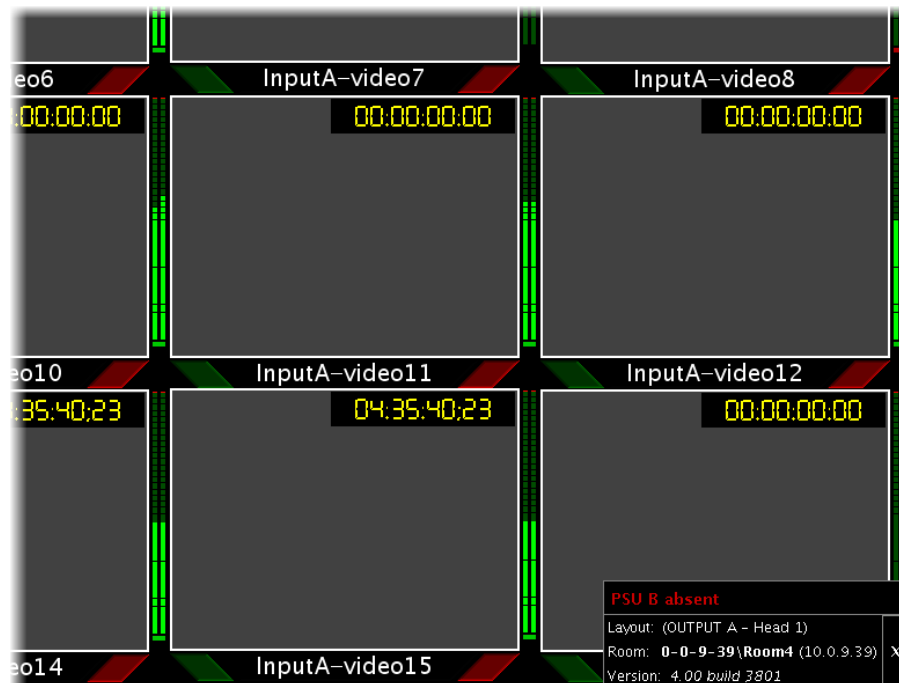
- 4 Click the **Ethernet** tab.
- 5 Type the required Frame IP address, network mask, and gateway address in the appropriate boxes.
- 6 Type the required addresses for all outputs.
- 7 Click **OK**.
- 8 When prompted to restart the system to apply your changes, click **Yes**.

The new configuration will become effective once the system restart has completed.

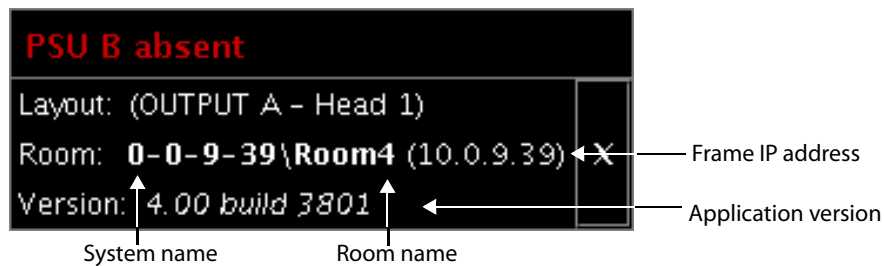
## Finding the System IP Address, System Name, and Application Version

### To find the system IP address, system name and application version:

- 1 Connect a mouse to the front USB connector of an output card.
- 2 Right-click anywhere on the monitor wall. On the shortcut menu, point to **Monitor wall** (if you clicked a monitor), and then click **Show dashboard** to display the dashboard associated with the current head. A small window appears, revealing the frame IP address and the system version. Take note of these values — they will be used later in the configuration process.



Display from card output (partial view) showing dashboard at the bottom right



Enlarged view of dashboard.

## Using the Kaleido-RCP2 with Default Settings

To start using the Kaleido-RCP2 with its default settings:

- 1 Physically connect the Kaleido-RCP2 unit to the network using an Ethernet cable. By default, the Kaleido-RCP2 is shipped with DHCP enabled, so it will automatically be assigned an IP address by a DHCP server. If no DHCP server can be found, the Kaleido-RCP2 will fall back to its default static IP address, subnet mask, and gateway settings:

Default IP address	10.0.3.191
Default subnet mask	255.255.0.0
Default gateway	0.0.0.0

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### Notes

- If you need to operate with a fixed IP address, you must use the Kaleido-RCP2's configuration menu to disable DHCP and set up the correct IP address, Network Mask, and Gateway (see the "Enabling or Disabling DHCP" and "Setting an IP Address, Subnet Mask and Gateway" sections in the "Peripheral Equipment" chapter of the Kaleido-X (7RU) Hardware Description & Installation Manual).
  - To access Kaleido-X rooms located in other subnets, the Kaleido-RCP2 must be configured with the appropriate unicast IP addresses (see the "Configuring Unicast IP Addresses" section in the "Peripheral Equipment" chapter of the Kaleido-X (7RU) Hardware Description & Installation Manual).
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- 2 On the Kaleido-RCP2 unit, press the ENTER button and hold it until the ESC button lights up.

The following message appears on the LCD display:

**Configuration**  
**ROOM SELECTION**

- 3 Press ENTER again to obtain the room list from the Kaleido-X systems that are currently available on the network.

The message **ROOM Select** followed by the name of the first room available appears on the LCD display.

- 4 Press the **2** key (to move up in the list) or the **8** key (to move down the list) until the name of the room you wish to access is displayed.

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**Note:** By default, the two head (DVI/VGA) outputs from each of the Output A, B, C and D cards are assigned to ROOM1, ROOM2, ROOM3 and ROOM4 respectively.

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- 5 When the desired room name is visible, press ENTER, and then press ESC to exit the configuration menu.

- 6 Press the LOGIN button.

The following message appears on the LCD display:

**LOGIN Position**  
**Admin**

- 7 Press ENTER to log on to your system as "Admin".

A message prompting you for a password appears on the LCD display.

- 8 Press ENTER again (by default, there is no password).

The message "Access granted" will appear on the LCD display if the login is successful. If a mouse is connected to the Kaleido-RCP2, then you should be able to see and move the mouse pointer on the monitor. Press any of the LAYOUT PRESETS buttons to load a predefined layout on the monitor wall.


wall.

If your system was configured prior to shipment, then a layout will appear on all displays. Otherwise, a gray screen will appear with the following message in the



middle:

“No layout has been assigned to this room. Please load a layout.”



No layout has been assigned to this room. Please load a layout.

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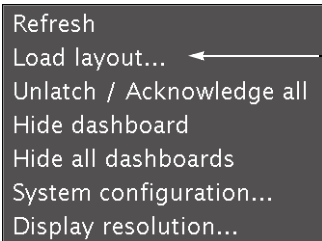
**Note:** To access other layouts, press the LOAD button. To assign a layout to a preset button, press and hold the button for more than six seconds while the desired layout is showing on the monitor wall.

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## Loading a Layout

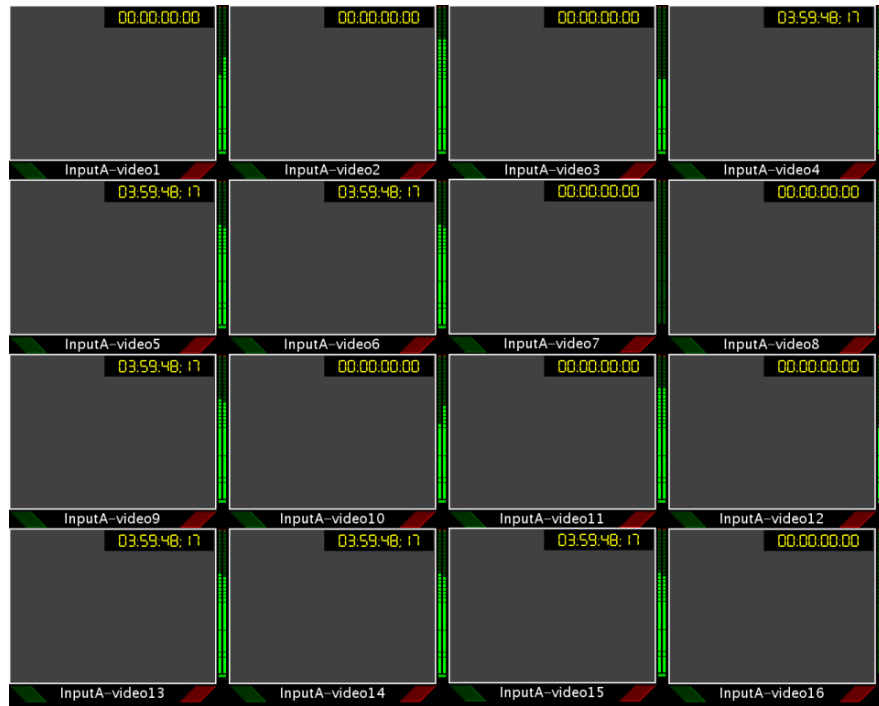
### To load a layout on the monitor wall:

- 1 Connect a mouse to the Kaleido-RCP2.
- 2 If you have not already done so, log on to the Kaleido-X from the Kaleido-RCP2. See [Using the Kaleido-RCP2 with Default Settings](#) on page 11.
- 3 Right-click anywhere on the monitor wall, point to **Monitor wall** (if you clicked a monitor), and then click **Load layout** on the shortcut menu.



### *Monitor wall shortcut menu*

A layout browser appears on the displays associated with the current room. By default, each room is associated with one output card. Each default layout is pre-configured to show 16 video streams for each input card.



*Example of a default layout showing 16 video streams*

- 4 Choose a layout from the layout window on the monitor wall.  
The video source should appear on the room displays.

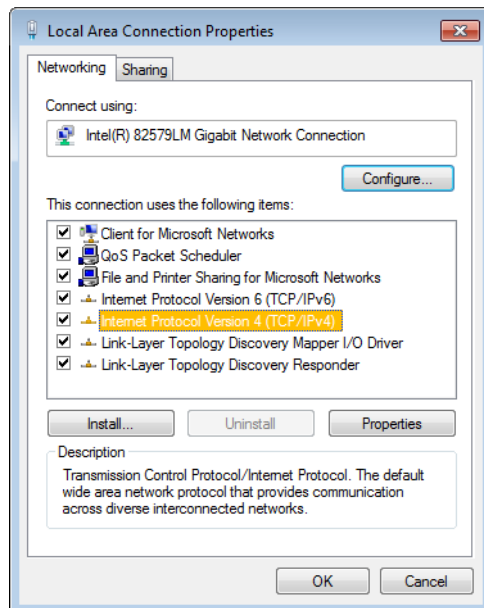
## Configuring a Client PC

The client PC that you will use to communicate with the Kaleido-X (via XAdmin and XEdit) and the Kaleido-X itself must have IP addresses within the same subnet. The following procedure applies to a typical Windows 7 system. For Windows XP, see [Changing an IP Address on Windows XP](#) on page 16.

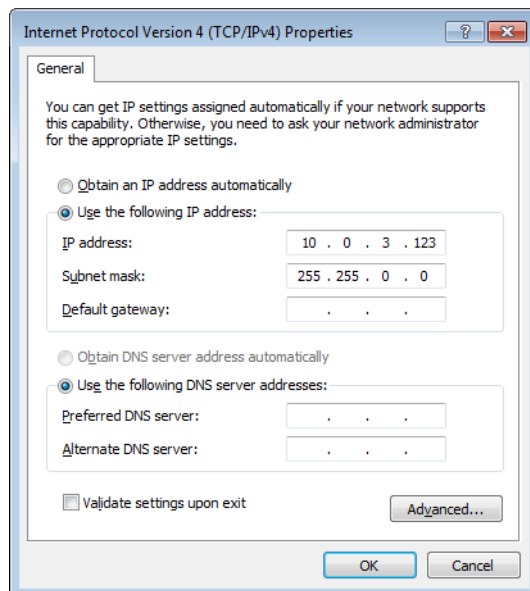
### Changing an IP Address on Windows 7

**To change the IP address of a client PC that has Windows 7:**

- 1 Click the **Start** button, and then click **Control Panel**. In the search box, type “adapter”, and then, under **Network and Sharing Center**, click **View network connections**.
- 2 In **Network Connections**, right-click **Local Area Connection**, and then click **Properties**. If the system prompts you for an administrator password or confirmation, type the password or provide confirmation.  
The **Local Area Connection Properties** window opens.



- 3 On the **Networking** tab, under **This connection uses the following items**, click **Internet Protocol Version 4 (TCP/IPv4)**, and then click **Properties**.  
The **Internet Protocol Version 4 (TCP/IPv4) Properties** window opens.
- 4 On the **General** tab, click **Use the following IP address**.
- 5 Type an IP address in the same range as the default IP address of the multiviewer. For example, if the IP address of the multiviewer is 10.0.3.70, then the IP address of your client PC could be 10.0.3.123. If you are unsure, contact your network administrator.
- 6 Type a subnet mask in the same range as that of the multiviewer.



- 7 Click **OK**.
- 8 In **Local Area Connection Properties**, click **Close**.

## Changing an IP Address on Windows XP

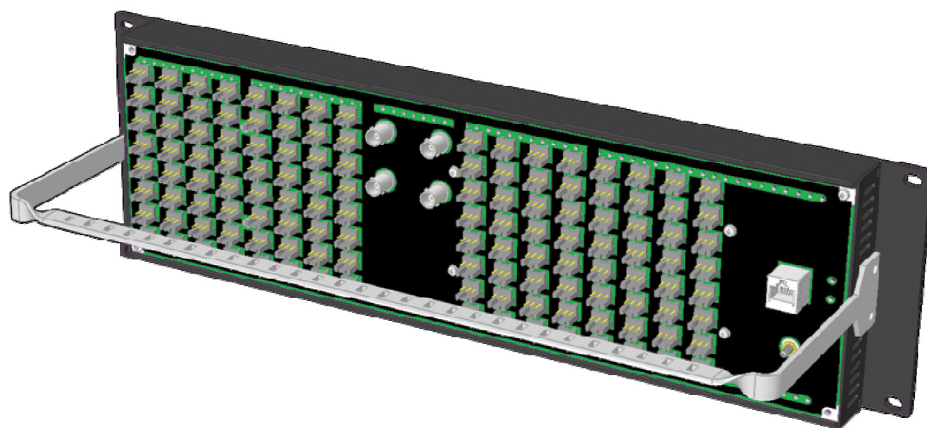
To change the IP address of a client PC that has Windows XP:

- 1 On the Windows XP **Start** menu, point to **Control Panel**, right-click **Network Connections**, and then click **Open** on the shortcut menu.
- 2 In **Network Connections**, right-click **Local Area Connection**, and then click **Properties** on the shortcut menu.
- 3 In **Local Area connection Properties**, select **Internet Protocol (TCP/IP)** from the list on the **General** tab, and then click **Properties**.  
The **Internet Protocol (TCP/IP) Properties** window opens.
- 4 On the **General** tab, click **Use the following IP address**.
- 5 Type an IP address in the same range as the default IP address of the Kaleido-X frame.  
For example, if the IP address of the Kaleido-X frame is 10.0.3.70, then the IP address of your client PC could be 10.0.3.123. If you are unsure, contact your network administrator.
- 6 Type a subnet mask in the same range as that of the Kaleido-X.
- 7 Click **OK**.
- 8 In **Local Area Connection Properties**, click **Close**.

## Configuring an Audio Bridge Terminal

The optional Audio Bridge Terminal (ABT) is an external audio multiplexer/serializer for the Kaleido-X. The Kaleido-X supports audio channel inputs from the ABT-64 or ABT-128 series of Audio Bridge Terminal panels through up to two SDTI inputs. The ABT-64 supports 64 channels and the ABT-128 supports 128 channels.

There is not enough space on the Kaleido-X rear panels to also include discrete audio connectors. An ABT provides connector space for multiple audio signal inputs, and multiplexes all the audio signals into combined serial feeds on coaxial cables that connect to the KXI cards.



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**Note:** The ABT is powered through the RJ-45 Ethernet connector. There is no power ON/OFF button, so the device is ON whenever a powered Ethernet cable (PoE) is connected.

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For more information about the ABT, refer to the Audio Bridge Terminal Guide to Installation and Operation, available on the DVD that shipped with your system.

**To configure the IP address and other network settings of the ABT**

- 1 Connect a PC to a switch.
- 2 Referring to [Configuring a Client PC](#) on page 14, configure the PC with the following network settings:

DHCP	OFF
Static IP address	10.0.0.1
Subnet mask	255.255.0.0
Default gateway	10.0.0.1

- 3 Apply power to the Audio Bridge Terminal and make sure it is connected to the same switch as the PC.
  - If the switch is Power over Ethernet (PoE) enabled, simply connect it to the unit using an Ethernet cable.
  - If not, PoE mid-span (*inserter*) equipment must be placed between the switch and the Audio Bridge Terminal.
- 4 Press the RESET button (located on the right-hand side of the ABT rear panel beside the ETHERNET/POWER RJ-45 connector) for at least 1 second.

The Audio Bridge Terminal will reboot with the following static network configuration:

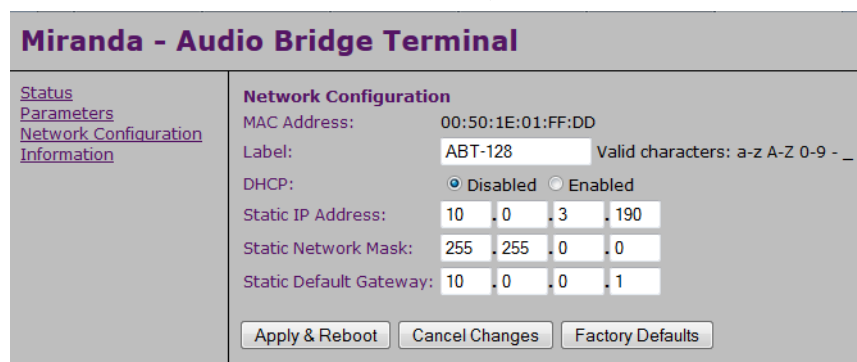
DHCP	OFF
Static IP address	10.0.3.190
Subnet mask	255.255.0.0
Default gateway	10.0.0.1

- 5 Using a Web browser on the PC, connect to the ABT using the following address: 10.0.3.190.

The home page of the ABT’s built-in Web server is displayed.

- 6 Click **Network Configuration** (in the navigation pane).

The Network Configuration page is displayed.



- 7 Change the ABT's network settings, as necessary, and then click **Apply & Reboot**.

---

Note: If you purchased more than one Audio Bridge Terminal unit, keep in mind that they all ship with the same default static IP address. Make sure to assign each of them a different static IP address before connecting them to the network, if DHCP is not used.

---

## Step 3: XEdit Installation

XEdit is a client application used to create layouts for the monitor wall, and to configure your multiviewer system, from your PC or laptop. When the computer with XEdit is connected to the Kaleido-X through a TCP/IP network, you can use XEdit to modify layouts and settings directly on the Kaleido-X, or you can work locally on the computer and then export your changes to the Kaleido-X.

### To install XEdit from your multiviewer's home page

- 1 From a workstation on the same subnet as the multiviewer, open a Web browser window and type the multiviewer's IP address in the address bar.

The Kaleido-X home page appears.



- 2 Click the **XEdit** button.

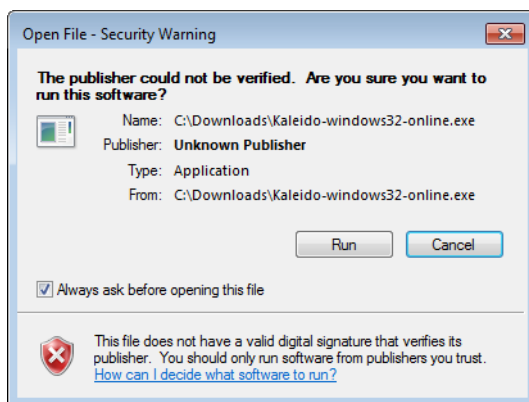
The browser prompts you to save an executable file to your hard drive (Kaleido-windows32-online.exe<sup>1</sup>). This file is an online installer, which will download XEdit and other companion elements from your multiviewer, and install them. Some browsers may allow you to run the file directly. Depending on your browser's security features, warnings may appear, which you may safely dismiss.

- 3 Unless your browser let you run the file (and you chose to do so), navigate to the location where you saved the installer file and open it.

A security warning appears.

---


1. Installers for Linux or Mac OS X are not yet available.

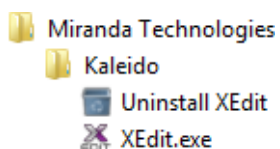


4 Click **Run**.

A window appears, showing the download and installation progress.



At the end of the installation process, launcher icons (  ) are added to your desktop and to the Start menu (under **All Programs**).



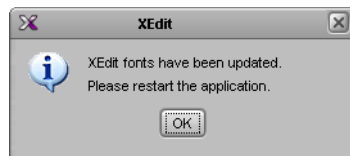
Once the installation has completed, the XEdit startup screen appears.



Depending on your Windows Firewall settings, a security alert may appear.

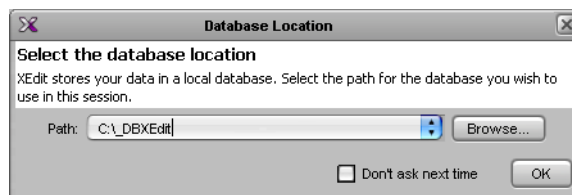
- Click **Allow access** to unblock the application.

If XEdit cannot find all of the fonts it needs already on your PC or laptop, it downloads them from the multiviewer automatically, in which case a message will appear to confirm the font update, and instruct you to restart the application.



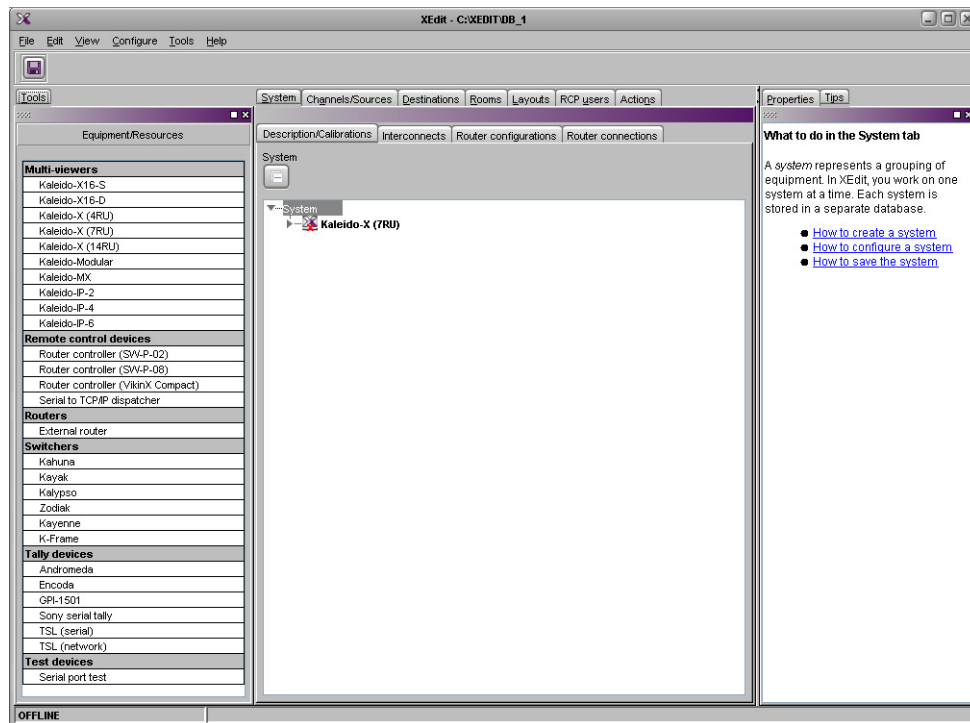
- Click **OK** to continue, and then open XEdit again, by using the launcher icon on your desktop (or on the Start menu).


- 5 When prompted to specify a database, choose one from the **Path** list, or click **Browse** to navigate to the database you wish to use as your local workspace, and then click **OK**.



- 6 Once the database has completed loading, XEdit's main application window appears.





**Note:** Once it has been installed from the multiviewer, XEdit remains on your PC or laptop, and can be launched from the  icon that was added to your desktop (see [page 19](#)). Whenever you install a new version of the Kaleido-X software on the multiviewer, the next time you open XEdit, your installed copy of the application will be automatically updated from the multiviewer.

For more information about calibrating your system, configuring rooms, creating layouts, and operating the monitor wall, refer to the *Kaleido-X User's Manual*, available on the DVD that shipped with your system, and from Miranda's support portal.

## Step 4: System Verification

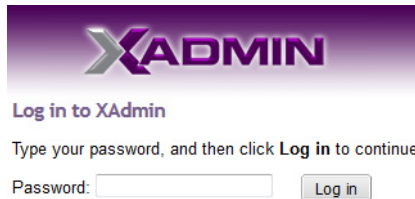
### Verifying the Kaleido-X Multiviewer

To verify the status of your Kaleido-X multiviewer:

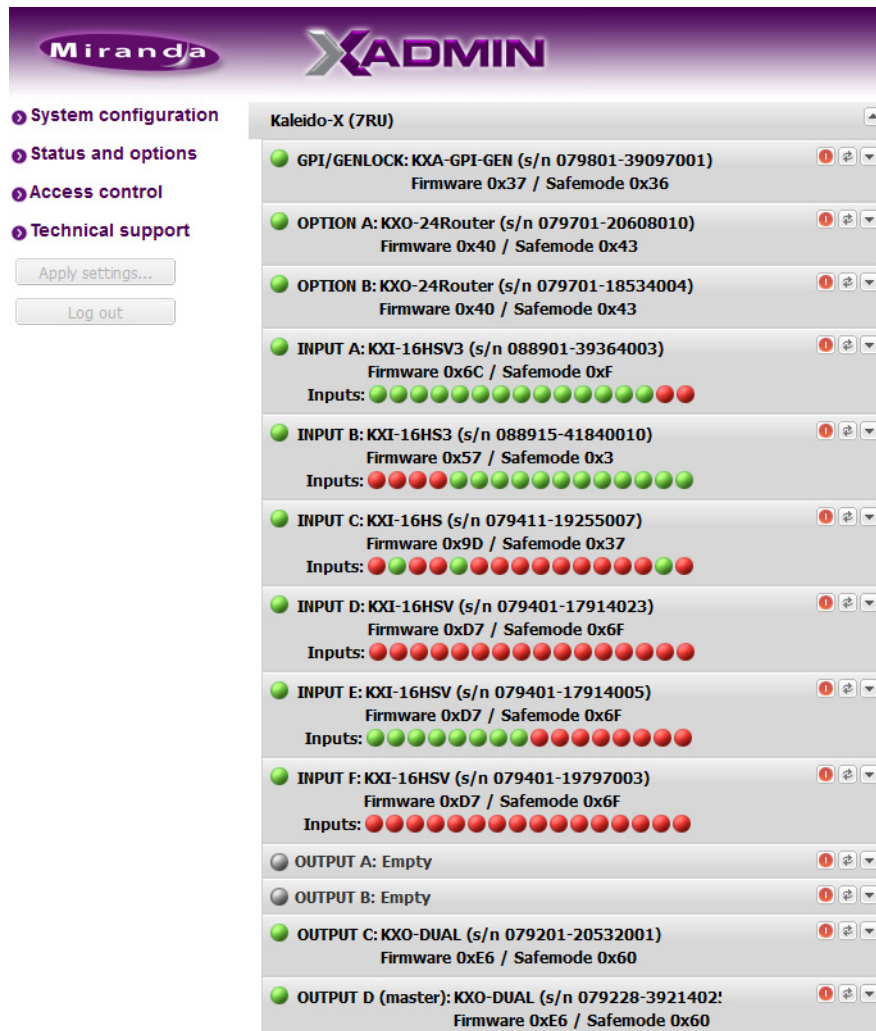
- 1 Open a Web browser window and enter the multiviewer's IP address in the address bar. The Kaleido-X home page appears.



- 2 Click the XAdmin button.
- 3 If you see a security warning, or a certificate error message, then refer to *Registering your Multiviewer's Security Credentials with your Browser*, in the Kaleido-X User's Manual.
- 4 If the "Log in to XAdmin" page appears, type the password, and then click **Log in**.



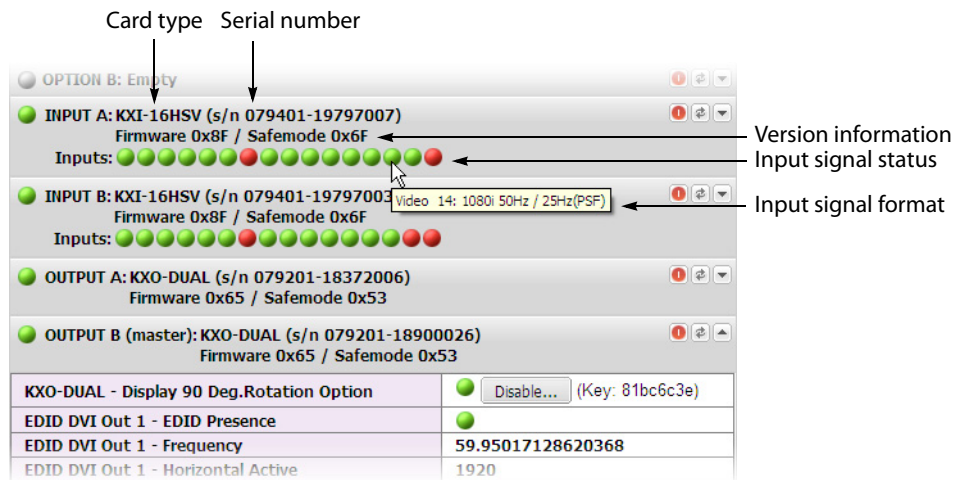
- 5 **Internet Explorer users:** If a blank page appears, then refer to *Enabling the Compatibility View in Internet Explorer 10*, in the Kaleido-X User's Manual. The XAdmin Status and Options page appears, displaying a list of all cards and their statuses.



Cards are presented in the order they appear, from left to right when looking at the front of the chassis. The card heading shows the card type, serial number, firmware and safemode versions, and a summary view of the input signals for each input card.

- 6 Move the pointer to an input signal status icon to view the associated signal format.

Setting Up Your Multi-Viewer  
 Verifying the Kaleido-X Multiviewer



7 Click the arrow button (▾) at the end of each card’s heading row to view detailed information for this card.



**Note:** At any time you can click the **Refresh** button to make sure the data displayed for the selected card is up to date. Click the **Reset card** button at the end of a card’s heading row to reset the card remotely, directly from your Web browser.

8 Review the enabled card options, and make sure that no card status error is reported.



Setting Up Your Multi-Viewer  
 Verifying the Kaleido-X Multiviewer

GPI/GENLOCK: KXA-GPI-GEN (s/n 079899-17912009) Firmware 0x35 / Safemode 0x36	
KXA-GPI-GEN - 1.2V Status	
KXA-GPI-GEN - 1.8V Status	
KXA-GPI-GEN - 2.5V Status	
KXA-GPI-GEN - 3.3V Status	
KXA-GPI-GEN - 48V Power Supply A Fuse Status	
KXA-GPI-GEN - 48V Power Supply B Fuse Status	
KXA-GPI-GEN - Board High Temperature	
KXA-GPI-GEN - Board Temperature (°C)	41.0
KXA-GPI-GEN - CPLD Version	0x1
KXA-GPI-GEN - Card Model	48.0
KXA-GPI-GEN - Card Patch Number	0x0
KXA-GPI-GEN - Card Revision	0x2
KXA-GPI-GEN - Card Type	0x30
KXA-GPI-GEN - Chassis Door Open Status	
KXA-GPI-GEN - Chassis Identifier	307.0
KXA-GPI-GEN - FPGA Version	0x15
KXA-GPI-GEN - Firmware Package Number	0x35
KXA-GPI-GEN - Firmware Type	0x2
KXA-GPI-GEN - Firmware Version	0x21
KXA-GPI-GEN - Frame Rate	60Hz
KXA-GPI-GEN - Normal Mode	
KXA-GPI-GEN - Power Supply A Status	
KXA-GPI-GEN - Power Supply B Status	
KXA-GPI-GEN - Rear Fan 1 Status	
KXA-GPI-GEN - Rear Fan 2 Status	
KXA-GPI-GEN - Rear Fan 3 Status	
KXA-GPI-GEN - Rear Fan 4 Status	

The other statuses should all be normal, although if you left the door open when checking the card LEDs, you may see a warning under **Chassis Door Open Status**.

- \_\_\_\_\_ KXA-GPI-GEN - 1.2V Status
- \_\_\_\_\_ KXA-GPI-GEN - 1.8V Status
- \_\_\_\_\_ KXA-GPI-GEN - 2.5V Status
- \_\_\_\_\_ KXA-GPI-GEN - 3.3V Status
- \_\_\_\_\_ KXA-GPI-GEN - 48V Power Supply A Fuse Status
- \_\_\_\_\_ KXA-GPI-GEN - 48V Power Supply B Fuse Status
- \_\_\_\_\_ KXA-GPI-GEN - Board High Temperature
- \_\_\_\_\_ KXA-GPI-GEN - Chassis Door Open Status
- \_\_\_\_\_ KXA-GPI-GEN - Power Supply A Status
- \_\_\_\_\_ KXA-GPI-GEN - Power Supply B Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 1 Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 2 Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 3 Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 4 Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 5 Status
- \_\_\_\_\_ KXA-GPI-GEN - Rear Fan 6 Status

## Verifying the Kaleido-RCP2

To verify that the Kaleido-RCP2 is functioning normally:

- Log on to the Kaleido-RCP2 (see [Using the Kaleido-RCP2 with Default Settings](#) on page 11), and then test various operations using the Kaleido-RCP2 keyboard and the mouse (e.g. load a predefined layout).

## Verifying the Audio Bridge Terminal

To verify that the ABT is functioning normally:

- Inspect the ACTIVITY and front panel LEDs on the unit to make sure there are no error conditions:

The ACTIVITY indicator is located on the right-hand side of the rear panel. This LED reports the status of the Ethernet connection as indicated in the table below.

Two LEDs are visible on the front panel, one for each power supply. When lit, they both indicate the same status.

When the ABT is powered up, all three LEDs will be orange until the boot sequence is terminated. This is a visual indicator that the LEDs are functioning properly.

ACTIVITY Indicator on Rear Panel		Power-Supply LEDs on Front Panel	
Color	Status	Color	Status
Off	No link detected	Green	Normal
Green	Normal (good link)	Flashing green	Normal, rebooting
Orange	Activity	Orange	Warning
Red	Hardware fault	Flashing orange	Warning, rebooting
Flashing red	Upgrading firmware	Red	Hardware fault
		Flashing red	Upgrading firmware

## RS-422 Connection Diagram

Each output card supports one RS-422 port over an RJ-45 connector. This port allows the Kaleido-X to connect to external serial devices such as a router, production switcher, or router controller.

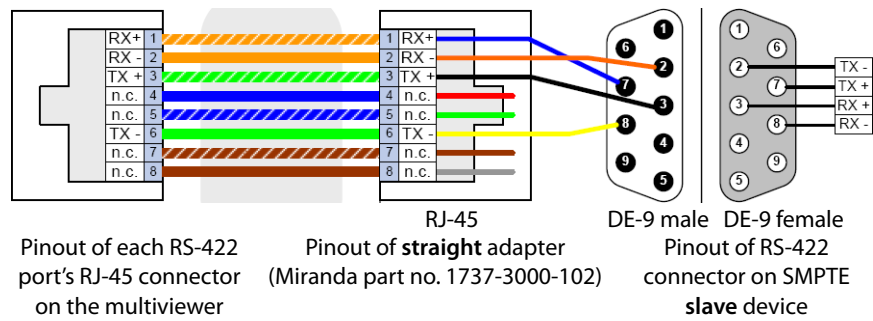
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**Note:** The Kaleido-X RS-422 ports each have an RJ-45 connector in order to preserve space on a busy panel. The RS-422 interface specifies a DE-9 connector, so if you are using this interface, you will require a DE-9-to-RJ-45 adapter. Miranda supplies two adapter models, correctly wired for this application: a straight adapter (part no. 1737-3000-102), and a crossover adapter (part no. 1792-3700-100).

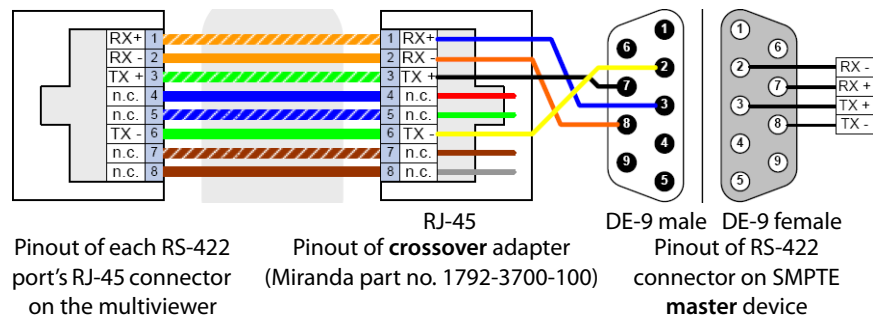
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The pinout for the RS-422 signals on the Kaleido-X16's RJ-45 connectors, and the wiring diagrams for the appropriate adapters, are shown here:

Setting Up Your Multi-Viewer  
RS-422 Connection Diagram



*Standard wiring between multiviewer and devices wired to SMPTE "slave" specification (e.g. most routers, Ross Synergy switchers, Neveon ETH-CON)*



*Standard wiring between multiviewer and devices wired to SMPTE "master" specification (e.g. Philips Jupiter router control system, Miranda Presmaster PCS)*

**Note:** The two RS-422 ports on the multiviewer side have no ground pin. Using the appropriate DE-9S-to-RJ-45 adapter, an external device should be able to communicate with a multiviewer despite the lack of a ground.

For more information about the RS-422 specifications, see the "RS-422" section in the *Specifications* chapter of the Kaleido-X (7RU) Hardware Description & Installation Manual. For more information about the RS-422 serial connections, see the "Serial Connections" section in the *Routers* chapter of the Kaleido-X User's Manual.





## Miranda Technical Support

For technical assistance, please contact the Miranda Technical Support center nearest you:

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Fax: +1 514 335 1614  
E-mail: support@miranda.com

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