Kaleido-X (4RU)

Unmatched picture quality and layout flexibility

Quick Start Guide

M809-9905-110

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Miranda

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Title	Kaleido-X (4RU) Quick Start Guide
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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 (2nd Edition)
- IEC 60950-1:2005 (2nd Edition)

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 (4RU) 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.

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 (4RU)
Setting Up Your Multiviewer

Welcome to the Kaleido family of multiviewers! This Quick Start Guide is designed to help you get your Kaleido-X (4RU) multiviewer up and running for the first time. The following sections will guide you through the installation of a Kaleido-X (4RU) system in its default configuration.

Summary

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 (4RU)** can display 32 3Gbps, HD, SD or analog inputs any number of times, in any size, across four displays of any resolution and orientation.

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 signals from a specific input module (card). 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.
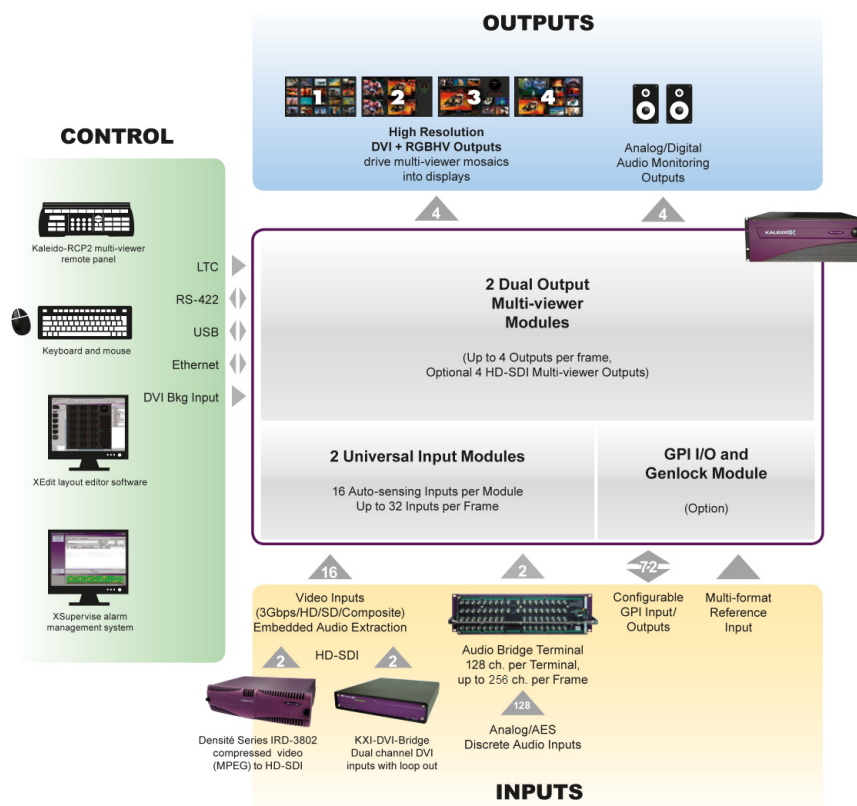
Kaleido-X (4RU) system overview

Kaleido-X (4RU) Frame

The Kaleido-X (4RU) frame is 4 RU high. It comprises an internal midplane for interconnecting the cards. Cards are installed from the front of the frame. Each card is associated with input and/or output connectors which are mounted on a connector panel. These connector panels are installed from the rear of the frame, in the same horizontal position as their associated card. The redundant power supplies are located in the lower right-hand corner of the frame. The hinged front door gives access to the cards.

The Kaleido-X (4RU) frame comprises the following key elements:

- A rack-mountable mechanical framework
- A side-opening, removable door to cover and protect the front of the frame and the installed cards
- A midplane board that enables inter-card communication
- Slots for installing signal processing cards that plug into the midplane
- Mounting points for rear connector panels
- Redundant power supplies
- Ventilation

The front slots and rear panel connection points are color-coded according to the type of card that can be located in the slot. The extractor handles on the cards are color-coded to

match. The cards are physically configured so they cannot be installed in the wrong type of slot.

Location and available slots

Slots	Function	Color Code	Card Types
1	Main	Grey	KXA-GPI-GEN
2 3	Output A Output B	Yellow	KXO-DUAL3 KXO-DUAL
4 5	Input A Input B	Green	KXI-16HSV KXI-16HS KXI-16SV
6 7	Option A Option B	Mauve	*(future use)*

Kaleido-X (4RU) System Block Diagram
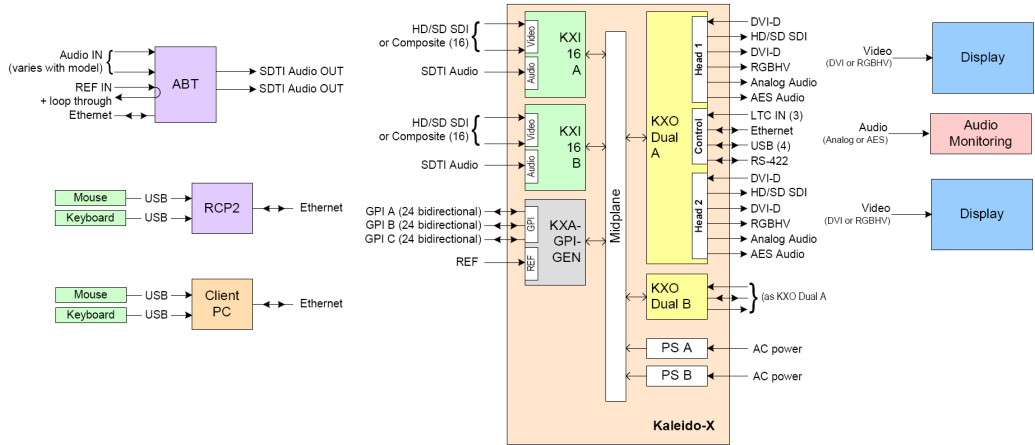
Kaleido-X (4RU) System Block Diagram

For more information about the Kaleido-X (4RU) hardware, refer to the Kaleido-X (4RU) Hardware Description & Installation Manual.

Getting Organized

This section provides information about system requirements, and items shipped with your Kaleido-X (4RU).

Required Materials

Your Kaleido-X (4RU) system package includes the following:

• A Kaleido-X (4RU) 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 — see RS-422 Connection Diagram, on page 24) 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 (4RU) 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

> 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.

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

• Up to 4 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

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.

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 (4RU) Hardware

To set up the Kaleido-X (4RU) hardware

1 With the Kaleido-X (4RU) frame (enclosure) installed in its designated rack position, and before powering up the unit, verify that each card is securely seated in its slot.

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 6). 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. 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.

Notes

* The Kaleido-RCP2, and Audio Bridge Terminal (ABT) are optional devices, and may not have been shipped with your Kaleido-X (4RU) 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.
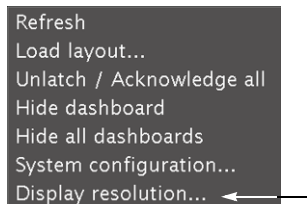
Cabling Diagram
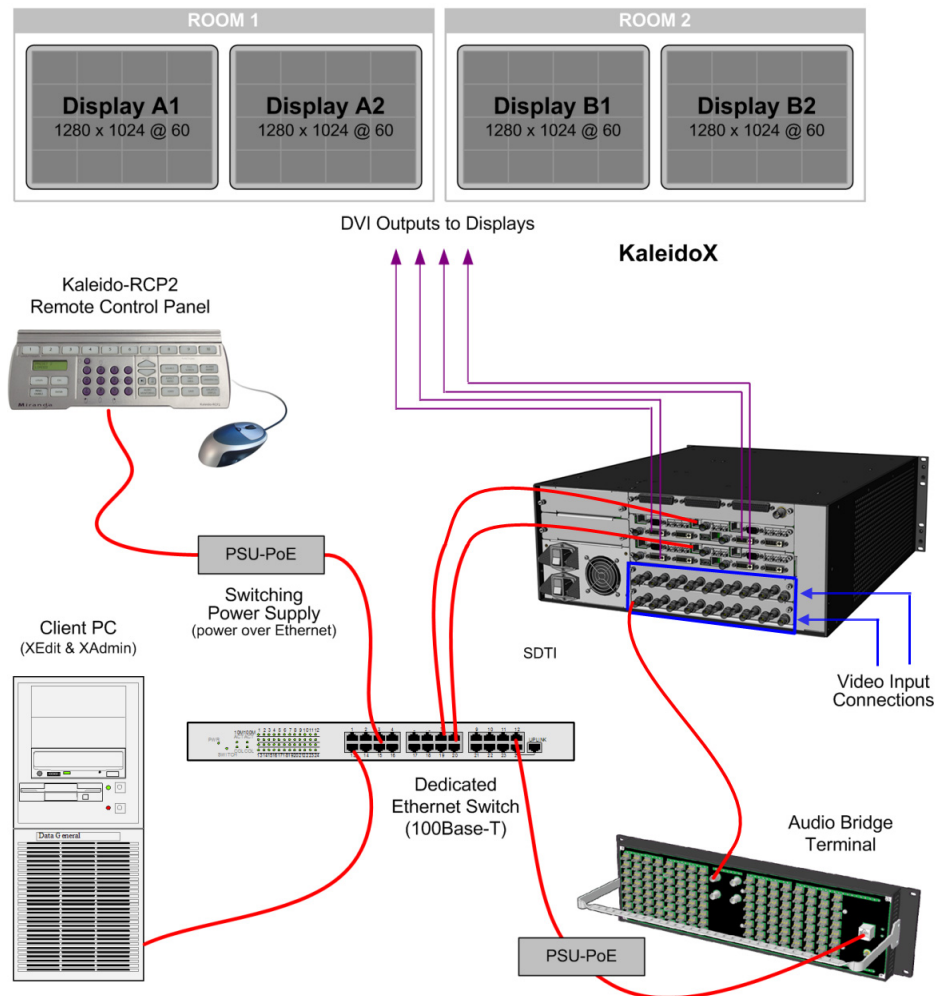
Kaleido-X (4RU) cabling diagram

Changing the Output Resolution

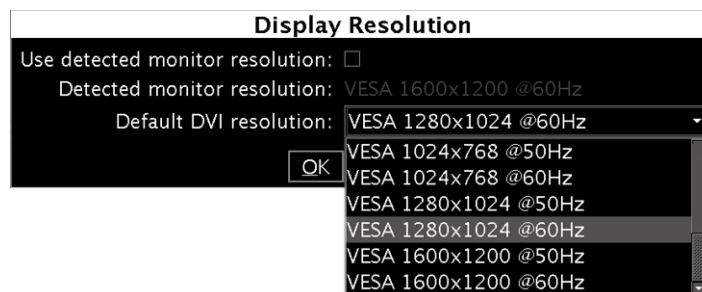**To set a display's output resolution from the monitor wall**

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**:

```
Refresh
Load layout...
Unlatch / Acknowledge all
Hide dashboard
Hide all dashboards
System configuration...
Display resolution...
```

The **Display Resolution** window appears:

Display Resolution
Use detected monitor resolution: ☐
Detected monitor resolution: VESA 1600x1200 @60Hz
Default DVI resolution: VESA 1280x1024 @60Hz
OK Cancel

- 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:

Display Resolution
Use detected monitor resolution: ☐
Detected monitor resolution: VESA 1600x1200 @60Hz
Default DVI resolution: VESA 1280x1024 @60Hz
OK
VESA 1024x768 @50Hz
VESA 1024x768 @60Hz
VESA 1280x1024 @50Hz
VESA 1280x1024 @60Hz
VESA 1600x1200 @50Hz
VESA 1600x1200 @60Hz

3 Click **OK**.

The output resolution is adjusted accordingly.

Powering Up the Kaleido-X (4RU)

To power up the Kaleido-X

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

2 Press the power switches at the back of each power supply module to the *On* position.

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).

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:

Frame IP address	10.0.3.70
Network mask	255.255.0.0
Gateway	10.0.0.1
Output A	10.0.3.69
Output B	10.0.3.68

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 9.

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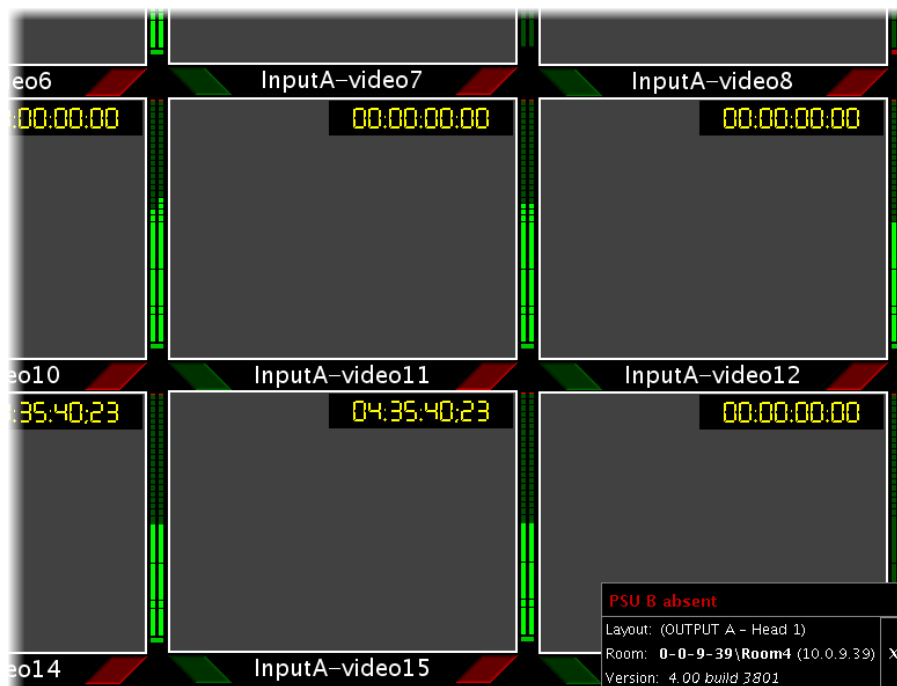
Display from card output (partial view) showing dashboard at the bottom right
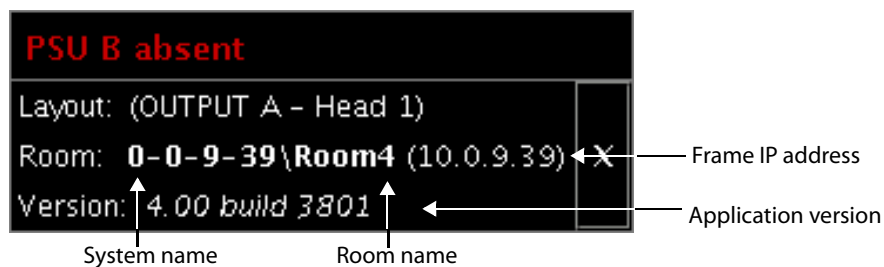
Enlarged view of dashboard.

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

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 (4RU) Hardware Description & Installation Manual).

- To access 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 (4RU) Hardware Description & Installation Manual).

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 multiviewers 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.

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

5 When the desired room name is visible, press ENTER, and then press ESC to exit the configuration menu.
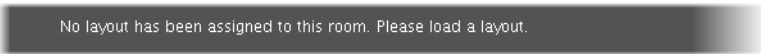
6 Press the LOGIN button.

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."

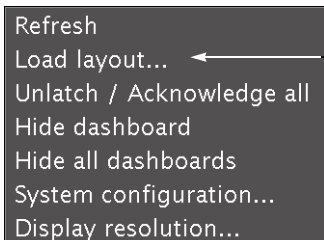No layout has been assigned to this room. Please load a layout.

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.

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

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.

Refresh
Load layout...
Unlatch / Acknowledge all
Hide dashboard
Hide all dashboards
System configuration...
Display resolution...

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.
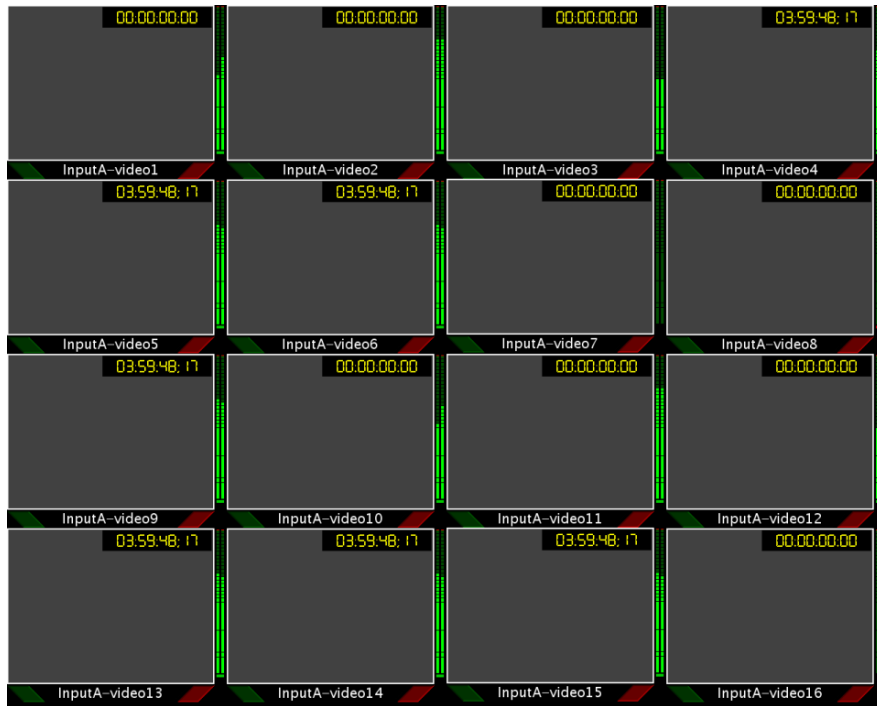
Example of a default layout showing 16 video streams

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 14.

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.
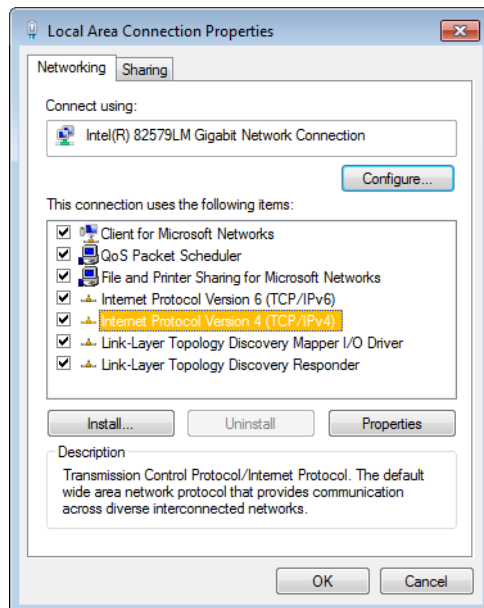
3 On the **Networking** tab, under **This connection uses the following items**, click **Internet Protocol Version 4 (TCP/IPv4)**, and then click **Properties**.

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.
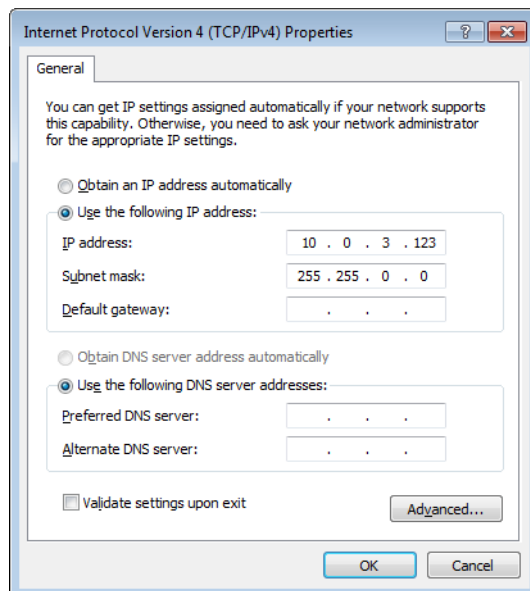
7 Click **OK**.

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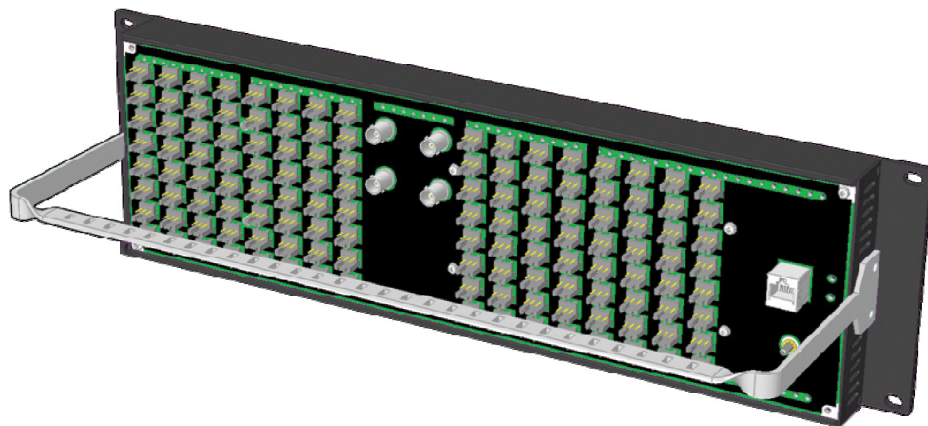
Note: The ABT is powered through the RJ-45 Ethernet connector. There is no power ON/OFF button, so the device is ON whenever a powered Ethernet cable (PoE) is connected.

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 12, 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.

Miranda - Audio Bridge Terminal

Status
Parameters
Network Configuration
Information

Network Configuration
MAC Address: 00:50:1E:01:FF:DD
Label: ABT-128   Valid characters: a-z A-Z 0-9 - _ *
DHCP: ⦿ Disabled ◯ Enabled
Static IP Address: 10 . 0 . 3 . 190
Static Network Mask: 255 . 255 . 0 . 0
Static Default Gateway: 10 . 0 . 0 . 1

[Apply & Reboot] [Cancel Changes] [Factory Defaults]
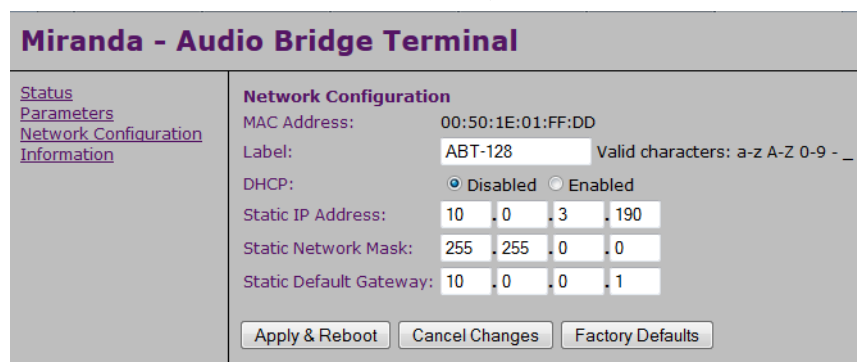
7 Change the ABT's network settings, as necessary, and then click **Apply & Reboot**.

> 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`[1]). 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 were you saved the installer file and open it.

A security warning appears.

1.Installers for Linux or Mac OS X are not yet available.
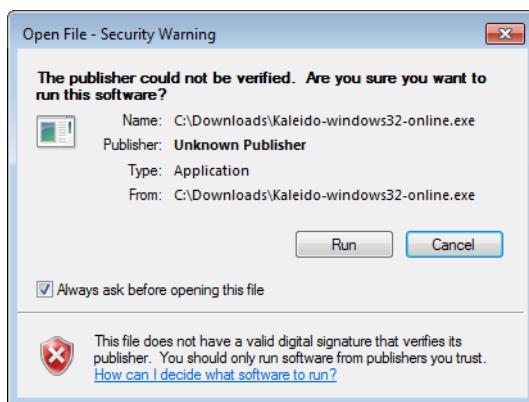
4 Click **Run.**

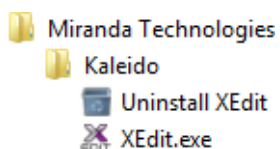A window appears, showing the download and installation progress.

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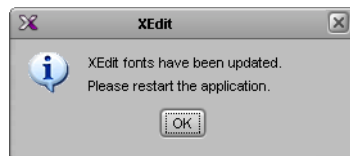
- Click **OK** to continue, and then open XEdit again, by using the launcher icon on your desktop (or on the Start menu).

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**.
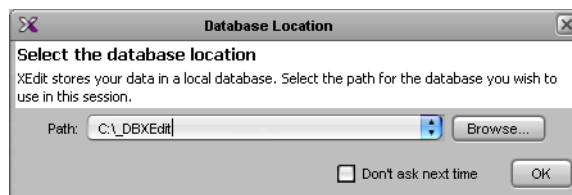
6 Once the database has completed loading, XEdit's main application window appears.
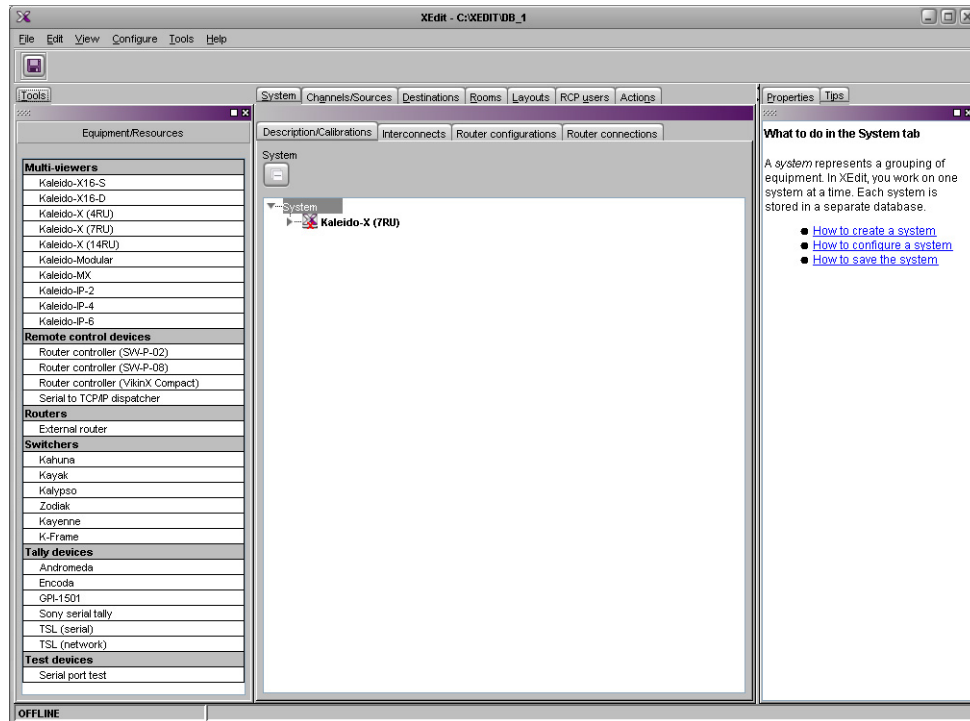
Note: Once it has been installed from the multiviewer, XEdit remains on your PC or laptop, and can be launched from the ⬛ icon that was added to your desktop (see page 17). Whenever you install a new version of the Kaleido-X software on the multiviewer, the next time you open XEdit, your installed copy 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 Configure your client PC with an IP address in the same range as the IP address of the multiviewer, if needed (see Configuring a Client PC, on page 12).

2 Open a Web browser window and enter the multiviewer's IP address in the address bar.

The Kaleido-X home page appears.

3 Click the XAdmin button.

4 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.

5 If the "Log in to XAdmin" page appears, type the password, and then click **Log in**.
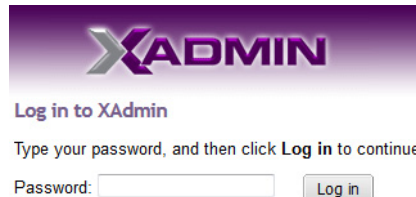
6 **Internet Explorer users:** If a blank page appears, then refer to *Enabling the Compatibility View in Internet Explorer 10,* in the Kaleido-X User's Manual.

The XAdmin Status and Options page appears, displaying a list of all cards and their statuses.

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.

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

Card type   Serial number

OPTION B: Empty

INPUT A: **KXI-16HSV** (s/n 079401-19797007)
Firmware 0x8F / Safemode 0x6F → Version information
Inputs: ← Input signal status
Video 14: 1080i 50Hz / 25Hz(PSF)

INPUT B: **KXI-16HSV** (s/n 079401-1979700? → Input signal format
Firmware 0x8F / Safemode 0x6F
Inputs:

OUTPUT A: **KXO-DUAL** (s/n 079201-18372006)
Firmware 0x65 / Safemode 0x53

OUTPUT B (master): **KXO-DUAL** (s/n 079201-18900026)
Firmware 0x65 / Safemode 0x53

KXO-DUAL - Display 90 Deg.Rotation Option	Disable... (Key: 81bc6c3e)
EDID DVI Out 1 - EDID Presence	
EDID DVI Out 1 - Frequency	59.95017128620368
EDID DVI Out 1 - Horizontal Active	1920

8 Click the arrow button (⬇) at the end of each card's heading row to view detailed information for this card.

OPTION B: Empty

INPUT A: **KXI-16HSV** (s/n 079401-17914037) ← Expand details
Firmware 0x8C / Safemode 0x6F ⎯ Refresh
Inputs: ⎯ Reset card

INPUT B: Empty

OUTPUT A (master): **KXO-DUAL** (s/n 079201-19722004)
Firmware 0x65 / Safemode 0x53

OUTPUT B: Empty

> 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.

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

OPTION B: Empty	
INPUT A: KXI-16HSV (s/n 079401-19797007) Firmware 0x8F / Safemode 0x6F Inputs:	
KXI-16 - CC/XDS Option	Disable... (Key: c88820a6)
KXI-16 - Dolby E Option	Enable...
KXI-16 - Embedded Audio Option	Disable... (Key: a8459e2f)
KXI-16 - Loudness Option	Enable...
ABT IP address	10.6.5.251
KXI-16 - 48va Status	
KXI-16 - 48vb Status	
KXI-16 - Audio Box Data Error	
KXI-16 - Audio Box Detected	
KXI-16 - CPLD Version	0x2
KXI-16 - Card Model	16.0
KXI-16 - Card Patch Number	0x8
KXI-16 - Strap value	8.0
KXI-16 - Temperature Control (°C)	33.0
KXI-16 - Temperature DC/DC converter (°C)	49.0
KXI-16 - Temperature FX/SX 1 (°C)	48.0
KXI-16 - Temperature FX/SX 2 (°C)	48.0
KXI-16 - Temperature Sensor 1 (°C)	29.0
KXI-16 - Temperature Sensor 2 (°C)	48.0
KXI-16 - Temperature Serdes 1 (°C)	34.0
KXI-16 - Temperature Serdes 2 (°C)	45.0
KXI-16 - Voltage Supply 1.2	
KXI-16 - Voltage Supply 1.8	
KXI-16 - Voltage Supply 2.5	
KXI-16 - Voltage Supply 3.3	
Video 01	720p 59.94Hz (EAV/SAV OK)
Video 02	720p 59.94Hz (EAV/SAV OK)
Video 12	NTSC M (EAV/SAV OK)
Video 13	PAL M (EAV/SAV OK)
Video 14	1080i 50Hz / 25Hz(PSF) (EAV/SAV OK)
Video 15	NTSC M (EAV/SAV OK)
Video 16	
INPUT B: KXI-16HSV (s/n 079401-19797003) Firmware 0x8F / Safemode 0x6F Inputs:	
OUTPUT A: KXO-DUAL (s/n 079201-18372006) Firmware 0x65 / Safemode 0x53	

Note: See *Managing Hardware and Software Options,* in the Kaleido-X User's Manual, for more information on the available options.

10 If your system includes a GPI/genlock card (KXA-GPI-GEN, optional), you can check the main system statuses of the Kaleido-X frame, to make sure that there are no errors or alerts related to system temperature, fan operation, or card fault conditions.

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 10), 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.

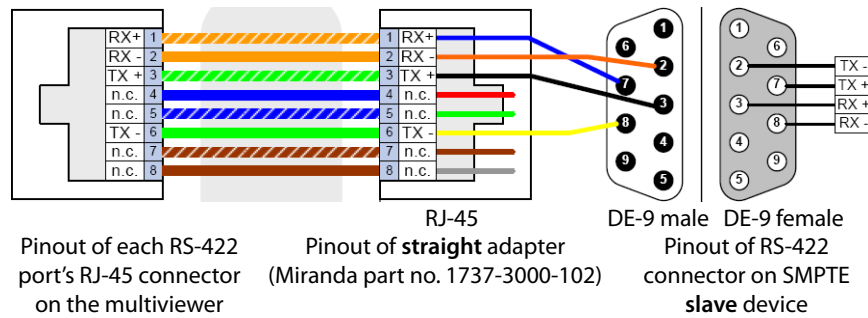| ACTIVITY Indicator on Rear Panel		Power-Supply LEDs on Front Panel	
Color	Status	Color	Status
Off	No link detected	Green	Normal
Green	Normal (good link)	Flashing green	Normal, rebooting
Orange	Activity	Orange	Warning
Red	Hardware fault	Flashing orange	Warning, rebooting
Flashing red	Upgrading firmware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

> Note: The 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).

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

Pinout of each RS-422 port's RJ-45 connector on the multiviewer

RJ-45
Pinout of **straight** adapter (Miranda part no. 1737-3000-102)

DE-9 male DE-9 female
Pinout of RS-422 connector on SMPTE **slave** device

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

Pinout of each RS-422 port's RJ-45 connector on the multiviewer

RJ-45
Pinout of **crossover** adapter (Miranda part no. 1792-3700-100)

DE-9 male DE-9 female
Pinout of RS-422 connector on SMPTE **master** device
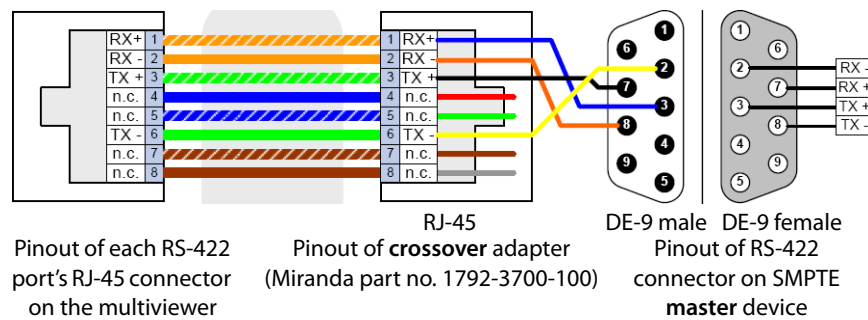
Standard wiring between multiviewer and devices wired to SMPTE "master" specification (e.g. Philips Jupiter router control system, Miranda Presmaster PCS)

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 (4RU) 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.

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