

# Appendix C

## Network Requirements

This appendix provides information on designing, troubleshooting and optimizing Ethernet networks used with Premiere systems.

### The Browser Interface

The browser interface is used to view and edit information about movies and music and configure a system. The computer used to access the browser interface must be on the same local subnet as the Premiere system.

#### For Windows

Use the following procedure to open the browser interface using Windows.

1. Open a web browser and enter <http://my-kaleidescape>.  
If the browser interface does not appear, go to the next step.
2. Enter <http://my-kaleidescape.local>.  
If the browser interface does not appear, go to the next step.
3. Install **Bonjour** for Windows. Go to the [Bonjour download](#) page and click the **DOWNLOAD** button.
4. Try entering <http://my-kaleidescape.local> again.  
If the browser interface does not appear, go to the next step.
5. Enter the **Browser Interface URL** in the web browser. Visit the onscreen display of any player in the Premiere system and use the following steps to locate the **Browser Interface URL**.
  - a. Press the **Menu** button on a remote control, or press **Menu** on the *Remote Control* page of the Kaleidescape iPad app.
  - b. Use the arrow buttons to highlight **System**, and then select **Status**.
  - c. Highlight **System Summary** to see the **Browser Interface URL**.
  - d. Enter the **Browser Interface URL** in the web browser.

If access to the onscreen display of a player is not readily available and the IP address of the server is known, try entering this in the web browser. The **Browser Interface URL** is the IP address of the server.

## For Mac

Use the following procedure to open the browser interface using a Mac.

1. Open a web browser and enter <http://my-kaleidescape.local>.  
If the browser interface does not appear, go to the next step.
2. Enter the **Browser Interface URL** in the web browser. Visit the onscreen display of any player in the Premiere system and use the following steps to locate the **Browser Interface URL**.
  - a. Press the **Menu** button on a remote control, or press **Menu** on the *Remote Control* page of the Kaleidescape iPad app.
  - b. Use the arrow buttons to highlight **System**, and then select **Status**.
  - c. Highlight **System Summary** to see the **Browser Interface URL**.
  - d. Enter the **Browser Interface URL** in the web browser.

If access to the onscreen display of a Kaleidescape player is not readily available and the IP address of the server is known, try entering this in the web browser. The **Browser Interface URL** is the IP address of the server.

## Special Cases

Under special conditions, other methods are used to access the browser interface.

- ▶ Using a link local address when the server has an unknown static IP address.
- ▶ Using a serial number when more than one Kaleidescape System is on the same network

## Link Local Address

The link local address method is used in extreme cases under the following conditions:

- The server has an unknown static IP address.
- The server is on a different subnet than the computer.

(Using the link local address is a somewhat complicated procedure requiring setting the computer to a static IP in the 169.254.xxx.xxx range).

For detailed instructions on using the link local address, see Knowledge Base article at [www.kaleidescape.com/go/link-local](http://www.kaleidescape.com/go/link-local).

## Server Serial Numbers

When more than one Kaleidescape System is on the same network, using `http://my-kaleidescape` accesses one of the servers.

To open the browser interface for a specific server, enter `http://ks-` followed by the twelve-digit serial number of the server.

For example, for a server with the serial number **0000 0001 2345**, enter  
`http://ks-000000012345` for Windows or  
`http://ks-000000012345.local` for Mac.

A dealer who has a demonstration system plus one or more customer systems on the dealer's network can access the browser interface for each system using this method.

## Network Switches

### Gigabit Switch

A Gigabit switch is recommended for any Premiere line installation, and is required to watch more than one Blu-ray quality movie from the same server at the same time. Both server and player require a 1000Base-T connection for 1000Base-T throughput.

All-in-one devices that combine the functions of a router and a switch are generally less effective and not recommended. Kaleidescape does not recommend a particular network switch, because there are several quality network switches on the market; however the following switches were tested and worked successfully:

- Dell PowerConnect Series Gigabit Ethernet switches (27xx, 28xx)
- Cisco Small Business Managed Gigabit Switches (SRWxxxx)
- Packedge Gigabit Switches (SWxx-GBx)

### Multiple Switches

If more than one 1000Base-T switch is on the network, make sure all switches are interconnected using only 1000Base-T switches.

- Do not use 100Base-TX switches.
- Do not use a router as a switch.

## Network Connections

Cat5, Cat5e and Cat6 network cabling can be used. Network cabling must have all four pairs of the cable terminated at each connector for 1000Base-T speed.

Kaleidescape strongly recommends the use of wired Ethernet network connections between servers and players. Wireless and powerline connections work well for providing Internet access to the Premiere system, for connecting control systems, and for accessing the browser interface from a computer; however, a wired Ethernet network must be used for connecting the Premiere line components because there is little tolerance for latency while streaming movies or music.

Up to 54 megabits per second of network bandwidth is used while streaming a Blu-ray quality movie. Blu-ray quality movies are not compressed when downloaded or imported. Full audio and video fidelity are maintained.

A single 1U+ Movie Server or 3U Server can stream up to 15 Blu-ray quality movies over a well-designed 1000Base-T network at the same time.

## Configuring Network Settings

### Assigning Fixed IP Addresses Using DHCP Reservations

DHCP reservations provide a central point of management for all IP allocations at a site. With DHCP reservations, network parameters such as IP addresses, subnet mask, default gateway, and DNS servers are set in one place – at the DHCP server. If any of these parameters change, only the DHCP server has to be modified.

For most installations, the DHCP server built into the router is perfectly adequate.

The procedure to create DHCP reservations is device-specific. Refer to the router or DHCP server documentation for instructions. DHCP reservations are usually made using MAC addresses. To see MAC addresses for Premiere line components, go to the **SETTINGS > Components** page on the browser interface. Refer to [Configuring System Components on page 76](#).

The MAC address of a player can also be found on the **System Summary** view of the onscreen user interface.

## Resetting a Player or Disc Vault to Use a DHCP Address

To remove a static IP configuration on a player or disc vault, press the network **RESET** button on the back of the component to restore the factory default DHCP setting. The network **RESET** button is located just left of the analog audio connectors on Premiere line players including the M700 Disc Vault, or in the middle of the back panel on the DV700 Disc Vault. Locations of the **RESET** button can be viewed in the section titled, [A/V Connections to Players in the Premiere Line on page 29](#).

**Note:** For servers and legacy players, the configuration must be changed on the browser interface **NETWORK** settings.

To activate the **RESET** button, insert a paperclip in the reset hole. Press until the indicator on the right side of the **Network** connector starts blinking, then release. The player or disc vault restarts with the factory default DHCP setting.

## Assigning Static Network Addresses

If the installation site does not have a DHCP server, or if DHCP cannot be used for Premiere line components, IP addresses can be assigned manually. See [Network Settings on page 91](#). Add a DHCP server temporarily to the site network to access the browser interface and enter IP settings that are valid for the local site network.

## Configuring Network Settings from the Serial Port

All Premiere line components, with the exception of the M300 Player, have a serial port (RS-232). If the IP address cannot be determined, it can be reset or changed by connecting a DB-9 serial cable to the serial port of the Premiere line component and a standard DB-9 serial port on a computer (or a known good USB to serial adapter). Use a straight-through cable for players and a crossover cable for servers.

Refer to the Knowledge Base article at [www.kaleidescape.com/go/set-network-settings](http://www.kaleidescape.com/go/set-network-settings) for a list of commands.