

VideoCenter
User's Manual



About this Manual

This manual documents the VideoCenter revision V1.0.8. For a complete revision history, see the Eurotech support forum.

Organization of this Manual

The manual organizes information in three key sections:

Introduction	Provides an overview of the features of VideoCenter.
Getting Started	Describes using VideoCenter with the Player VIP development system.
Service Modes	Gives details about the service modes.

To locate the information you need, try the following:

1. Browse the *Table of Contents*.
2. Follow cross-references between sections.
3. View and search this manual in PDF format.

Printing this Manual

This manual is designed for printing on both sides of an 8.5x11 inch paper sheet or two pages per sheet but can be printed single-sided also.

Revision History

The following table summarizes the changes made between released revisions of the manual.

Revision	Description	By
1	Preliminary release	07/17/08 ch

Errata, Addenda, and Further Information

Errata and addenda to this manual are posted on the Eurotech support forums along with the latest release of the manual. Consult the support forums any time you need further information or feel information in this manual is in error. You may access the forums from the Eurotech support site,

<http://www.eurotech.com>

In addition to manuals, the support forums include downloads, troubleshooting guides, operating system updates, and answers to hundreds of questions about developing applications for Eurotech products. You may also post questions you have about Eurotech products on the forums.

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1 Introduction

1.1 **Overview**

VideoCenter is a Windows®-based application supporting the Player VIP decoder in Video over IP (VIP) systems. The application runs on a computer connected to the same network as Player VIP and allows you to manage the media displayed by Player VIP.

Two service modes are supported simultaneously: Video On Demand (VOD) and Video Over Hard Drive (VOHD). In VOD mode, VideoCenter streams media files to the Player VIP. In VOHD mode, VideoCenter copies files to the Player VIP local storage and sets the play schedule. VideoCenter supports a stand-alone Player VIP or multiple units.

1.2 **Features**

1.2.1 Network

- TCP/IP protocol suite
- Unicast and multicast configurations

1.2.2 Service Modes

- Automatic detection of Player VIP and service mode
- Streaming video over IP
- Playlist scheduling
- Remote file management

1.2.3 Video

- AVI, VOB, and MPG file formats
- MPEG-4 compression

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2 Getting Started

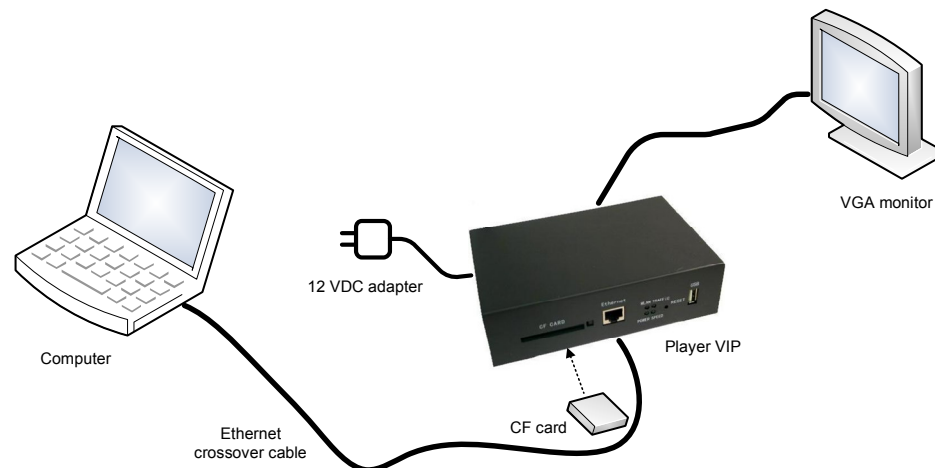
This section provides information on using VideoCenter with the Player VIP development system.

2.1 *Development System*

VideoCenter is part of the Player VIP development system. See the Player VIP User's Manual for a complete description of the Player VIP and for instructions on using the development system.

2.2 *Software Application*

To use the VideoCenter application with the Player VIP development system, connect your computer directly to the system without a hub or switch. Use an Ethernet crossover cable between your computer and the Ethernet port of Player VIP, as shown in the following diagram.



This configuration allows you to become familiar quickly with the VideoCenter functionality prior to connecting the Player VIP to your network.

2.2.1 Installation

To install VideoCenter, copy the following files to your local disk drive:

- VideoCenter.dll
- VideoCenter.exe
- VideoCenter User's Manual

VideoCenter is compatible with Windows 2000, Windows XP, and Windows Vista™ operating systems.

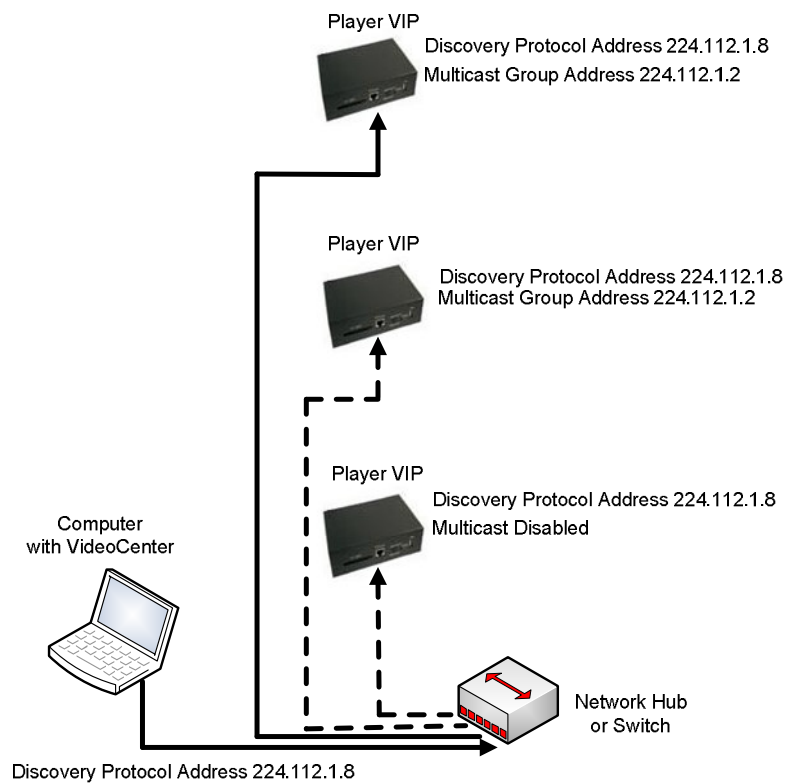
2.2.2 Player VIP Detection

Upon start, VideoCenter discovers the Player VIP, displays the Player VIP IP address, and detects the Player VIP operation mode. When VideoCenter discovers a Player VIP, the VOD or the VOHD service window appears. Selecting the Player VIP IP address opens the available services on the right side of the service window. Refer to Section 3 for a complete description of the service modes.

For a troubleshooting guide for Player VIP detection, see the Player VIP User's Manual.


Discovering Multiple Player VIPs

VideoCenter supports multiple Player VIPs connected to the same local area network (LAN). The Player VIPs join a discovery group designated by the Discovery Protocol settings. VideoCenter discovers all Player VIPs that have joined the discovery group. Discovery groups can include stand-alone Player VIPs and multiple Player VIPs configured for multicast streaming. VideoCenter supports unicast and multicast configuration on the same LAN. Set the Discovery Protocol Address and Discovery Protocol Port of all Player VIPs and VideoCenter the same. See the Player VIP User's Manual for instructions on configuring networks with multiple Player VIPs. The following example network includes one unicast Player VIP and one multicast streaming group.



Configure Discovery Protocol Settings

To configure VideoCenter to discover multiple Player VIPs, complete the following steps:

1. In the service window, click the  button.

The Discovery Protocol dialog box appears.

2. Type values into the Discovery Protocol Address and Discovery Protocol Port boxes.

Notice that the multicast streaming group address and discovery group address must be different. The following screen capture contains the default settings for the discovery group:

- Address 224.112.1.8
- Port 8000



3. Click the Set button.
4. Click the Exit button.

VideoCenter discovers all Player VIPs that have joined the discovery group and displays the Player VIP IP addresses in the service window. If multiple Player VIPs are configured in a multicast streaming group, the multicast streaming group address is displayed.

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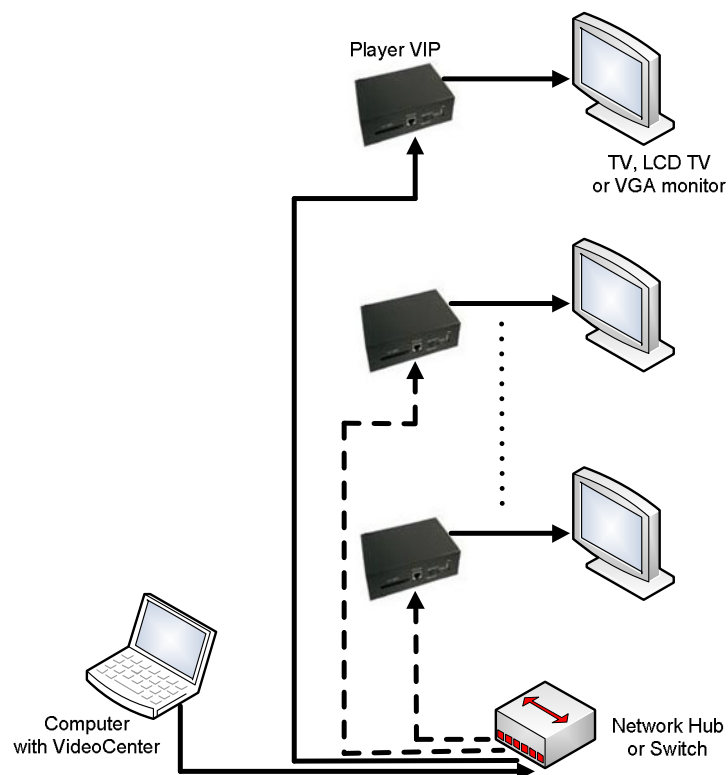
3 Service Modes

VideoCenter operates in two service modes simultaneously: VOD and VOHD. When the application discovers a Player VIP, VideoCenter automatically detects the mode of operation. The mode determines the services available to the Player VIP. For a complete description of the Player VIP, including system configurations, see the Player VIP User's Manual. This section explains the services available in VOD and VOHD modes.

3.1 Video On Demand (VOD) Mode

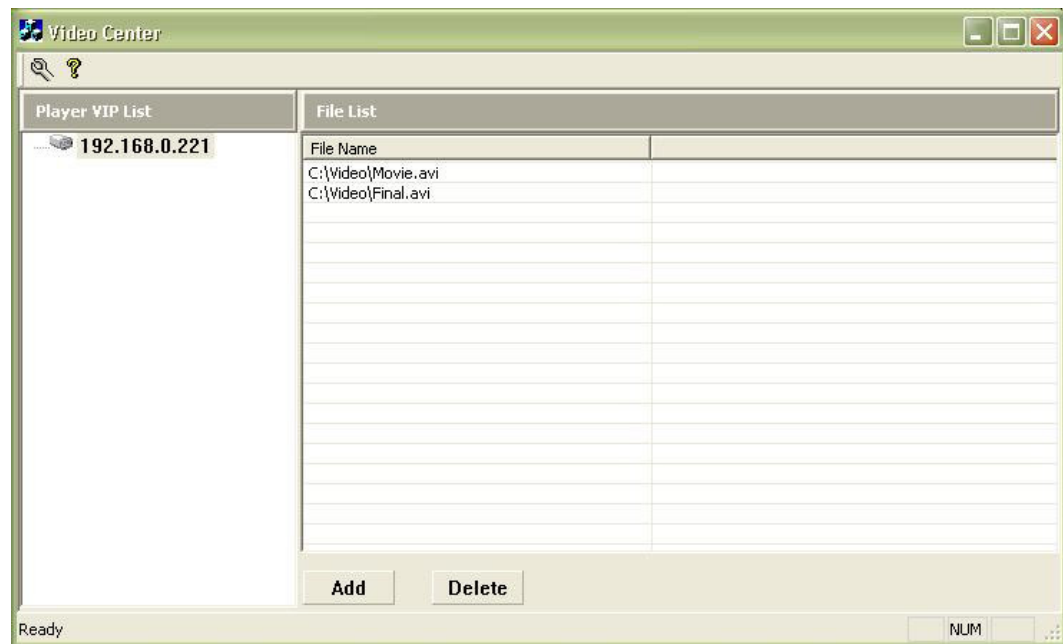
During operation in VOD mode, VideoCenter streams media files stored locally to the Player VIP across the network. The application supports stand-alone units and multiple Player VIPs configured for multicast streaming. Refer to Section 2.2.2 for an explanation on discovering Player VIPs.

The following diagram illustrates the network topology for VOD mode.



When VideoCenter discovers a Player VIP operating in VOD mode, the VOD service window is displayed. The IP address of the discovered Player VIP appears under the Player VIP List title bar. Selecting this IP address opens the available services on the right side of the service window. In VOD mode, you can add to or delete from the list of files streamed to the Player VIP.

The following screen capture contains an example VOD service window for the Player VIP at <http://192.168.0.221>. The media files streamed to the Player VIP are listed under the File List title bar. These files stream continuously in the order shown until you stop the service.



Manage Files in VOD Mode

To add or delete a file, complete the following steps:

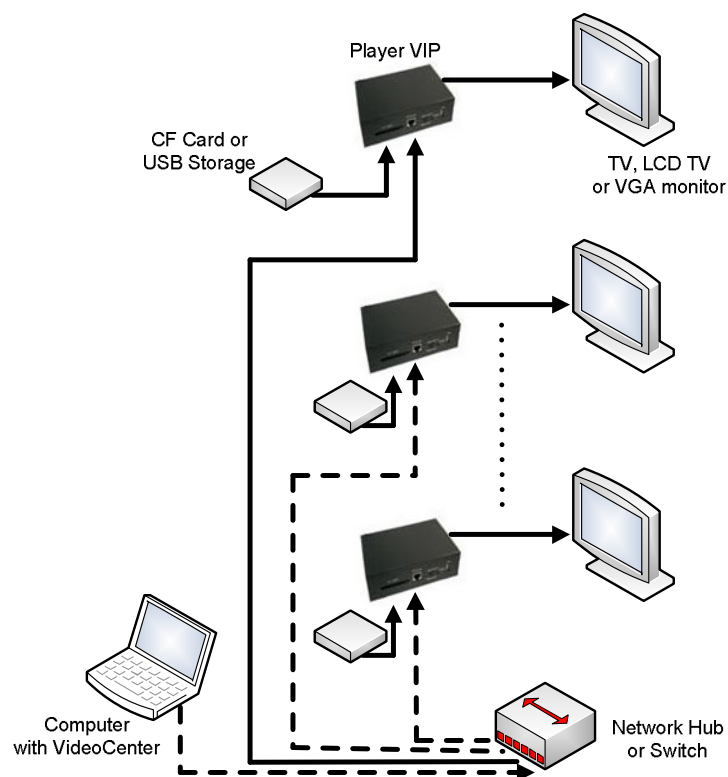
1. Select an IP address in Player VIP List.
The files for the highlighted Player VIP are displayed in File List.
2. To add a file, complete the following steps:
 - a. Click the Add button.
You can browse your disk drive for media files to stream to the Player VIP.
 - b. Select the files to stream to the Player VIP, and then click Open.
The highlighted files are added to File List.
3. To delete a file, complete the following steps:
 - a. Select a file in File List.
 - b. Click the Delete button.
The file is removed from File List.

After you setup the File List, VideoCenter opens each media file and streams the file to the highlighted Player VIP continuously in the order shown until you stop the service.

3.2 Video Over Hard Drive (VOHD) Mode

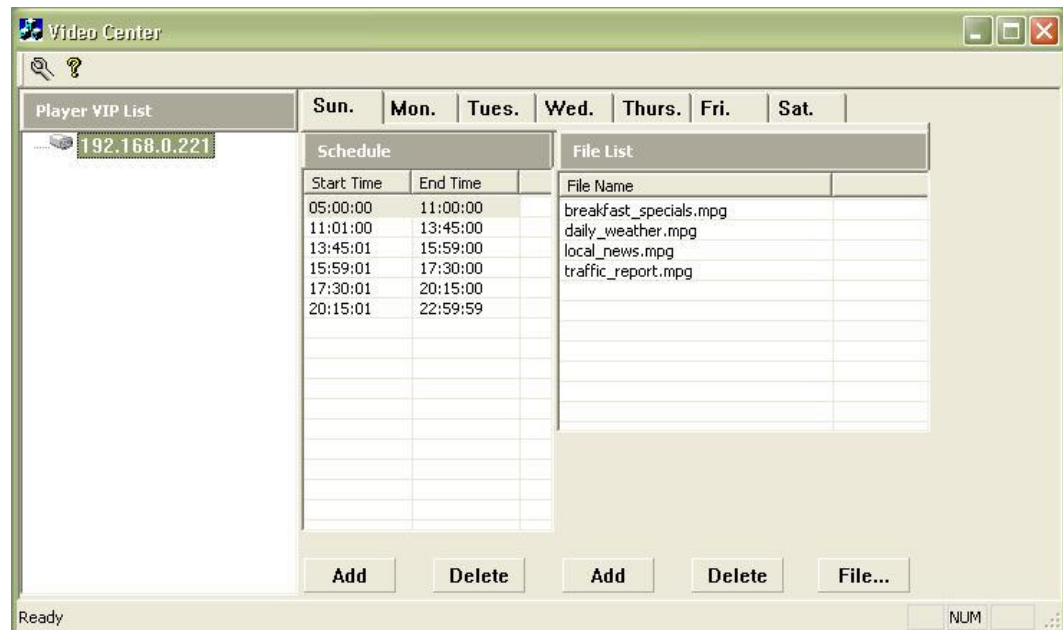
In VOHD mode, VideoCenter manages the files on the Player VIP local storage and sets the play schedule. The application supports stand-alone units and multiple Player VIPs configured for multicast streaming. Refer to Section 2.2.2 for an explanation on discovering Player VIPs.

The following diagram illustrates the network topology for VOHD mode.



When VideoCenter discovers a Player VIP operating in VOHD mode, the VOHD service window is displayed. The IP address of the discovered Player VIPs appears under the Player VIP List title bar. Selecting this IP address opens the available services on the right side of the service window. In VOHD mode, you can copy files to or delete files from the Player VIP local storage and can set the play schedule for each day of the week.

The following screen capture illustrates an example schedule for the Player VIP at <http://192.168.0.221>. All scheduled times for Sunday are listed under the Schedule title bar. The time 05:00:00-11:00:00 is highlighted. The playlist for this scheduled time is given under the File List title bar. Each scheduled time has a unique playlist, and selecting the scheduled time accesses the playlist. Notice that each day of the week has its own schedule.

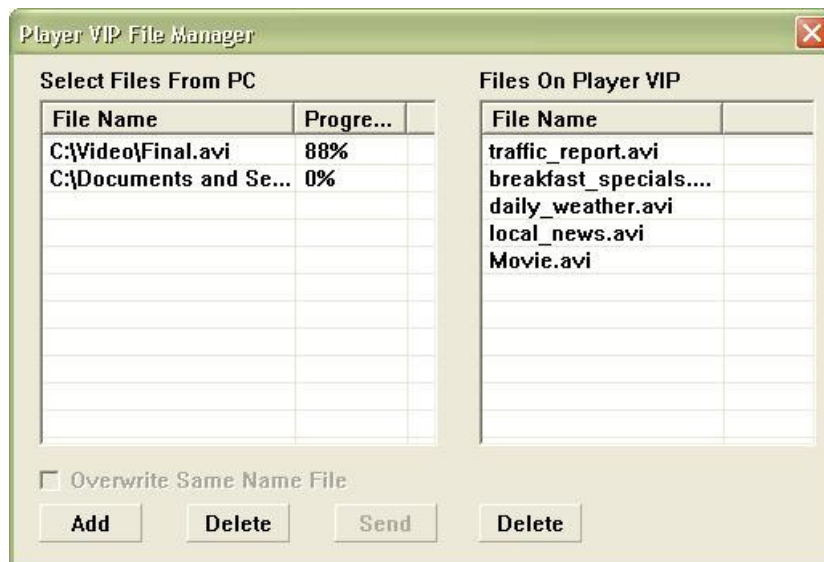


Manage files in VOHD Mode

To copy a file to or delete a file from the Player VIP local storage, complete the following steps:

1. Select an IP address in Player VIP List.
2. Click the File... button.

The Player VIP File Manager dialog box appears as shown next. All files selected from your local disk drive are displayed under the Select Files From PC title bar, while all files on the Player VIP local storage are displayed under the Files on Player VIP title bar.



3. To select files to copy, complete the following steps:
 - a. Click the Add button.

You can browse your disk drive for files to copy to the Player VIP.
 - b. Select the files to copy to the Player VIP local storage, and then click Open.

The highlighted files are added in Select File From PC and are available to copy.
4. To remove files to copy, complete the following steps:
 - a. In Select Files From PC, select the file name.
 - b. Click the Delete button at the far left.

The file is removed from Select Files From PC and is not available to copy.
5. To copy files to the Player VIP, click the Send button.

All files in Select Files From PC are copied to the Player VIP local storage. A percentage indicator shows the sending progress. When complete, the file names appear in Files on Player VIP.
6. To delete files from the Player VIP, complete the following steps:
 - a. In Files On Player VIP, select the file name.
 - b. Click the Delete button at the far right.

The file is deleted from the Player VIP local storage and from Files On Player VIP.

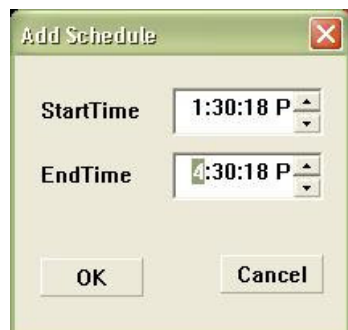
Set Play Schedule in VOHD Mode

To set a play schedule in VOHD mode, complete the following steps:

1. Select an IP address in Player VIP List.

Schedule and File List for the highlighted Player VIP are displayed.
2. Click a day of the week tab.
3. To add a schedule, complete the following steps:
 - a. Click the Add button at the far left.

The Add Schedule dialog box appears as shown next.



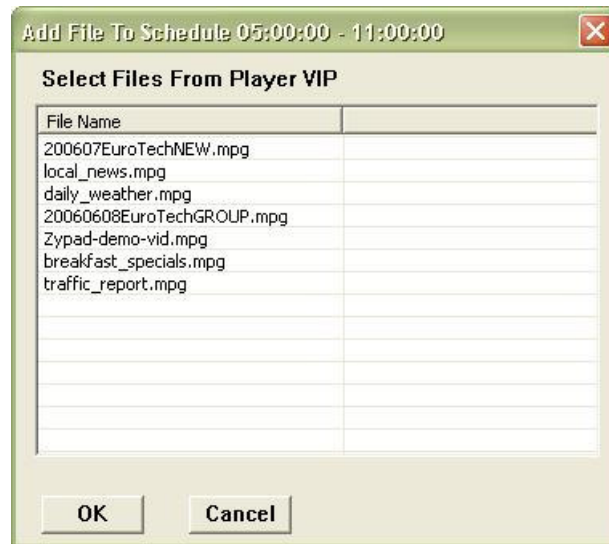
- b. Choose a StartTime and EndTime.

Notice that each time includes an AM and PM setting.
 - c. Click the OK button.

The new time is added to Schedule in the VOHD service window.

4. To add files to the schedule, complete the following steps:
 - a. Select one time in Schedule.
 - b. Click the Add button at the far right.

The Select Files From Player VIP dialog box appears as shown in the next screen capture.



- c. Select the files that you want to add to the schedule.
 - d. Click the OK button.

The files are added to File List at the highlighted time. Player VIP plays the files in the order listed in File List during the time specified in Schedule.

5. To delete files from the schedule, complete the following steps:
 - a. Select one time in Schedule.
 - b. Select the file names in File List that you want to delete.
 - c. Click the Delete button at the far right.

The files are removed from the play schedule and no longer appear in File List.

6. To delete a schedule, complete the following steps:
 - a. Select a time Schedule.
 - b. Click the Delete button at the far left.

The time is removed from the Player VIP schedule.

After you copy files to the Player VIP and set the play schedule, the Player VIP automatically begins playing files from its local storage according to the schedule.

4 Troubleshooting Guide

The following are some of the most common problems that occur during operation:

Q: Why does VideoCenter not discover a Player VIP?

A: One of the following reasons causes this problem:

- The network is not functioning.
- The router/switch connecting the Player VIP to VideoCenter does not support multicast packet forwarding.
- The discovery protocol settings of the Player VIP are not configured the same as those of VideoCenter.

Q: Why does the IP address in the Player VIP List flash?

A: Multiple VideoCenter applications may be running at the same time. Do one of the following to resolve this problem:

- Verify that there is only one VideoCenter application running. Close multiple VideoCenter applications.
- Restart the VideoCenter application.
- Restart the Player VIP.