



# **PictureTel® 900 Series Collaboration System**

**Administrator's Guide**

Copyright © 2002: Polycom, Inc.—Printed in U.S.A.  
Polycom, Inc., 100 Minuteman Road, Andover, MA 01810  
www.polycom.com

Polycom and the Polycom logo are registered trademarks of Polycom, Inc.

PictureTel and the PictureTel logo are registered trademarks of PictureTel Corporation. IDEC, ImageShare, LAMB, Look-At-Me-Button, PictureTel LiveGateway, PowerMic, PT716, PT724, and Siren are trademarks of PictureTel Corporation.

Bose is a registered trademark of Bose Corporation.

Intel is a registered trademark of Intel Corporation.

Microsoft, NetMeeting, PowerPoint, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

HP is a registered trademark of Hewlett-Packard Company.

Netscape and Netscape Directory Server are registered trademarks of Netscape Communications Corporation.

Lucent Technologies is a trademark of Lucent Technologies, Inc.

All other product and company names are the trademarks or registered trademarks of their respective owners.

The information contained in this document is subject to change without notice. Polycom assumes no responsibility for technical or editorial errors or omissions that may appear in this document or for the use of this material. Nor does Polycom make any commitment to update the information contained in this document. This document contains proprietary information which is protected by copyright. All rights reserved. No part of this document may be photocopied or reproduced in any form without the prior written consent of Polycom, Inc.

---

### **Caution**

---

For service personnel only:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

---

Edition: 800-1164-01/C

Do you have any suggestions or comments on the documentation for this product? If so, please send them by e-mail to <a href="mailto:iDesign@polycom.com">iDesign@polycom.com</a> .
--

# ***About This Guide***

This guide explains how to configure, maintain, and troubleshoot the PictureTel® 900 Series collaboration system.

To install your system, see the *Installing the PictureTel 900 Series Collaboration System* document, which is included in the shipping kit with the system. For regulatory information, see the *PictureTel Product Regulatory Information* document, which is available on the PictureTel support web site, <http://www.polycom.com>. (For the titles and descriptions of each piece of the PictureTel 900 Series system documentation suite, see Appendix B, “System Documentation.”)

For support or service, please contact your PictureTel service provider or call PictureTel Technical Support. You can find phone numbers for Technical Support in your area, as well as the latest product information, at the PictureTel support web site.

PictureTel recommends that you record the serial number of the PictureTel 900 Series system here for use by your service provider and for future reference. The serial number for the system is printed on the back of the computer box.

System Serial Number: \_\_\_\_\_

# Contents

<b>About This Guide</b> .....	iii
-------------------------------	-----

## **Chapter 1 Introducing the PictureTel 900 Series System**

About the PictureTel 900 Series System .....	1-1
System Components .....	1-2
Computer Box .....	1-2
PictureTel Cameras .....	1-3
Remote Control Devices .....	1-4
PowerMic .....	1-5
ImageShare .....	1-5
Software Components .....	1-6
Optional Components .....	1-8
Monitor .....	1-8
Cart .....	1-9
Look-At-Me-Button .....	1-10
Other Optional Components .....	1-10
Administrative Applications .....	1-11
Setup Wizard .....	1-11
AdminTools .....	1-11
Operating Statistics .....	1-11
Hardware Diagnostics .....	1-12

## **Chapter 2**

### **Customizing System Behavior**

Managing User Access .....	2-1
Choosing Logon Options .....	2-1
Disabling Auto Logon .....	2-3
Setting Up User Accounts for Standard Windows Logon .....	2-4
Choosing Logoff Options .....	2-5
Configuring Standby Mode.....	2-6
Setting Call Preferences.....	2-8
Allowing Use of a Custom Control Panel .....	2-9

## **Chapter 3**

### **Configuring Network Use**

Configuring ISDN Support .....	3-1
Setting the Basic Configuration.....	3-1
Controlling ISDN Bandwidth.....	3-3
Choosing Advanced Options .....	3-5
Configuring the System to Use an IMUX .....	3-7
Configuring LAN Support .....	3-11
Setting the Basic Configuration.....	3-12
Controlling LAN Bandwidth.....	3-13
Configuring the System to Use a Gateway .....	3-14
Configuring the System to Use a Gatekeeper.....	3-16

## **Chapter 4**

### **Configuring Audio**

Setting Audio Algorithms .....	4-1
Choosing the G.711 Encoding Law for Your Location.....	4-4
Configuring the Microphones.....	4-5
Adding Optional Audio Components.....	4-7
Adding Laptop Output .....	4-7
Adding PowerMic Microphones.....	4-7

## **Chapter 5**

### **Configuring Video**

Setting Video Preferences .....	5-1
Configuring Video Sources .....	5-6
Configuring Camera Behavior .....	5-8
Adding Optional Video Components.....	5-9
Adding a Second Monitor .....	5-10
Adding VCRs .....	5-15

## **Chapter 6**

### **Setting Up Directory Services**

Setting Up a Local Directory .....	6-1
Setting Up Directories on a Server .....	6-3
Loading Server Software .....	6-4
Setting Up a Central Directory .....	6-4
Managing One or More Servers .....	6-6

## **Chapter 7**

### **Allowing Data Sharing**

Managing Data Sharing Options .....	7-1
Allowing File Transfer .....	7-1
Installing User Applications.....	7-2
Allowing Document Server Use .....	7-3
Setting Up a Document Server .....	7-3
Configuring the PictureTel 900 Series System to Use a Document Server .....	7-4
Observing Data Sharing Tips and Guidelines .....	7-6
If You Allow File Transfer.....	7-6
If You Allow Document Server Use... ..	7-6

## **Chapter 8**

### **Maintaining the System**

Monitoring System Statistics.....	8-1
Viewing Detailed System Statistics.....	8-1
Viewing the Configuration Summary .....	8-3
Viewing Statistics for the Current Call.....	8-5
Accessing and Viewing Logs.....	8-6
Optimizing System Performance.....	8-7
Setting Up Virus Protection .....	8-9
Conserving Disk Space .....	8-9
Restoring the System.....	8-9

## **Chapter 9**

### **Using Remote Management Tools**

Setting Up WebRemote Management.....	9-2
Setting Up RAS Access Over ISDN .....	9-2
Using WebRemote to Manage the PictureTel 900 Series System.....	9-4

Setting Up SNMP Management.....	9-5
Setting Up an SNMP Environment.....	9-5
Installing the PictureTel MIBs .....	9-5
Configuring the System for SNMP Management.....	9-6
Adding the PictureTel Network Manager.....	9-7
Using SNMP to Manage the PictureTel 900 Series System.....	9-7

**Chapter 10**  
**Configuring Internal Multipoint**

Allowing Internal Multipoint.....	10-1
Setting the Default Video Display.....	10-2
Setting Audio and Video Preferences.....	10-3

**Chapter 11**  
**Troubleshooting**

Solving Installation Problems .....	11-1
Solving Startup Problems .....	11-2
Solving General System Problems.....	11-3
Solving Network Problems .....	11-5
Solving Video Problems.....	11-15
Solving Audio Problems.....	11-20
Solving ImageShare or ImageShare II Problems.....	11-24

**Appendix A**  
**System Default Settings .....** **A-1**



## **Appendix B**

<b>System Documentation</b> .....	<b>B-1</b>
Documentation CD.....	B-1
Hardcopy Documentation.....	B-2
Online Documentation .....	B-2
Online Help.....	B-3
Web Documentation.....	B-4

## **Appendix C**

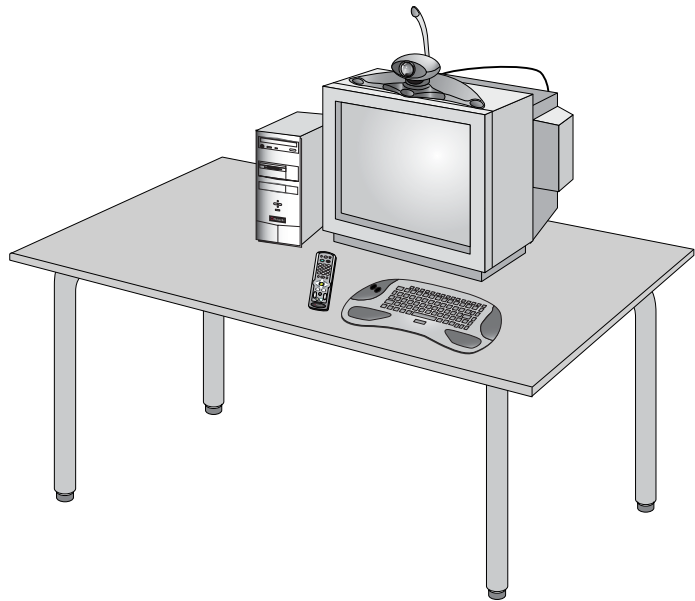
<b>Assisting Users</b> .....	<b>C-1</b>
Customizing the Getting Started Guide .....	C-1
Maintaining System Information.....	C-2
Adding Applications to the System .....	C-3

<b>Index</b> .....	<b>Index-1</b>
--------------------	----------------

## *Introducing the PictureTel 900 Series System*

### **About the PictureTel 900 Series System**

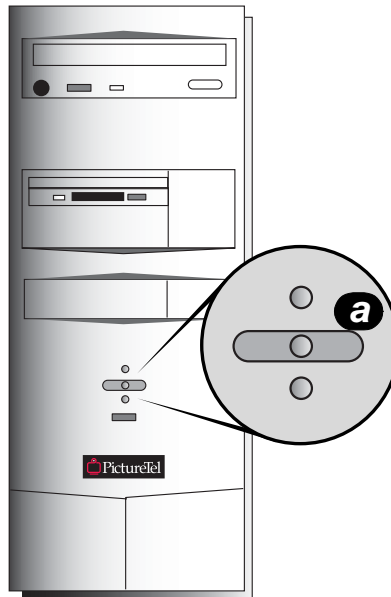
The PictureTel 900 Series system is a state-of-the-art visual collaboration tool. It allows users to exchange ideas and share documents with people anywhere in the world, as if they were all in the same room.



## System Components

### Computer Box

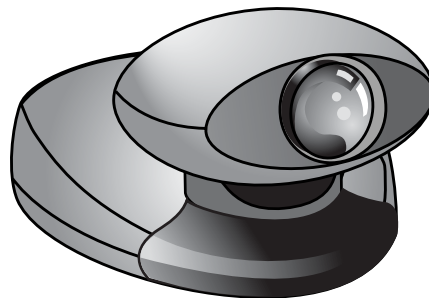
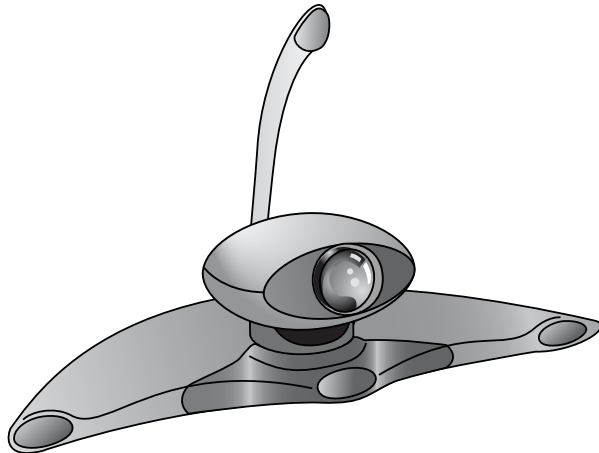
The computer box is a self-contained unit that contains the system software, internal hardware, and power supply. The power button **a**, CD-ROM drive, and diskette drive are at the front of the box, while the connection panel is at the rear.



## PictureTel Cameras

The system uses the PictureTel 80 Dynamic Locating Camera or the PictureTel 70 Room Camera as its main camera.

The PictureTel 80 features the Automatic Camera Pointing (ACP) mechanism. When you enable ACP, the camera automatically locates and frames the speaker.



---

## Remote Control Devices

### Keyboard

The keyboard is designed for both administrative and user tasks. It includes the standard keyboard character buttons, as well as an integrated trackball, left-click button, and right-click button.



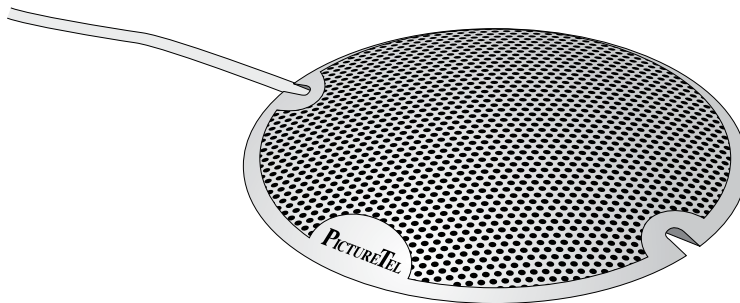
### Remote Control

The remote control is designed to make visual collaboration easier for your users — a clearly marked button corresponds to each common user task. See the *PictureTel iPower Collaboration System Getting Started Guide* and the *PictureTel iPower Collaboration System Quick Tips Sheet* for detailed information on how to use the remote control.



## PowerMic

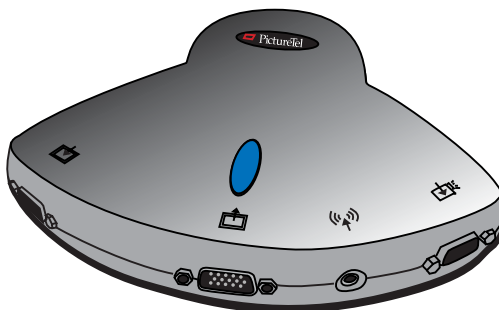
The system uses the PowerMic™ as the main microphone. You can use up to a total of four PowerMic microphones with your system.



## ImageShare

The ImageShare™ device makes it easy for your users to add audio and video input and output devices to the system for a particular call.

The ImageShare is included with the PictureTel 970 system and is available as an option for the PictureTel 960 system.



## Software Components

The following table describes the software applications included on the *PictureTel 900 Series System Software CD*.

<b>This application...</b>	<b>Allows you to...</b>
Setup Wizard	Set up the system.
Collaboration application	Participate in videoconferences or in-room presentations.
AdminTools	Configure and maintain the PictureTel 900 Series collaboration system.
Operating Statistics	Verify system performance and run loopback tests.
Hardware Diagnostics	Run hardware tests.
File Transfer	Send and receive files during meetings.
NetMeeting® Chat	Use text chatting while you are in a call.
Acrobat Reader	Read user documents provided in .pdf format.

---

The following table describes the optional PictureTel Document Server application included on the *PictureTel Document Server* CD.

<b>This application...</b>	<b>Allows you to...</b>
PictureTel Document Server	Store files on a server so they can be retrieved during meetings.

The following table describes the optional PictureTel Directory Services Setup application included on the *PictureTel Directory Service Tools* CD.

<b>This application...</b>	<b>Allows you to...</b>
PictureTel Directory Services Setup	Set up and access Central and Personal Directories, or “phone books,” of collaboration sites.

The following table describes the optional PictureTel Network Manager application included on the *PictureTel Network Manager* CD.

<b>This application...</b>	<b>Allows you to...</b>
PictureTel Network Manager	Manage networked collaboration systems.



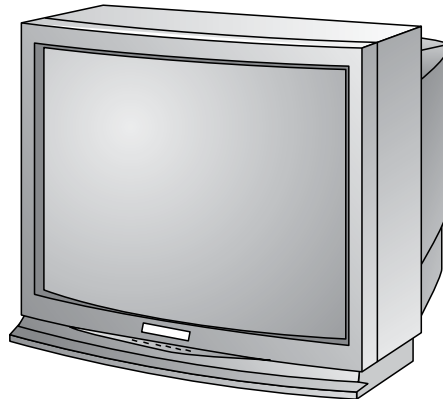
## Optional Components

### Monitor

The monitor displays video from the cameras and other video sources, application windows, online help, and so on.

The monitor's picture-in-picture (PIP) window is an area on the screen that is usually used to display the image you are sending to the other call participants.

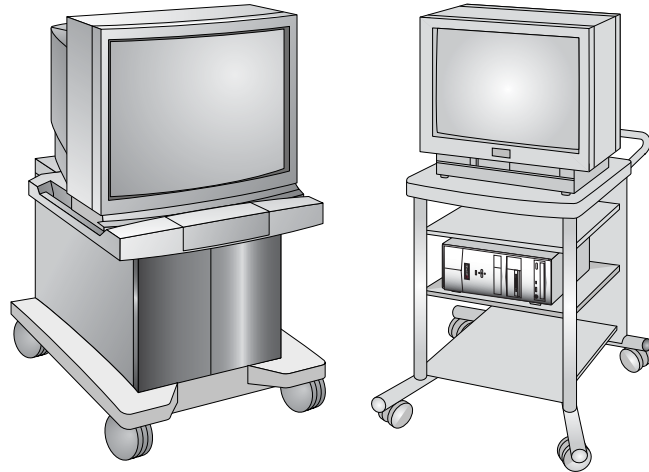
With a dual-monitor system, you typically view People on one monitor; on the second monitor, you view Content, such as reports and presentations.



If you have a dual-monitor system, one monitor will be an SVGA/XGA monitor. The second monitor will be an NTSC monitor (if you have an NTSC main camera) or a PAL monitor (if you have a PAL main camera).

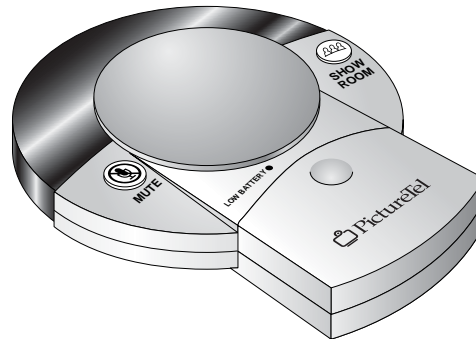
## Cart

You can use one of several carts to hold the system, peripheral devices, and documentation. The Premier Cart includes enclosed storage for your computer box, monitor, system components, and documentation. It also features a built-in Bose® speaker. The Utility Cart offers a more basic means to hold and move the system and monitor.



## Look-At-Me-Button

The Look-At-Me-Button™ (LAMB™) is a device that allows people who are not near the keyboard or remote control to move the camera to a preset position, return to a room shot, and mute and unmute the room microphone.



## Other Optional Components

There are several other optional components you can add to your system:

- ❑ *VCRs* — You can add one or two VCRs to your system so users can play videotapes during calls or create videotapes of meetings.
- ❑ *Additional cameras* — You can add cameras to your system, such as a document camera.
- ❑ *Additional monitor* — You can connect a total of two monitors to your system.
- ❑ *Additional microphones* — You can use up to a total of four PowerMic microphones.
- ❑ *Additional controllers* — You can add keyboards, remotes, or LAMBs to your system to give more conference participants the ability to control the system and camera(s).
- ❑ *Projector* — You can connect a projector to the ImageShare device.

## Administrative Applications

### Setup Wizard

The Setup Wizard application allows you to easily install the Collaboration software onto your system.

**Note:** Before starting the Setup Wizard, shut down any other applications that may be running.

#### To start the Setup Wizard

*Choose Start > Programs > PictureTel iPower > Administrator Information > Setup Wizard.*

### AdminTools

The AdminTools application is your main system management tool. It allows you to configure and maintain the PictureTel 900 Series system.

#### To start AdminTools

*Choose Start > Programs > PictureTel iPower > Administrator Information > AdminTools.*

### Operating Statistics

The Operating Statistics application allows you to verify system performance, view a log of call-related statistics and events, log system events, and run loopback tests.

**Note:** Before starting Operating Statistics, shut down any other applications, other than the Collaboration application, that may be running.

### **To start Operating Statistics**

**Choose *Start > Programs > PictureTel iPower > Administrator Information > Operating Statistics.***

### **Hardware Diagnostics**

The Hardware Diagnostics application allows you to test the performance of the system's internal boards and cables. The application can also monitor input and output from audio and video devices that are connected to the system.

**Note:** Before starting Hardware Diagnostics, shut down any other applications that may be running.

### **To start Hardware Diagnostics**

**Choose *Start > Programs > PictureTel iPower > Administrator Information > Hardware Diagnostics.***

# Customizing System Behavior

## Managing User Access


To control how users access and exit the PictureTel 900 Series system, you must decide which logon and logoff options to employ.

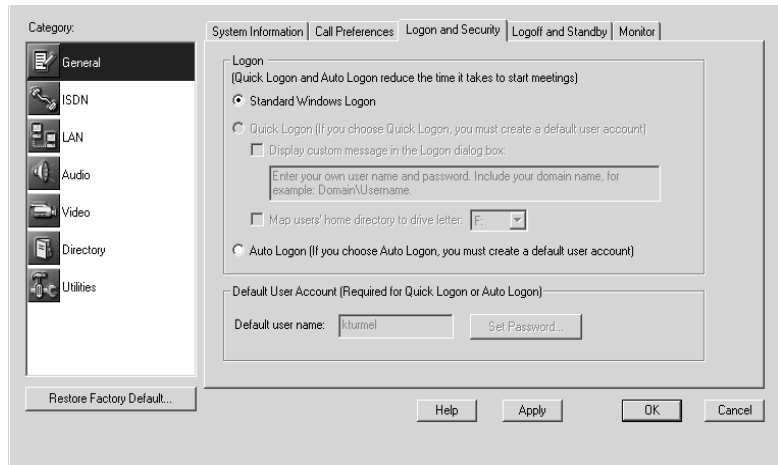
### Choosing Logon Options

The PictureTel 900 Series system offers two logon options:

- ❑ **Standard Windows<sup>®</sup> logon** lets users log on by entering a valid user or administrator name and password for either a local Windows user account or a Windows domain account. After they log on, users have the privileges you define for the local Windows user account or Windows domain account.
- ❑ **Auto Logon** lets users log on without entering a user name and password for the default user account. This means that anyone can use the system. After they log on, users have the privileges defined for the default user account.

## To choose the logon method

1. Open the AdminTools *Logon and Security* page:
  - a. Start AdminTools and click  General.
  - b. Click the Logon and Security tab.



2. Choose one of the following:

Option	Description
Standard Windows Logon	Requires users to enter a valid user or administrator name and password to access both Windows and the Collaboration application.
Auto Logon	Automatically logs users on to both Windows and the Collaboration application. A user name and password are not required.

### 3. If you chose *Standard Windows Logon...*

You must also choose the type of user account to employ. Skip to “Setting Up User Accounts for Standard Windows Logon” on page 2-4.


### 4. If you chose *Auto Logon...*

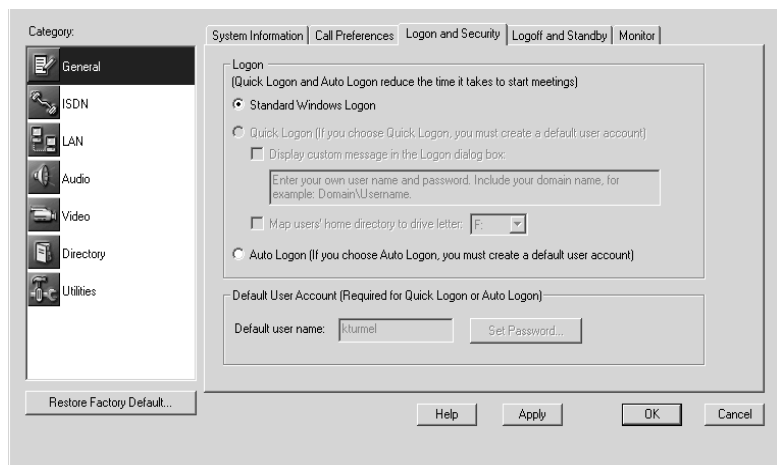
Set the default user name and password using the Default User Account section of the page. If the user account does not exist on the system, it will be created. The default user name and password appear automatically in the Logon dialog box.

## Disabling Auto Logon

If you want to change any configuration settings and Auto Logon is enabled, you must log on as the administrator, disable Auto Logon, and restart the system.

### To disable Auto Logon

1. Shut down the Collaboration application.
2. Open the AdminTools *Logon and Security* page:
  - a. Start AdminTools and click  General.
  - b. Click the Logon and Security tab.





3. Deselect the *Auto Logon* option.

4. Restart the system.

## Setting Up User Accounts for Standard Windows Logon

The available user accounts are as follows:


Type of Account	Description	How to Create It
Local user account	Requires a unique account for each user, which allows the user to access the system.	You create local user accounts using the Windows User Manager. For specific instructions, see your Windows documentation.
Domain account	Requires a unique account for each user, which allows the user to access each system in the domain.	You create domain accounts using the Windows User Manager for Domains. For specific instructions, see your Windows documentation.
PictureTel 900 Series system default user account	Allows all users to access the system. The default user name and password appear in the Logon dialog box.	You set up the PictureTel 900 Series system default user account from the AdminTools Logon and Security page. Set the default user name and password using the Default User Account section of the page.

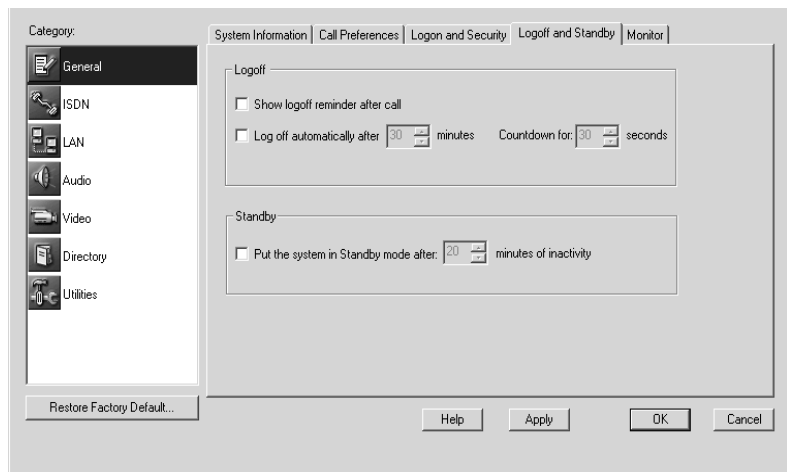
## Choosing Logoff Options

The logoff option you choose determines how the system behaves when a call ends or the system is idle for the period of time you specify.

### To set the logoff options

**1. Open the AdminTools *Logoff and Standby* page:**

- a. Start AdminTools and click  General.
- b. Click the Logoff and Standby tab.



**2. Configure the logoff options as follows:**

Option	Description
Show logoff reminder after call	Determines whether the system displays a dialog box after users end a call instructing them to log off when they are finished using the system.
Log off automatically	Determines whether the system automatically logs off users.

Option	Description
After x minutes	Sets how long the system must be inactive before automatically logging off the last user.
Countdown for x seconds	Determines how long the system displays the time remaining before logoff.


## Configuring Standby Mode

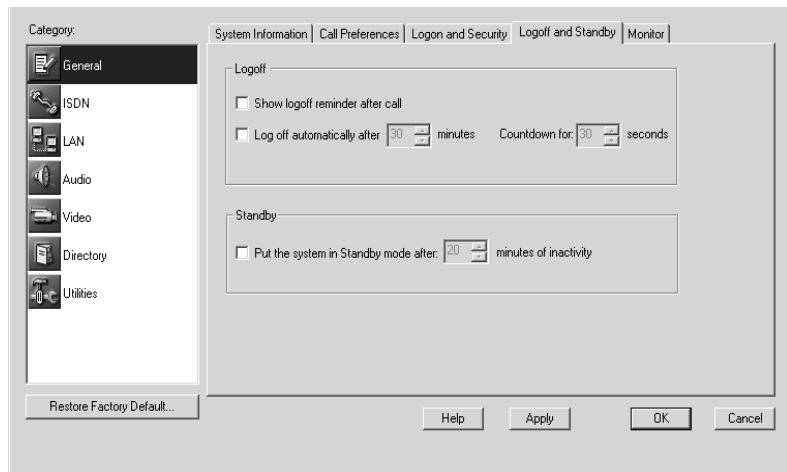
If you enable Standby mode, the PictureTel 900 Series system goes into Standby when it hasn't been used in a specified period of time. The system does not enter Standby mode if in a call. The system exits Standby mode when a user presses a key or button on the keyboard, remote control, mouse, LAMB, or ImageShare, or when an incoming call arrives.



If you enable both automatic logoff and Standby mode, the time set for automatic logoff must exceed the Standby timer or the system will always log off before going into Standby mode.

## To configure Standby mode


1. Open the AdminTools **Logoff and Standby** page:
  - a. Start AdminTools and click  General.
  - b. Click the Logoff and Standby tab.

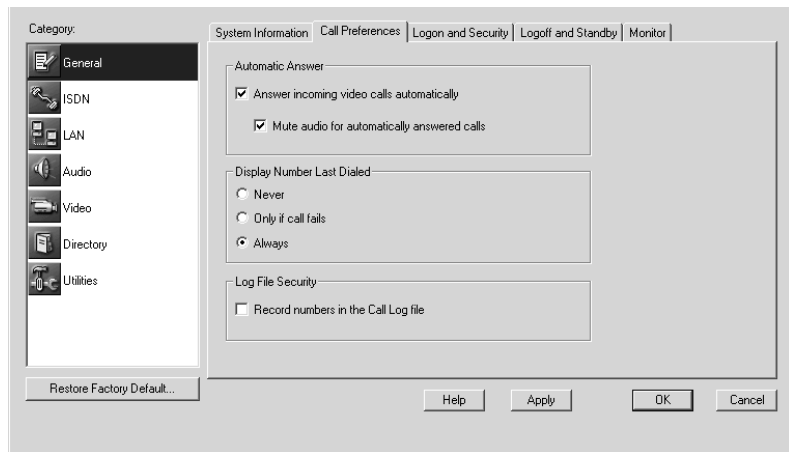


2. To enable Standby mode, choose the ***Put the system in Standby mode*** option.
3. If desired, change the Standby timer using the ***minutes of inactivity*** drop-down list.

## Setting Call Preferences

### To set call preferences

1. Open the AdminTools *Call Preferences* page:
  - a. Start AdminTools and click  General.
  - b. Click the Call Preferences tab.



2. Configure the call preference options as follows:

Option	Description
Answer incoming video calls automatically	Determines if the system answers incoming video calls automatically or if users have to answer them manually. This option only works for the initial video call to a site. Incoming voice calls and incoming video calls during a voice call are never auto-answered.
Mute audio for automatically answered calls	Keeps the system microphones from sending sound to calling systems when the PictureTel 900 Series system automatically answer calls.

Option	Description
Display Number Last Dialed	Determines whether the system saves the last number dialed and presents an option to redial it in the Make a Call dialog box as follows: Never, Only if call fails, or Always.
Record numbers in the Call Log file	Directs the system to record the numbers of called systems in the Operating Statistics application's Call Log.




The automatic answer and redial options make calling easier for your users, but they also present security concerns:

- ❑ With automatic answer, an unexpected caller could interrupt a meeting in progress or look at equipment and notes left in an empty room.
- ❑ With redial, a user could access a sensitive site called by a previous user.

## Allowing Use of a Custom Control Panel

You can use a custom control panel with your iPower system, as long as that control panel uses the PictureTel iPower Control Protocol. You can continue to use the iPower keyboard and remote control along with your custom control panel.

### To allow use of a custom control panel

1. Open the AdminTools *Custom Control* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the Custom Control tab.
2. Check the *This system can be controlled by a custom control panel that uses the PictureTel iPower Control Protocol* check box.


# Configuring Network Use

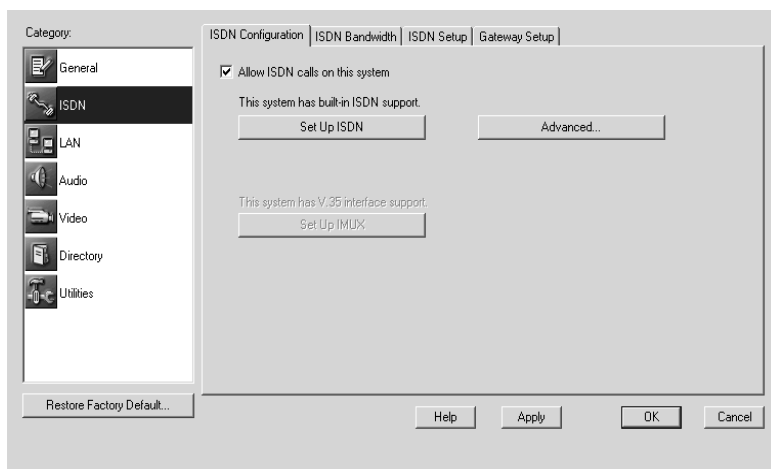
## Configuring ISDN Support

Before attempting to configure ISDN support, make sure that both your network administrator and your ISDN service provider have completed the appropriate sections of the *Preparing Your Network for Collaboration* document, available at <http://www.polycom.com>.

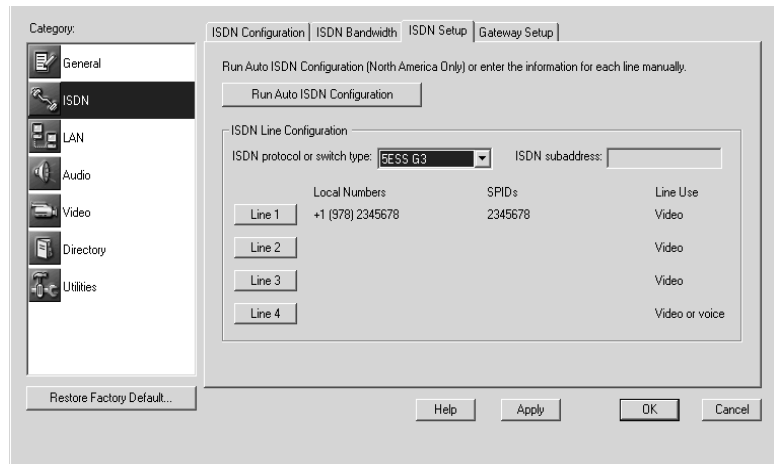
### Setting the Basic Configuration

#### To set the basic ISDN configuration

1. Open the AdminTools *ISDN Configuration* page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the ISDN Configuration tab.



2. Click *Set Up ISDN*.



3. If you're in North America, click **Run Auto ISDN Configuration** to start the automatic configuration of the system.


Auto ISDN attempts to automatically set the basic ISDN configuration. If the configuration cannot be set automatically, you will need to enter the information manually.

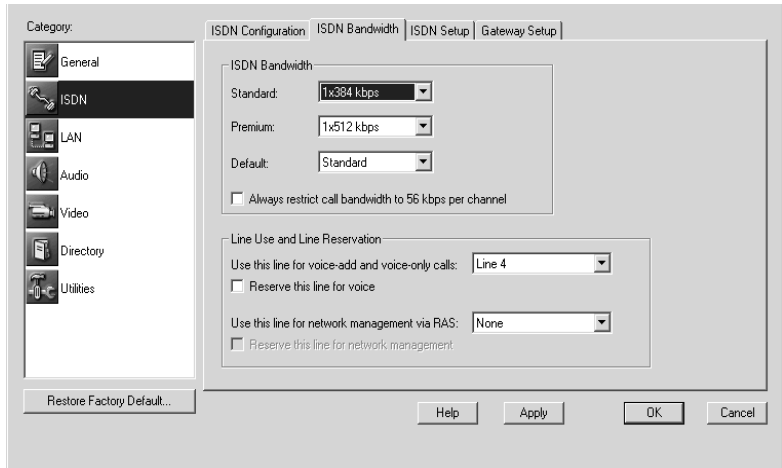
4. If you're not in North America, or **Run Auto ISDN Configuration** failed, refer to *Preparing Your Network for Collaboration*, and enter or confirm the values in the **ISDN Line Configuration** section.
  - a. Choose the appropriate ISDN protocol or switch type from the ISDN Protocol or switch type drop-down list.
  - b. Click Line 1, Line 2, Line 3, or Line 4.
  - c. Enter the local numbers and SPIDs for the selected line.
  - d. Repeat steps b and c for each line.



## Controlling ISDN Bandwidth

### To set the bandwidth options

1. Open the AdminTools *ISDN Bandwidth* page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the ISDN Bandwidth tab.



2. Configure the bandwidth options as follows:


Option	Description
Standard	Selects the rate for the Standard setting available to users from the Advanced Call Options dialog box.
Premium	Selects the rate for the Premium setting available to users from the Advanced Call Options dialog box.

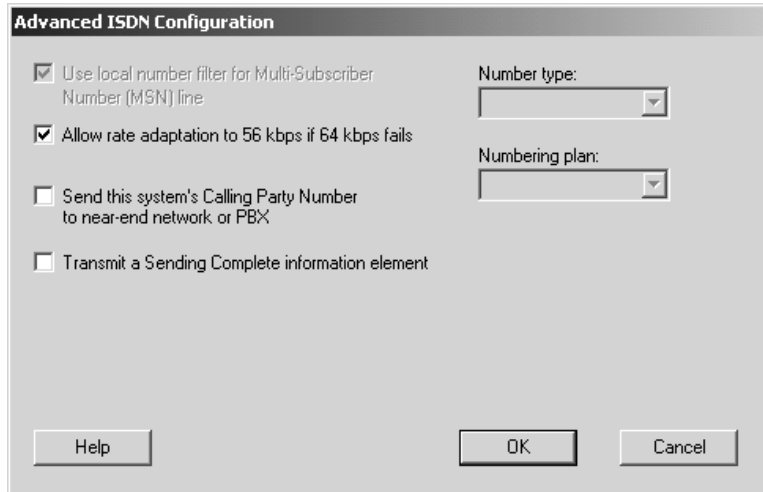
Option	Description
Default	Determines whether the Premium or Standard rate should serve as the default rate the system employs when users don't select a rate for calls.
Always restrict call bandwidth to 56 kbps per channel	Determines whether the system will require users to make calls at restricted rates (multiples of 56 kbps) only.
Use this line for voice-add and voice-only calls	Selects a line to be used for incoming and outgoing voice calls. The default is Line 4. (If you select Line 1, you cannot reserve it for voice calls.)
Reserve this line for voice	Determines whether the selected line will be used exclusively for voice calls. This option decreases the maximum bandwidth for ISDN video calls. (If you selected Line 1, you cannot reserve it for voice calls.)
Use this line for network management via RAS	Selects a line to be used for network management.
Reserve this line for network management	Determines whether the selected line will be used exclusively for network management. This option decreases the maximum bandwidth for ISDN video calls.

**3. Click *OK*.**

## Choosing Advanced Options

### To set the advanced configuration

1. Open the AdminTools *Advanced ISDN Configuration* page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the Advanced button on the ISDN Configuration tab.



2. Configure the advanced ISDN options as follows:

Option	Description
Use local number filter for Multi-Subscriber Number (MSN) line	Directs the system to check the intended destination of a call before answering it. Use this when multiple devices share an ISDN line.

---


<b>Option</b>	<b>Description</b>
Allow rate adaptation to 56 kbps if 64 kbps fails	Determines whether the system should redial rejected unrestricted calls (multiples of 64 kbps) at the corresponding restricted rate (multiples of 56 kbps). This option allows the system to adjust to the rates used by different far-end networks.
Send this system's Calling Party Number to near-end network or PBX	Allows local numbers to be displayed at the far end when far-end systems support Caller ID.
Transmit a Sending Complete information element	Directs the system to send information indicating that the transmission of the dialed number is complete (required by some network equipment).
Number type	Selects the appropriate number type for your location, if it differs from the default.
Numbering plan	Selects the appropriate numbering plan for your location, if it differs from the default.

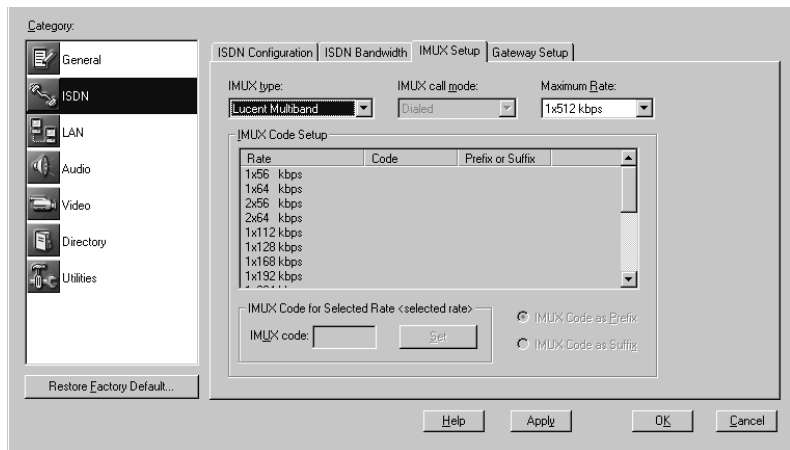
**3. Click OK.**

## Configuring the System to Use an IMUX

### To configure your system to use a DICA OASIS IMUX

Typically, a caller must specify the rate of an outgoing call to an IMUX by including a call profile (a sequence of characters such as #20) with the dialed number. Completing the following steps allows the user to place a call without entering a call profile.

1. Open the AdminTools *IMUX Setup* page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the IMUX Setup tab.




2. Choose *DICA OASIS* from the *IMUX type* drop-down list.
3. Choose the appropriate *IMUX call mode* from the *IMUX call mode* drop-down list.

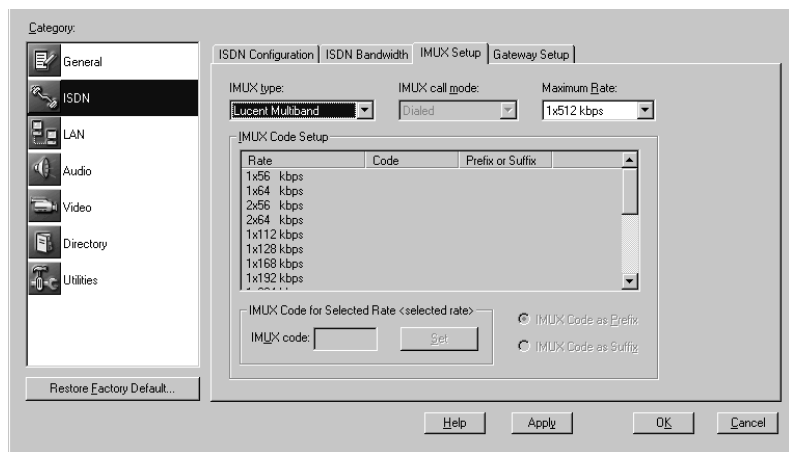
Predefined Code	Call Type
#10*	64 kbps Clear call
#11*	56 kbps Clear call
#20*	128 kbps IMUX call
#21*	112 kbps IMUX call
#30*	192 kbps IMUX call

Predefined Code	Call Type
#31*	168 kbps IMUX call
#40*	256 kbps IMUX call
#41*	224 kbps IMUX call
#60*	384 kbps IMUX call
#61*	336 kbps IMUX call

4. Click **OK**.

### To configure your system to use a Lucent Multiband IMUX

1. Change the general IMUX configuration settings. For specific instructions, see your *Multiband VSX BRI Operations Guide*.
2. Open the AdminTools *IMUX Setup* page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the IMUX Setup tab.



3. Choose *Lucent Multiband* from the *IMUX type* drop-down list.
4. Choose the appropriate IMUX call mode from the *IMUX call mode* drop-down list.
5. Redefine the call profiles in the internal call profile directory, as listed in the following table. For specific instructions, see your *Multiband VSX BRI Operations Guide*.

Call Profile Name	Data Rate
#001	1x56 kbps non-bonded, restricted
#002	1x64 kbps non-bonded
#003	2x56 kbps non-bonded, restricted
#004	2x64 kbps non-bonded
#005	1x112 kbps bonded, restricted
#006	1x128 kbps bonded
#007	1x224 kbps bonded, restricted
#008	1x256 kbps bonded
#009	1x336 kbps bonded, restricted
#010	1x384 kbps bonded
#011	1x448 kbps bonded, restricted
#012	1x512 kbps bonded
#013	1x672 kbps bonded, restricted
#014	1x768 kbps bonded




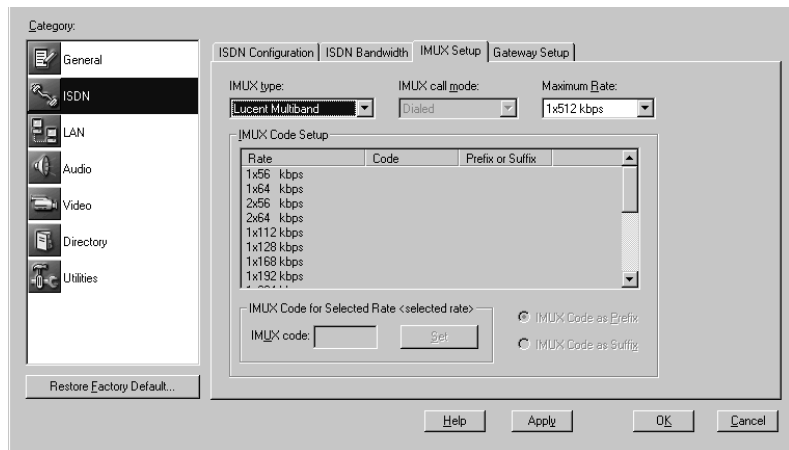
You change the settings on a Multiband VSX BRI by communicating through its COM port connector (RJ-12), using a terminal emulation program such as Microsoft HyperTerminal.

6. Click **OK**.

## To configure your system to use another IMUX

1. Open the AdminTools **IMUX Setup** page:

- a. Start AdminTools and click  ISDN.
- b. Click the IMUX Setup tab.



2. Choose **Other** from the **IMUX type** drop-down list.

3. Choose **Diald** from the **IMUX call mode** drop-down list.

4. Configure the remaining options on this page, as follows:

Option	Description
Maximum Rate	Provides a list of rates to choose from.
IMUX Code for Selected Rate	Displays the code associated with the rate selected in the Maximum Rate drop-down list.
Set	Saves the settings in the IMUX code box.



---

Option	Description
IMUX Code as Prefix	Indicates if the system should dial the IMUX code before the video number.
IMUX Code as Suffix	Indicates if the system should dial the IMUX code after the video number.
External Encryption Device	Specifies which external encryption device, if any, to use to encrypt and decrypt data.

**5. Click *OK*.**


## Configuring LAN Support

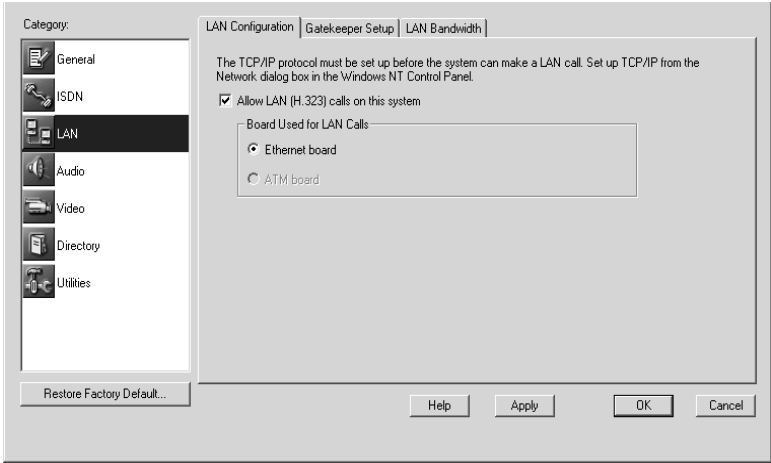
Before configuring the system to allow LAN calls, you must do the following:

- ❑ Make sure the system is connected to the network correctly, as described in the *Preparing Your Network for Collaboration* document, available at <http://www.polycom.com>.
- ❑ Set up TCP/IP support through the Windows Control Panel. For specific instructions, see your Windows documentation or online help.

## Setting the Basic Configuration

### To set the basic configuration

1. Open the AdminTools *LAN Configuration* page:
  - a. Start AdminTools and click  LAN.




### 2. Configure your system for LAN use as follows:

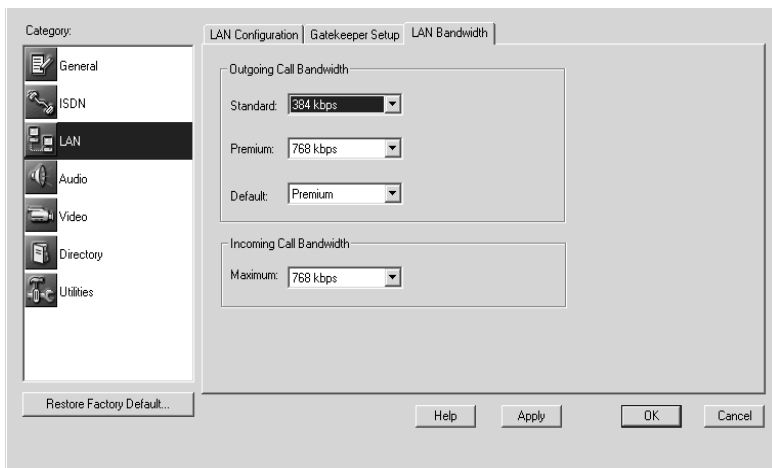
Option	Description
Allow LAN (H.323) calls on this system	Enables LAN support. In order to make LAN calls, the system must also have been configured for TCP/IP through the Windows Control Panel.
Allow E.164 numbers to be used for LAN calls	Allows users to make LAN calls by dialing E.164 numbers. If you do not check this box, users must use IP addresses, such as aliases or DNS numbers, to dial LAN calls. In order to use E.164 numbers, you must also configure a gatekeeper.

3. Click **OK**.

## Controlling LAN Bandwidth

### To set the bandwidth options

1. Open the AdminTools **LAN Bandwidth** page:
  - a. Start AdminTools and click  LAN.
  - b. Click the LAN Bandwidth tab.



2. Configure the bandwidth options as follows:

Option	Description
Standard	Selects the rate for the Standard setting available to users from the Advanced Call Options dialog box.
Premium	Selects the rate for the Premium setting available to users from the Advanced Call Options dialog box.


Option	Description
Default	Determines whether the Premium rate or the Standard rate should serve as the default rate the system employs when users don't select a rate for calls.
Incoming Call Bandwidth	Specifies a maximum rate for incoming calls.

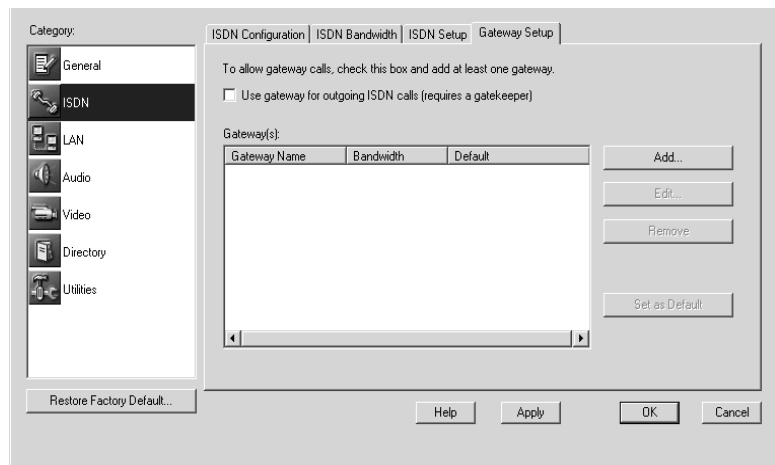
3. Click **OK**.

## Configuring the System to Use a Gateway

If you enable the system to use a gateway, you must specify the dialing codes to be used to dial out through the gateway(s), install a gatekeeper, and configure the system to use the gatekeeper.

### To set up a gateway

1. Open the AdminTools **Gateway Setup** page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the Gateway Setup tab.



2. Enable gateway use by clicking the *Use gateway for outgoing ISDN calls (requires a gatekeeper)* option.

3. Configure the system to use a gateway as follows:

Option	Description
Add	Opens the Add Gateway page so you can set up a new gateway.
Edit	Opens the Edit Gateway page so you can modify the selected gateway.
Remove	Removes the selected gateway.
Set as Default	Specifies the selected gateway as the default gateway to use for video calls.

If you chose Add or Edit, the following page appears, with either Add Gateway or Edit Gateway in the title bar.

**Add Gateway**

Gateway name:

Bandwidth	Prefix	Suffix	Default bandwidth
1x56 kbps			
2x56 kbps			
1x64 kbps			
2x64 kbps			
1x112 kbps			
1x128 kbps			
1x168 kbps			

Prefix or Suffix for <selected bandwidth or PictureTel LiveGateway>

Prefix  Suffix  Default bandwidth

**4. Create or modify the gateway information as follows:**

Option	Description
Gateway name	Indicates the name that will identify the gateway to users.
Prefix or Suffix for <selected bandwidth>	Indicates the selected bandwidth. Click a bandwidth in the list box above to make it appear in this field.
Prefix	Specifies that the prefix associated with a bandwidth should be dialed before the number.
Suffix	Specifies that the suffix associated with a bandwidth should be dialed after the number.
Default Bandwidth	Specifies this bandwidth as the default bandwidth for the selected gateway.
Set	Saves the selected settings.


**5. Click *Set* to save the displayed settings.**

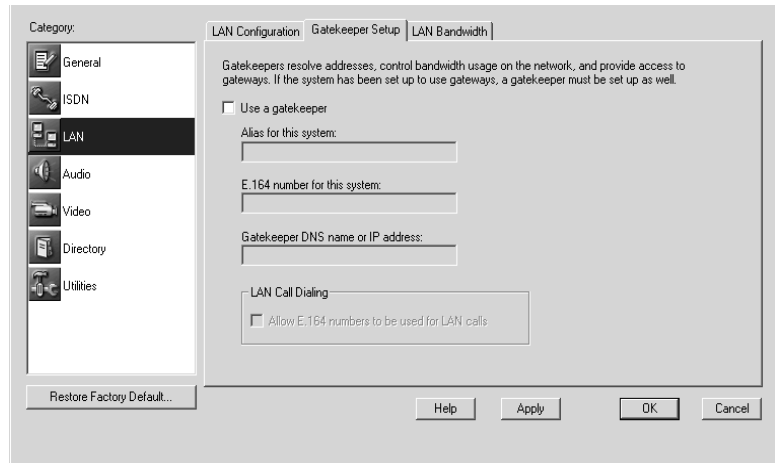
**6. Click *OK* to close the page.**

## Configuring the System to Use a Gatekeeper

If your network includes one or more gateways or if you want to make LAN calls using E.164 addresses, you must install a gatekeeper and configure the PictureTel 900 Series system to use it.

## To set up a gatekeeper

1. Open the AdminTools *Gatekeeper Setup* page:
  - a. Start AdminTools and click  LAN.
  - b. Click the Gatekeeper Setup tab.



2. Configure the system to use the gatekeeper as follows:

Option	Description
Use a gatekeeper	Enables the collaboration system to use a gatekeeper.
Alias for this system	Indicates the alias for this collaboration system to be used by the gatekeeper.
E.164 number for this system	Indicates the extension of the collaboration system.
Gatekeeper DNS name or IP address	Indicates the DNS name or IP address of the collaboration system on which the gatekeeper is installed.

<b>Option</b>	<b>Description</b>
LAN Call Dialing	Sets whether users can call other systems on the LAN by dialing the system's extension. The system must be registered to a gatekeeper for this option to be effective.

**3. Click *OK*.**



# Configuring Audio

## Setting Audio Algorithms

The audio algorithm determines the method of compression used on the audio transmitted during a call.


PictureTel recommends that you use the default Automatic setting. This setting allows the sites in the call to negotiate to the highest common algorithm, which results in the best audio quality possible.

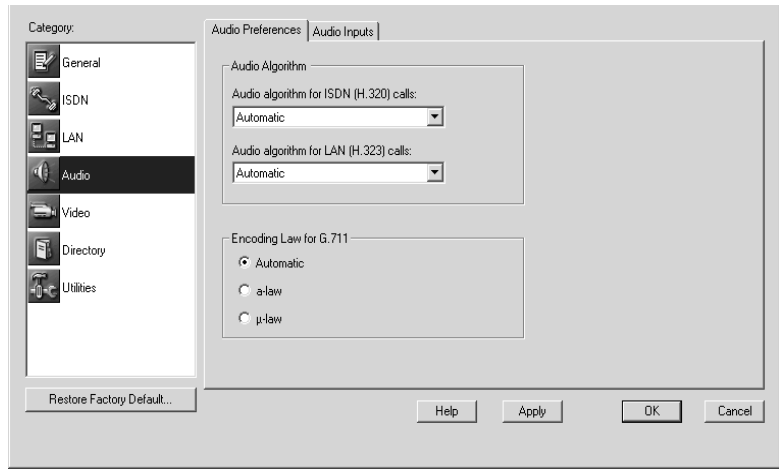


If you force the system to use a specific audio algorithm, and the other systems in the call don't support it, the call will connect using the lowest available algorithm.

You set the audio algorithms for ISDN and LAN calls separately.

## To set the audio algorithm for ISDN calls


1. Open the AdminTools *Audio Preferences* page:
  - a. Start AdminTools and click  Audio.
  - b. Click the Audio Preferences tab.

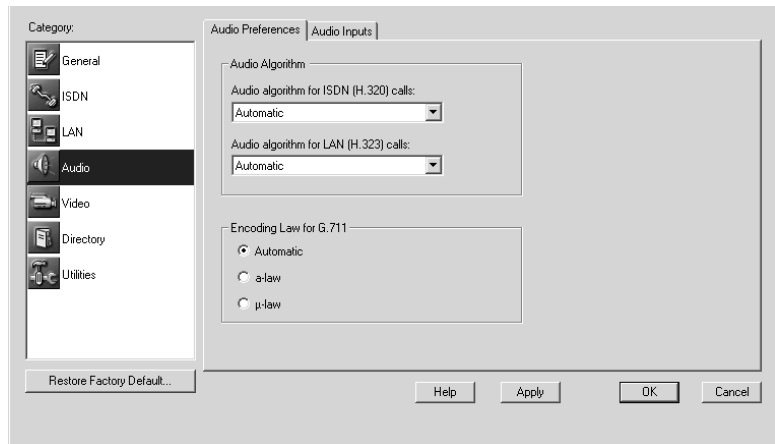


2. Set *Audio algorithm for ISDN (H.320) calls* as follows:

Option	Description
Automatic	Allows the system to negotiate to the highest algorithm supported by all of the call participants. PictureTel recommends that you use this setting.
G.711	Specifies 3.4 kHz audio at 64 kbps.
G.722	Specifies 7 kHz audio at 64 kbps.
G.722.1	Specifies 7 kHz audio at 16, 24, or 32 kbps.
PT724™	Specifies 7 kHz audio at 24 kbps.
PT716plus™	Specifies 7 kHz audio at 16, 24, or 32 kbps.
Siren™ 14	Specifies 14 kHz audio at 24, 32, or 48 kbps.

## To set the audio algorithm for LAN calls

1. Open the AdminTools **Audio Preferences** page:
  - a. Start AdminTools and click  Audio.
  - b. Click the Audio Preferences tab.



2. Set **Audio algorithm for LAN (H.323) calls** as follows:


Option	Description
Automatic	Allows the system to negotiate to the highest algorithm supported by all of the call participants. PictureTel recommends that you use this setting.
G.711	Specifies 3.4 kHz audio at 64 kbps.
G.722	Specifies 7 kHz audio at 64 kbps.

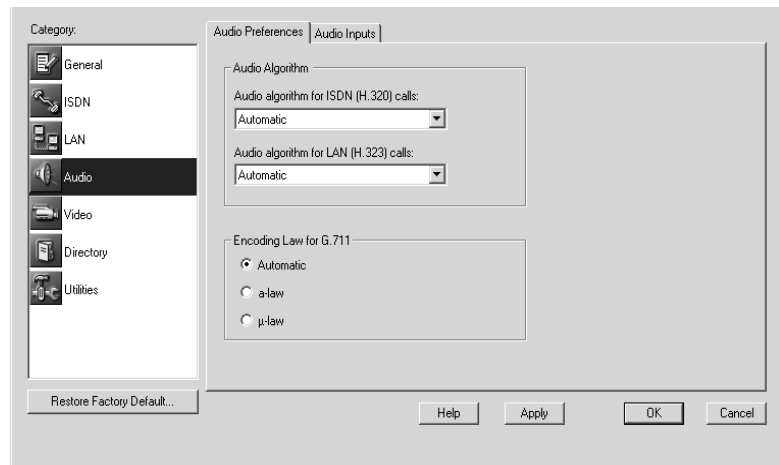
Option	Description
G.722.1	Specifies 7 kHz audio at 16, 24, or 32 kbps.
G.723.1	Specifies 3.4 kHz audio at 6 kbps.
G.728	Specifies 3.4 kHz audio at 16 kbps.
G.729	Specifies 3.4 kHz audio at 8 kbps.
Siren 14	Specifies 14 kHz audio at 24, 32, or 48 kbps.

## Choosing the G.711 Encoding Law for Your Location

The proper G.711 setting for your location should appear in the Audio Preferences page by default. If you're uncertain about the appropriate setting, check the information supplied by your network provider in the *Preparing Your Network for Collaboration* document.

### To set the G.711 encoding law

1. Open the AdminTools **Audio Preferences** page:
  - a. Start AdminTools and click  Audio.
  - b. Click the Audio Preferences tab.




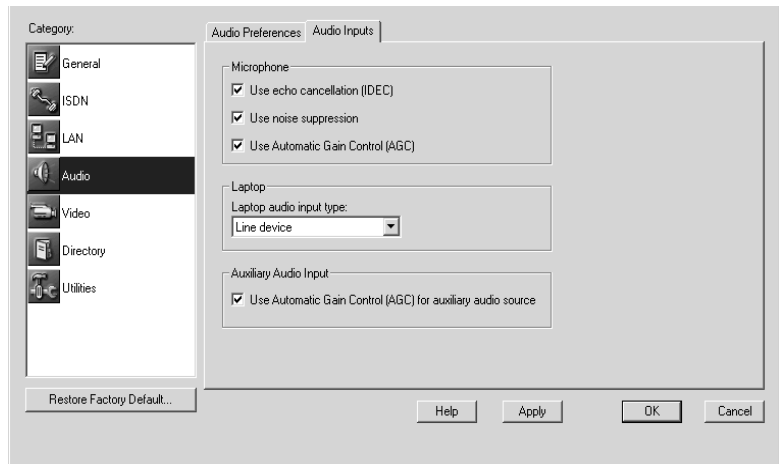
2. Choose the appropriate *Encoding Law for G.711* for your location as follows:

Option	Description
Automatic	Allows the system to automatically determine the encoding law according to the system location.
μ-law	Required for North America, Japan, and Korea.
a-law	Required in most other parts of the world.

## Configuring the Microphones

### To configure the microphones

1. Open the AdminTools *Audio Inputs* page:
  - a. Start AdminTools and click  Audio.
  - b. Click the Audio Inputs tab.



2. Choose the *Microphone* audio processing options as follows:

Option	Description
Use echo cancellation (IDEC)	<p>Enables Integrated Dynamic Echo Cancellation (IDEC™), which is self-calibrating echo cancellation. This option prevents the people at your site from hearing themselves through the speakers at the far end, which can impede audio quality because of the delay involved.</p> <p><b>Note:</b> In situations where there is no echo, or where you require pure tonal sound, you should disable IDEC.</p>
Use noise suppression	Enables the system to filter out background noises, such as noise from air ventilation systems.
Use Automatic Gain Control (AGC)	Enables the system to transmit sound at a constant level, so no difference in volume is noticeable when speakers move or different people speak.
Use Automatic Gain Control for auxiliary audio source	Enables the system to use AGC for the auxiliary audio device. The auxiliary AGC controls the audio for the VCR to keep its level matched to the PowerMic level.

## Adding Optional Audio Components

### Adding Laptop Output

You can add laptop (or PC) audio output to your system by connecting a laptop to the ImageShare or ImageShare II device, and then connecting the ImageShare or ImageShare II to your system's computer box. For instructions, see the *Installing and Using the ImageShare Devices* document.

### Adding PowerMic Microphones

You can use up to a total of four PowerMic microphones with your system. For instructions on connecting additional microphones, see the *Installing the PowerMic* document.

# Configuring Video

## Setting Video Preferences

The video algorithm determines the method of compression used on the video transmitted during a call.


PictureTel recommends that you use the default Automatic setting. This setting allows the sites in the call to negotiate to the highest common algorithm, which results in the best video quality possible.



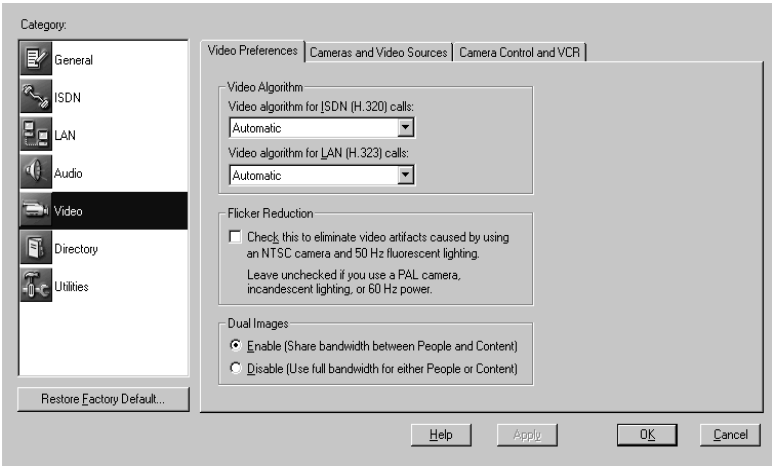
If you force the system to use a specific video algorithm, and the other systems in the call don't support it, the call will connect using the H.261 algorithm.

You set the video algorithms for ISDN and LAN calls separately.

### To set the video algorithm for ISDN calls

1. Open the AdminTools *Video Preferences* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Video Preferences tab.




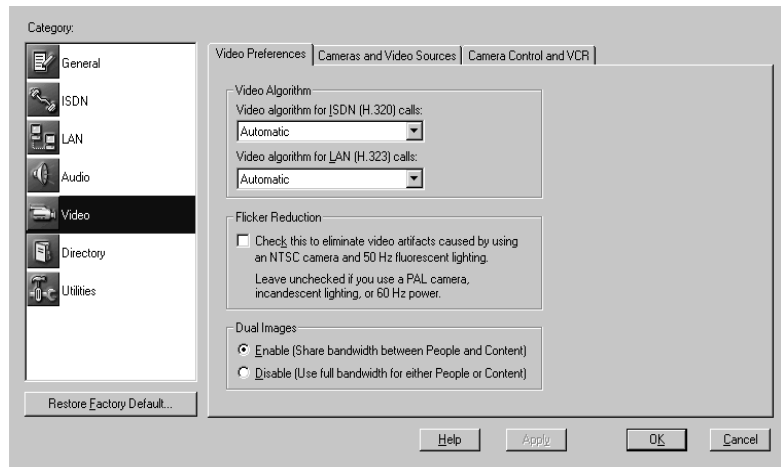


**2. Set Video algorithm for ISDN (H.320) calls as follows:**

Setting	Description
Automatic	Allows the system to negotiate to the highest algorithm supported by all of the call participants.
H.263+	Provides an enhanced version of H.263, with improved coding efficiency, video motion handling, and network error resiliency.
H.263	Compared to H.261, provides better coding efficiency at video transmission rates of 384 or above and better video motion handling.
H.261	Provides good video resolution. H.261 is supported by all H.320 and H.323 enabled videoconferencing terminals.

## To set the video algorithm for LAN calls

1. Open the AdminTools *Video Preferences* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Video Preferences tab.




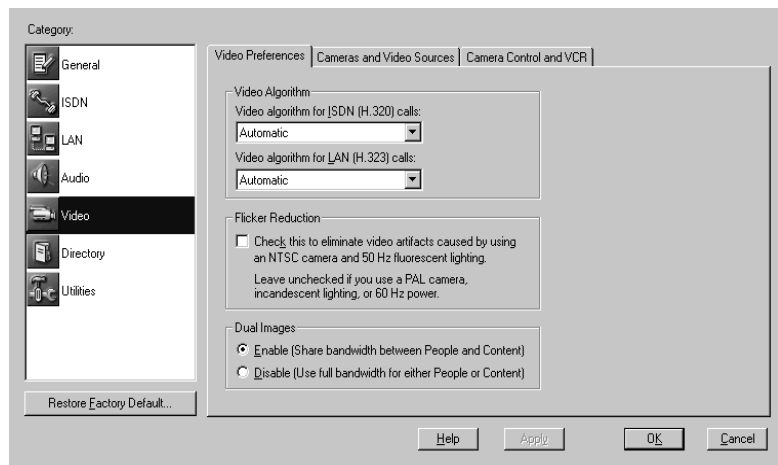
2. Set *Video algorithm for LAN (H.323) calls* as follows:

Setting	Description
Automatic	Allows the system to negotiate to the highest algorithm supported by all of the call participants.
H.263+	Provides an enhanced version of H.263, with improved coding efficiency, video motion handling, and network error resiliency.
H.263	Compared to H.261, provides better coding efficiency at video transmission rates of 384 or above and better video motion handling.

Setting	Description
H.261	Provides good video resolution. H.261 is supported by all H.320 and H.323 enabled videoconferencing terminals.

## To enable Flicker Reduction

1. Open the AdminTools *Video Preferences* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Video Preferences tab.




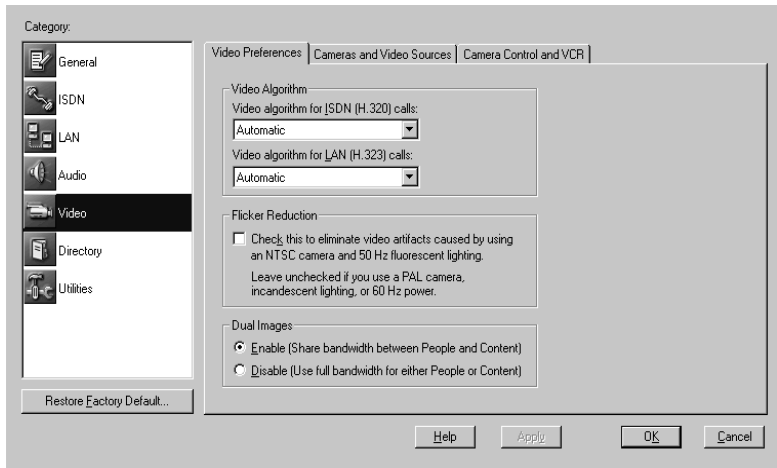
2. Enable *Flicker Reduction* as follows:

Setting	Description
Eliminate video artifacts caused by using an NTSC camera or monitor and 50 Hz fluorescent lighting. Leave unchecked if you use a PAL camera, incandescent lighting, or 60 Hz power.	Synchronizes the screen display with the power frequency used by the local electric lighting. If you don't know if this check box should be checked or not, try the system with the check box checked and then not checked to see which way looks better.

To enable or disable Dual Images

1. Open the AdminTools *Video Preferences* page:

- a. Start AdminTools and click  Video.
- b. Click the Video Preferences tab.




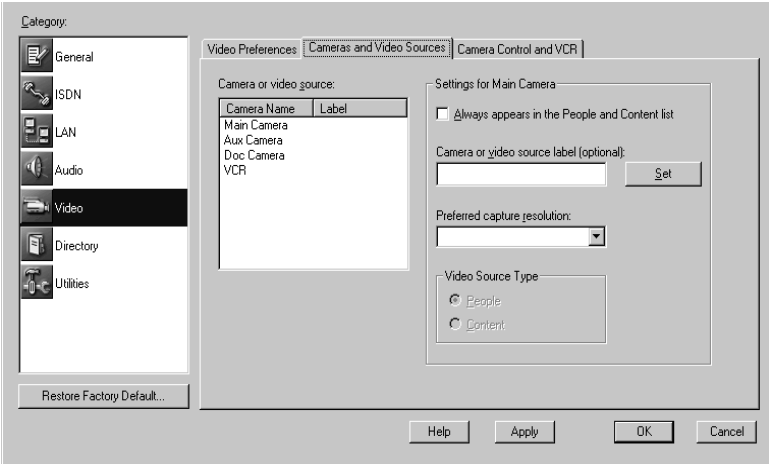
**2. Enable or disable *Dual Images* as follows:**

Setting	Description
Enable (Share bandwidth between People and Content)	Allows People and Content sources to share the same bandwidth; thus, conference participants can view both simultaneously.
Allow system to dynamically adjust People and Content bandwidth allocation	Allows the system to allocate bandwidth to the video source (either People or Content) that needs it the most at any given time. For example, if a participant is presenting a slide show, the system will provide more bandwidth to Content when the participant changes a slide; when the participant is speaking, the system will allocate more bandwidth to People.
Disable (Use full bandwidth for either People or Content)	Allows only one video source (either People or Content) to be sent. Because the full bandwidth is allocated to that video source, it appears on the screen more quickly. Far-end participants can see the near-end participants or Content, but not both at the same time.

## Configuring Video Sources

### To set up cameras and video sources

1. Open the AdminTools *Cameras and Video Sources* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Cameras and Video Sources tab.



**2. Click the camera or video source you want to configure in the *Camera or Video Source* list.**

All the available video sources appear on this list, such as the various cameras, the VCR, the Laptop, and the Windows Desktop.

**3. Configure the selected video source as follows:**


Option	Description
Always appears in the People and Content list	Adds the video source to the Collaboration application's People and Content list even when the video source is disconnected.
Camera or video source label (optional)	Allows you to name the camera or video source. The name you choose identifies the source in the Collaboration application's People and Content list.
Preferred capture resolution	Sets one of these resolutions: QCIF (176x120) CIF (or FCIF) (352x240) 4CIF (704x480) XGA (1024x768)

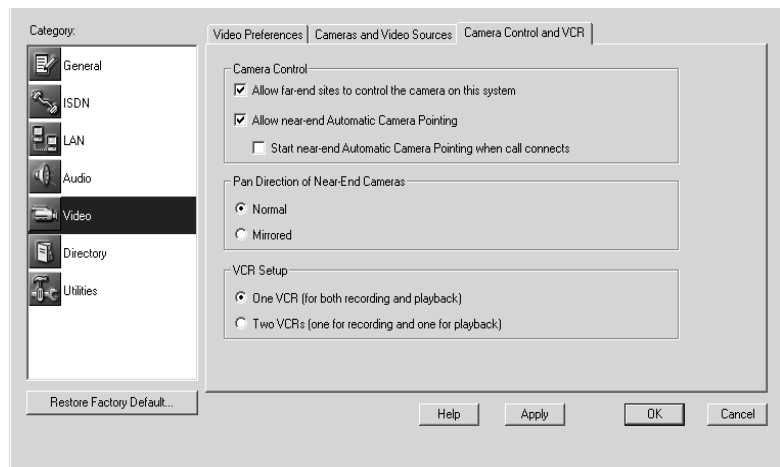
Option	Description
Video Source Type	Allows you to define the video source type as either People or Content for the auxiliary camera.

## Configuring Camera Behavior

The PictureTel 900 Series system provides several camera control options which determine the behavior of the system camera(s).

### To configure the camera behavior

1. Open the AdminTools **Camera Control and VCR** page:
  - a. Start AdminTools and click  Video.
  - b. Click the Camera Control and VCR tab.



**2. Configure the camera control options as follows:**

Setting	Description
Allow far-end sites to control the camera on this system (Far-End Camera Control)	Allows callers at the far-end sites to control the camera at the near-end site when that camera is being shown to the far end. The far-end site can pan, tilt, and zoom the camera, as well as use presets and turn Automatic Camera Pointing on and off.
Allow near-end Automatic Camera Pointing (ACP)	Automatically points the camera at the speaker. If you enable ACP, users can turn this feature on and off during a call using the remote control or on-screen camera controls.
Start near-end Automatic Camera Pointing when call connects	Starts ACP at the beginning of each call.
Pan Direction of Near-End Cameras	Normal causes the camera to behave in the same manner as a scroll bar. For example, press the right arrow to look further to the right on the monitor; press the left arrow to look further to the left. This is the recommended setting. Mirrored causes the camera to move to the right when you press the right arrow.

**Adding Optional Video Components**

To add video components, you must install the hardware and then use AdminTools to configure the system to use it.



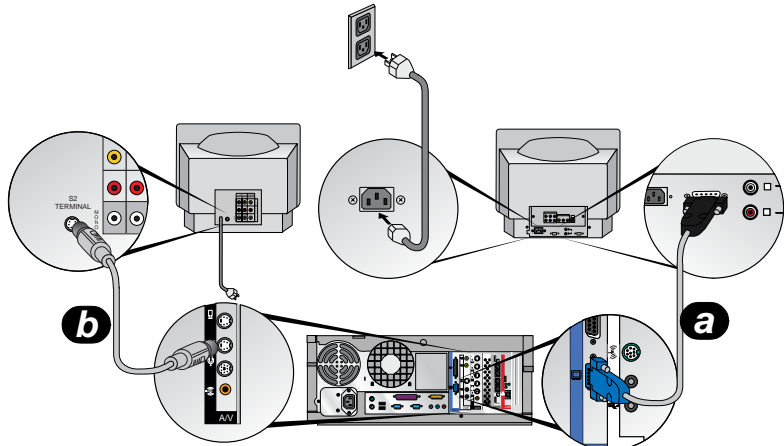
## Adding a Second Monitor

If you ordered one monitor with your system, you received an SVGA/XGA monitor. If you ordered two monitors, the second monitor is an NTSC/PAL monitor. With a dual-monitor system, you can view People on the NTSC/PAL monitor and view Content, such as presentations and reports, on the SVGA/XGA monitor.

**Note:** When adding a second monitor, be sure to install the PTZ camera onto the NTSC or PAL monitor and *not* onto the SVGA/XGA monitor.

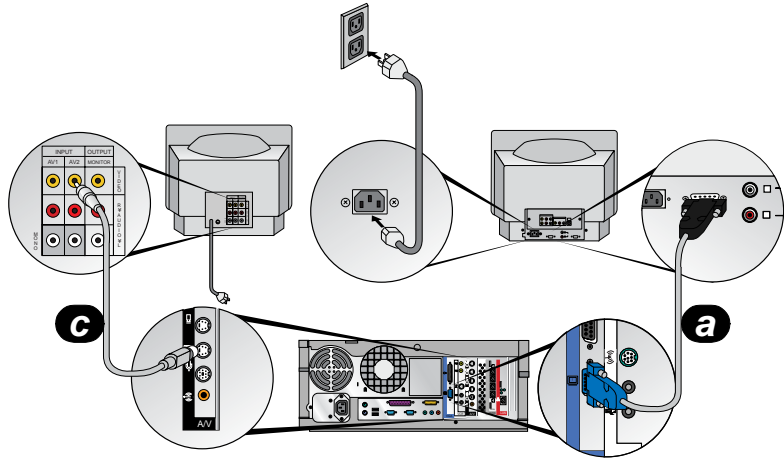
### To add a second monitor

1. Power off your system.
2. If you are installing the second monitor on a cart, place the computer box on the same cart, and see the cart documentation for installation instructions. If you are not installing the second monitor on a cart, place the monitor near the computer box.
3. Plug one end of the VGA cable **a** into the connector on the back of the SVGA/XGA monitor.
4. Plug the other end of the VGA cable **a** into the connector on the VGA board of the computer box.



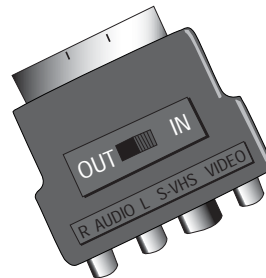
5. Plug one end of the video cable **b** into the 4-pin connector on the A/V board of the computer box.

If you are using the composite video cable **c** (shipped separately), rather than the video cable **b**, the video cabling typically looks like this:



**Note:** In European countries, you may need to use a Scart adapter.

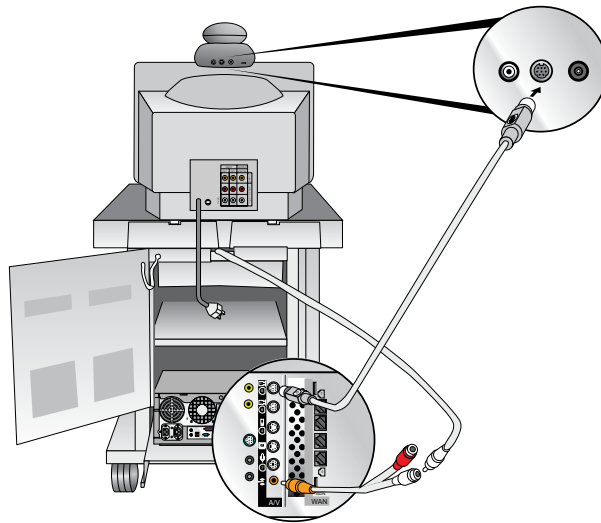
6. If necessary, plug the optional composite video cable **c** (shipped separately) into the Scart adapter (shipped separately), and connect the Scart adapter to the back of the monitor. Then plug the composite video cable into the 4-pin connector on the A/V board of the computer box. Make sure that the Scart adapter switch is switched to the IN position.



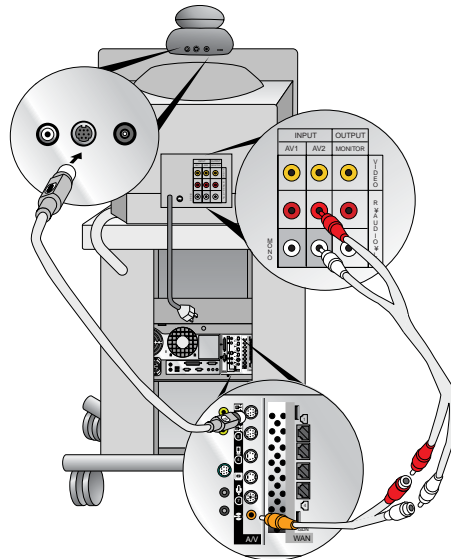
7. Plug the video cable **b** into the 4-pin connector on the back of the NTSC/PAL monitor.

8. If the NTSC/PAL monitor is not on a Premier Cart, plug the power cable into a wall outlet. If the NTSC/PAL monitor is on a Premier Cart:
  - a. Run the power cable from the monitor down through the center channel on the rear of the cart.
  - b. Plug the power cable into the power adapter shipped with the cart.
  - c. Plug the power adapter into the power strip on the rear of the cart.
9. Plug the SVGA/XGA monitor power cable into a wall outlet.
10. If a PictureTel 70 camera is being installed onto the NTSC/PAL monitor, see the *Installing the PictureTel 70 Room Camera* document for camera mounting instructions.

If the NTSC/PAL monitor is installed on a cart with Bose speakers, the PictureTel 70 camera and audio cabling typically looks like this (note that this illustration shows a Premier Cart):

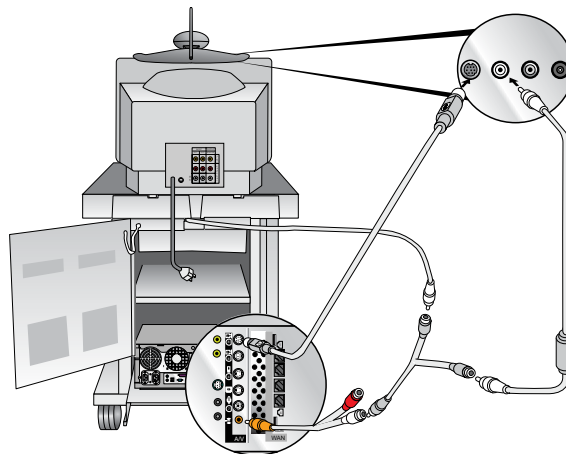


If the NTSC/PAL monitor is installed on a tabletop or on a cart without Bose speakers, the PictureTel 70 camera and audio cabling typically looks like this:

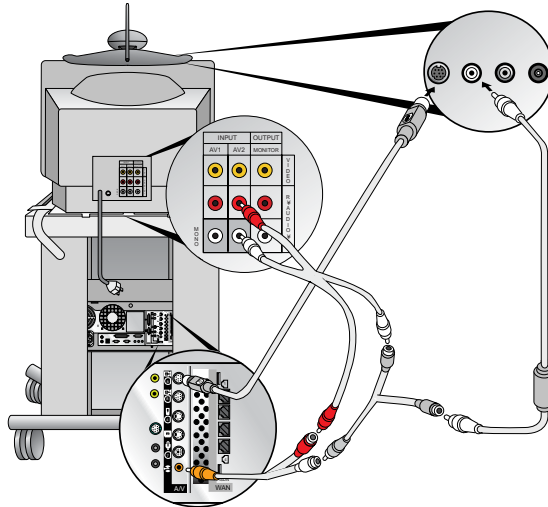


11. If a PictureTel 80 camera is being installed onto the NTSC/PAL monitor, see the *Installing the PictureTel 80 Dynamic Locating Camera* document for camera mounting instructions.

If the NTSC/PAL monitor is installed on a cart with Bose speakers, the PictureTel 80 camera and audio cabling typically looks like this (note that this illustration shows a Premier Cart):




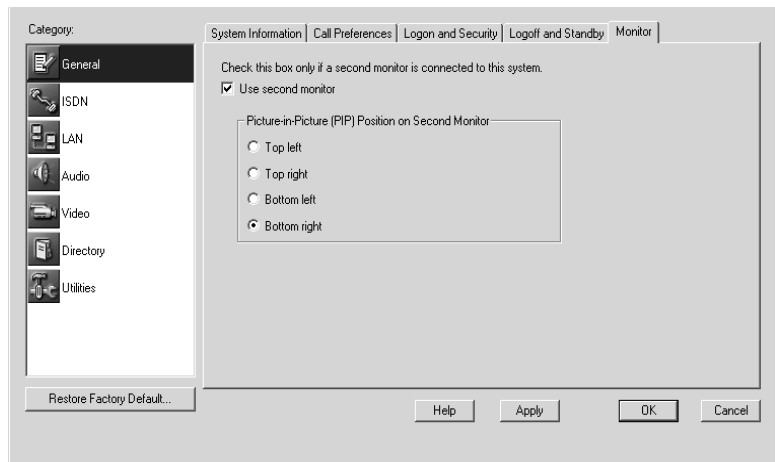
If the NTSC/PAL monitor is installed on a tabletop or on a cart without Bose speakers, the PictureTel 80 camera and audio cabling typically looks like this:



12. Power on your system.

13. Open the AdminTools **Monitor** page:

- a. Start AdminTools and click  General.
- b. Click the Monitor tab.



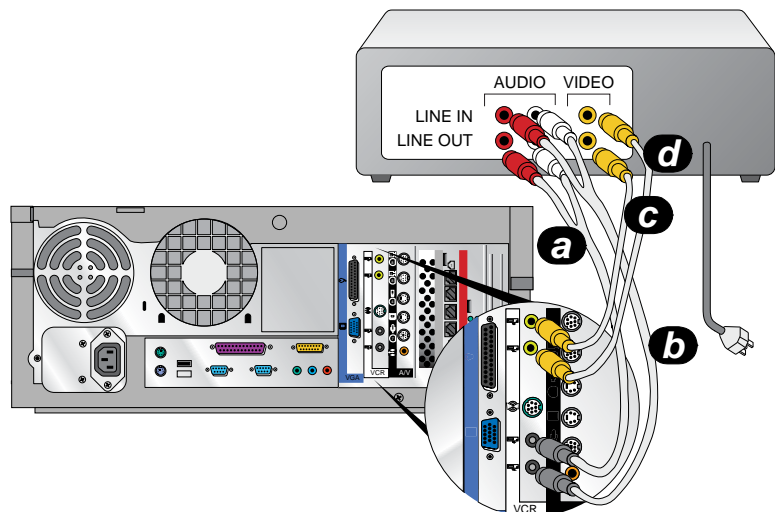
14. Check the *Use second monitor* check box.
15. Set the PIP location using the *Picture-in-Picture (PIP) Position on Second Monitor* option.


This choice is only necessary for the second monitor, since users can choose the position of the PIP on the main monitor using the remote control or keyboard.

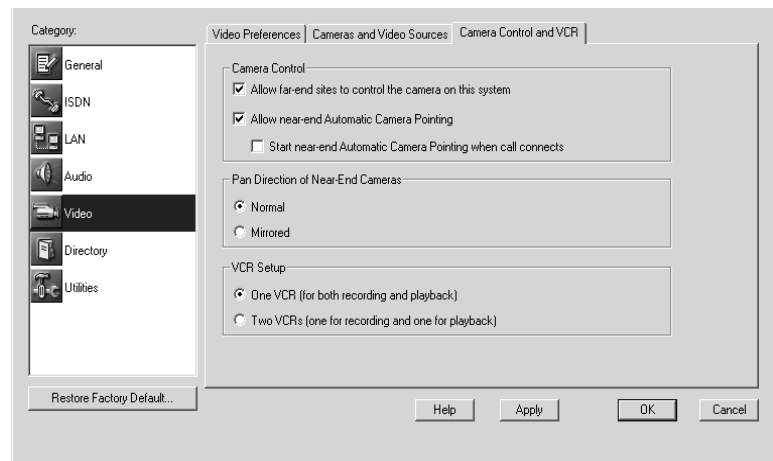
## Adding VCRs

### To add one VCR to your system

1. Power off your system.
2. Locate the VCR and the computer box in the same cart or near each other.
3. Plug one audio cable **a** into the AUDIO IN connector on the VCR board of the computer box and into the AUDIO OUT connectors on the VCR.
4. Plug the other audio cable **b** into the AUDIO OUT connector on the VCR board of the computer box and into the AUDIO IN connectors on the VCR.



5. Plug one video cable **(c)** into the VIDEO IN connector on the VCR board of the computer box and into the VIDEO OUT connector on the VCR.
6. Plug the other video cable **(d)** into the VIDEO OUT connector on the VCR board of the computer box and into the VIDEO IN connector on the VCR.
7. If the VCR is not located in a Premier Cart, plug the VCR power cable into a wall outlet. If the VCR is located in a Premier Cart, plug the VCR power cable into the power strip in the Premier Cart.
8. Power on your system.
9. Open the AdminTools *Camera Control and VCR* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Camera Control and VCR tab.

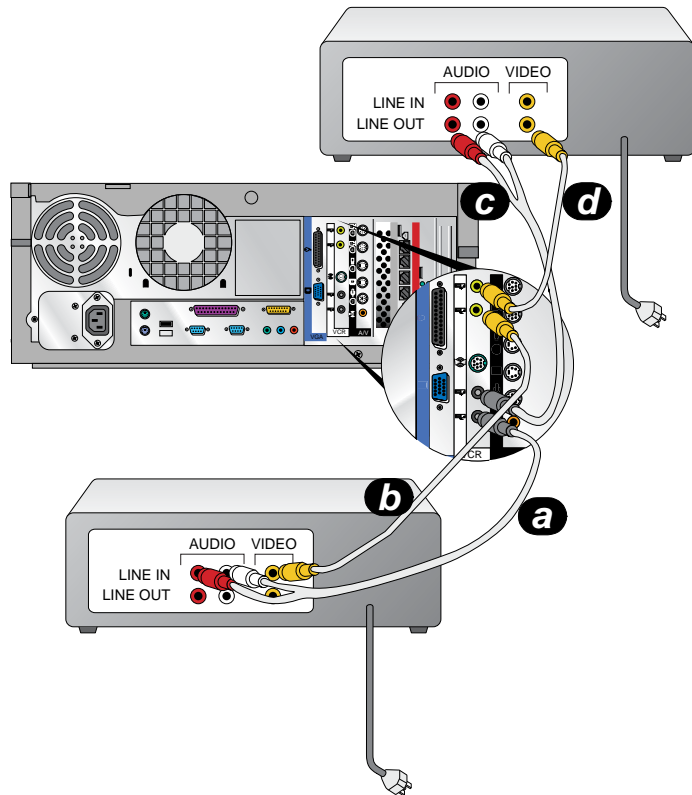


10. In the *VCR Setup* section, click *One VCR (for both recording and playback)*.


## To add two VCRs to your system

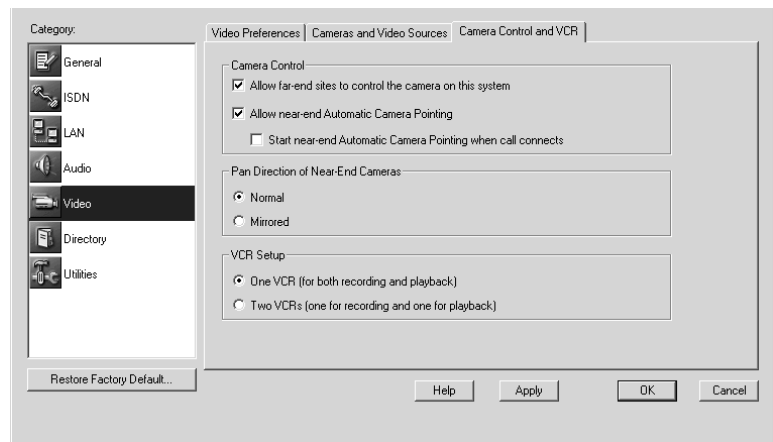
**Note:** When you add two VCRs to your system, one VCR is referred to as the Record VCR, while the other is referred to as the Play VCR.

1. Power off the system.
2. Locate at least one of the VCRs and the computer box near each other.
3. Plug one audio cable **a** into the AUDIO OUT connector on the VCR board of the computer box and into the AUDIO IN connectors on the Record VCR.
4. Plug one video cable **b** into the VIDEO OUT connector on the VCR board of the computer box and into the VIDEO IN connector on the Record VCR.





5. Plug the other audio cable **(c)** into the AUDIO IN connector on the VCR board of the computer box and into the AUDIO OUT connectors on the Play VCR.
6. Plug the other video cable **(d)** into the VIDEO IN connector on the VCR board of the computer box and into the VIDEO OUT connector on the Play VCR.
7. If the VCRs are not located in Premier Carts, plug the power cables into a wall outlet. If the VCRs are located in Premier Carts, plug the power cables into the power strips in the Premier Carts.
8. Power on your system.
9. Open the AdminTools *Camera Control and VCR* page:
  - a. Start AdminTools and click  Video.
  - b. Click the Camera Control and VCR tab.



10. In the *VCR Setup* section, click *Two VCRs (one for recording and one for playback)*.

# 6

## *Setting Up Directory Services*


There are two types of Directories:

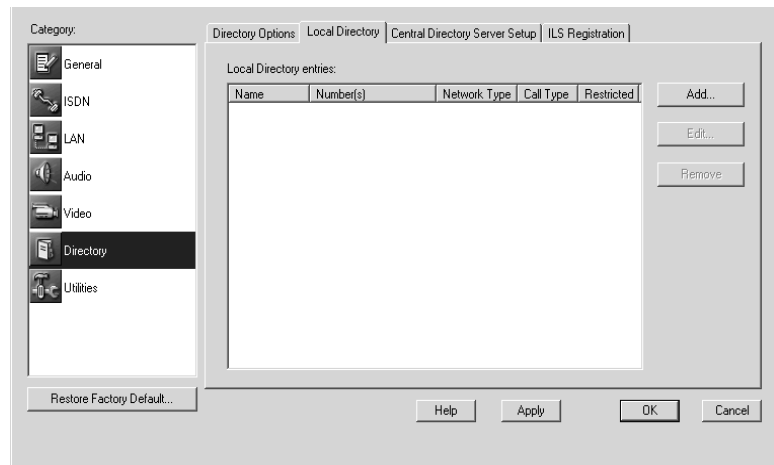
- ❑ **Local Directories**, which are hosted on the PictureTel 900 Series system and are accessible to anyone who can open the Collaboration application.
- ❑ **Central Directories**, which are hosted on a server and can be accessed by users from the PictureTel 900 Series system once you configure the system to use them.

### **Setting Up a Local Directory**

Once you set up a Local Directory, no further configuration is necessary.

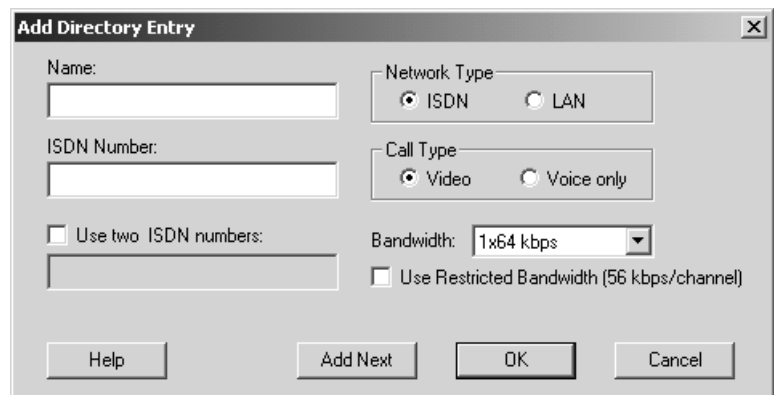
## To set up a Local Directory

1. Open the AdminTools *Directory Options* page:
  - a. Start AdminTools and click  Directory.
  - b. Click the Local Directory tab.



2. Use the buttons at the right of the page to **Add**, **Edit**, and **Remove** entries.

If you choose Add or Edit, a dialog box appears allowing you to record or modify Directory entries.



**3. Record or modify the entry as follows:**

Option	Description
Name	Identifies the entry in the Directory. You can use the name of a person, conference room, or company.
Network Type	Specifies whether the system should call the site via ISDN or LAN.
ISDN Number	Indicates the video number of the system as dialed (including any extra digits, such as 9).
Use two ISDN numbers	Provides a second number for ISDN calls when applicable.
Call Type	Specifies whether the call is video or voice-only.
Bandwidth	Sets the bandwidth for video calls to the site. This option is not available for voice-only calls.
Use Restricted Bandwidth (56 kbps/channel)	Determines whether the system will require users to make calls to the site at restricted rates (multiples of 56 kbps) only.

**4. Click *OK*.**

## Setting Up Directories on a Server

To set up a Central Directory, you must install the PictureTel Directory Service Tools application onto a Microsoft Windows server platform and then configure the PictureTel 900 Series system to access the server over the LAN.

## Loading Server Software


### To install the Directory Services Setup Utility

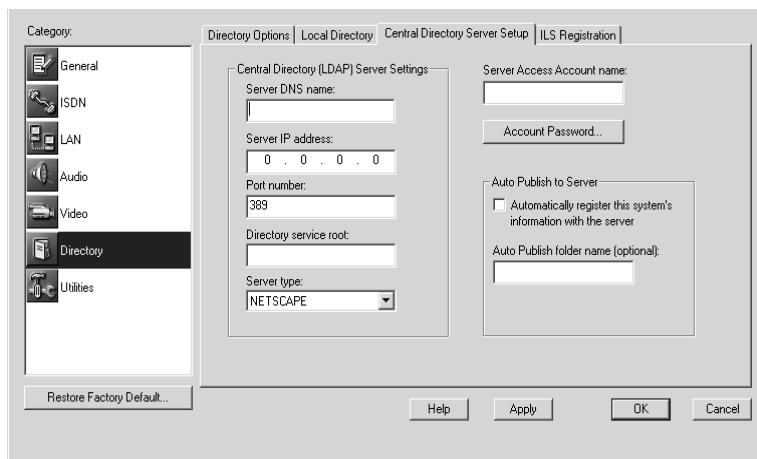
1. Load the Directory server application that you have chosen to use.
2. Insert the *PictureTel Directory Service Tools* CD into the CD-ROM drive of the intended Directory server.
3. Navigate to the CD drive.
4. Double-click the *Directory Service Setup* icon.
5. Follow the onscreen instructions to complete the installation.

## Setting Up a Central Directory

Once you set up a networked Directory, your users can access it to look up conference sites in the Central Directory.

### To set up a Central Directory

1. Open the *Central Directory Server Setup* page:
  - a. Start AdminTools and click  Directory.
  - b. Click the Central Directory Server Setup tab.



The screenshot shows the 'Central Directory Server Setup' window. On the left is a 'Category' list with icons for General, ISDN, LAN, Audio, Video, Directory (selected), and Utilities. Below the list is a 'Restore Factory Default...' button. The main area has four tabs: 'Directory Options', 'Local Directory', 'Central Directory Server Setup' (active), and 'ILS Registration'. The 'Central Directory (LDAP) Server Settings' section contains: 'Server DNS name:' (text box), 'Server IP address:' (text box with '0 . 0 . 0 . 0'), 'Port number:' (text box with '389'), 'Directory service root:' (text box), and 'Server type:' (dropdown menu with 'NETSCAPE' selected). The 'Server Access Account name:' section has a text box and an 'Account Password...' button. The 'Auto Publish to Server' section has a checkbox for 'Automatically register this system's information with the server' (unchecked) and a text box for 'Auto Publish folder name (optional)'. At the bottom are 'Help', 'Apply', 'OK', and 'Cancel' buttons.

2. Configure the Central Directory server as follows (you may need to obtain some of this information from your LDAP server administrator, if your organization has one):

Option	Description
Server DNS name	Specifies the DNS of the Directory server (the system on which the Directory Service Tools application is installed). This is not required if the Server IP address is provided.
Server IP address	Specifies the IP address of the Directory server, if applicable. This is not required if the Server DNS name is provided.
Port number	Indicates the port number of the server assigned to the Directory server.
Directory service root	Indicates the root of the data tree that contains all collaboration system entries. You can obtain the root from your LDAP server administrator.
Server type	Specifies whether the server type is Netscape Directory Server <sup>®</sup> or Microsoft Exchange.
Server Access Account name	Specifies the name of the Directory server access account. See your server administrator for the account name.

---

Option	Description
Account password	Specifies the password of the Directory server account for the automatically registered information of this system. See your server administrator for the account password.
Automatically register this system's information with the server	Allows the system to automatically create or update its own entry in the Directory server at startup.
Auto Publish folder name (optional)	Specifies the name of the Directory server folder that contains the automatically registered information of this system. See your server administrator for the folder name.

3. Click **OK**.

## Managing One or More Servers

The PictureTel 900 Series system can access one Directory server at a time. If you need to use a different server than the one you are currently set up to use, change the options on the Central Directory Server Setup page.

# *Allowing Data Sharing*

## **Managing Data Sharing Options**

You can extend your users' data sharing options as follows:


- ❑ **To allow users to exchange files during conferences**, enable the File Transfer application.
- ❑ **To allow users to edit files during conferences**, install the desired applications on the PictureTel 900 Series system.
- ❑ **To allow users to store and retrieve files from a server**, set up a Document Server.

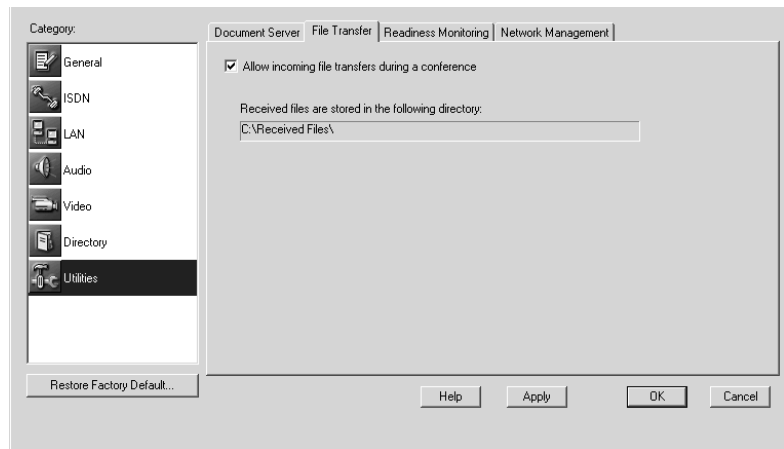
## **Allowing File Transfer**

The File Transfer application allows users to exchange data files during calls.



## To configure File Transfer

1. Open the AdminTools *File Transfer* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the File Transfer tab.



## 2. Configure File Transfer as follows:

Option	Description
Allow incoming file transfers during a conference	Enables the system to accept files transferred from other systems during calls.
Received files are stored in the following directory	Displays the directory of transferred files. This option makes system management easier, as it restricts received files to a single location.

## Installing User Applications

During a call, you may want to edit the documents that you're sharing with the far-end users. If so, you must install the applications used to create the documents onto the PictureTel 900 Series system.

To install software, follow the same procedure as you would to install an application on a typical PC running Microsoft Windows. For specific instructions, see the Windows documentation.

## Allowing Document Server Use

Users can access data during meetings in one of these ways:

- ❑ Using the optional Document Server.
- ❑ Using diskettes.
- ❑ Using CDs.
- ❑ Browsing the network.

A Document Server provides several advantages, such as:

- ❑ **Flexibility.** Users aren't hindered by the space limitations imposed by diskettes.
- ❑ **Frees hard drive space.** Users store the files they intend to share on the server, not on the PictureTel 900 Series system.
- ❑ **Security.** User data is secure. Each user's access to the server is limited to an individual folder created at logon.

## Setting Up a Document Server

To set up a Document Server, you must install the server software on a Windows NT server and then configure the PictureTel 900 Series system to use it.

### System Requirements

- ❑ Microsoft Internet Information Server (IIS) version 4.0 or higher
- ❑ Microsoft Windows NT Server 4.0 or higher with Service Pack 3 or higher
- ❑ An NTFS partition
- ❑ 90 MHz or faster Intel® Pentium processor
- ❑ 64 MB of RAM
- ❑ 10 MB of hard drive disk space per user


## To install Document Server software

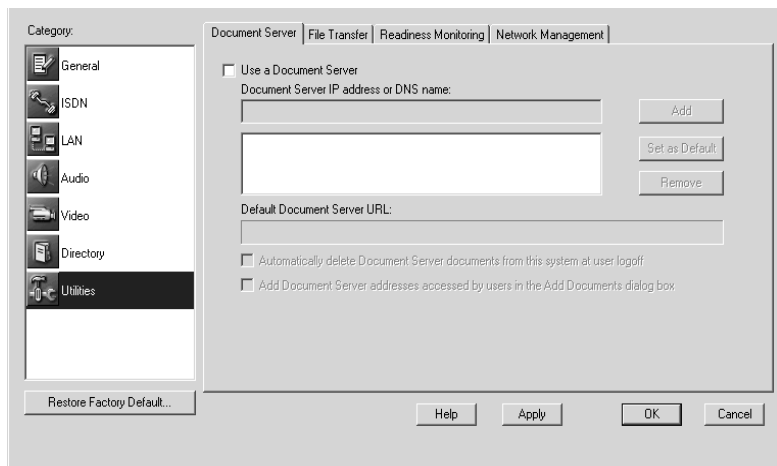
1. Log on to the system you intend to use as the server.
2. Insert the *PictureTel Document Server* CD into the CD-ROM drive.
3. Double-click the CD-ROM drive icon and double-click the *Install Document Server* icon.
4. Follow the onscreen instructions to complete the installation.

## Configuring the PictureTel 900 Series System to Use a Document Server

After installing the Document Server software on the server, you must configure how your users use the server from the PictureTel 900 Series system.

### To configure the system to use a server

1. Open the AdminTools *Document Server* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the Document Server tab.



**2. Configure the system's Document Server use as follows:**

<b>Option</b>	<b>Description</b>
Use a Document Server	Enables the system to access a Document Server that was previously installed.
Document Server IP address or DNS name	Identifies the server's IP address or DNS name.
Add	Adds the server specified in the Document Server IP address or DNS name field to the server list box. The listed servers are available to users.
Set as Default	Specifies the selected server as the default server for this system. This server appears first in the server list box presented to users.
Remove	Removes the selected server from the server list box. (If the removed server was the default server, the first server listed in the list box becomes the default server.)
Default Document Server URL	Displays the full URL of the default Document Server. (If no default is selected, this field displays the URL of the first server listed in the list box.)
Automatically delete Document Server documents from this system at user logoff	Directs the system to delete any data files added by users to the PictureTel 900 Series system. The system deletes the files when users log off.
Add Document Server addresses accessed by users in the Add Documents dialog box	Directs the system to add a Document Server to the list box in the PictureTel 900 Series system's Add Documents dialog box the first time a user browses to it. You should check this box if you checked Use a Document Server.

## **Observing Data Sharing Tips and Guidelines**

### **If You Allow File Transfer...**

- ❑ Install a virus protection package and keep it updated with the latest definitions.
- ❑ If you haven't checked the Automatically delete Document Server documents from this system at user logoff check box, remind users to delete the data files they place on the system after sending or receiving files.

### **If You Allow Document Server Use...**

- ❑ Check that users have one of the following browsers installed on their desktop computers:
  - Microsoft Internet Explorer version 4.0 or higher
  - Netscape® Navigator version 4.0 or higher
- ❑ Publish the Document Server URL(s) throughout your organization.
- ❑ Customize the Document Server logon message to suit your collaboration environment. To customize the message, edit the Welcome.txt file at C:\inetpub\wwwroot\documentserver\ on the Document Server.
- ❑ Maintain the permissions for the Document Server so that unauthorized individuals can't access other people's accounts.
- ❑ If you haven't checked the Automatically delete Document Server documents from this system at user logoff check box, remind users that you will periodically delete shared files from the Document Server.

# Maintaining the System

## Monitoring System Statistics

The Conference Statistics screen and the Operating Statistics application allow you to view a wide variety of statistics on the system's performance during calls.



The Operating Statistics and Collaboration applications may be run simultaneously, whereas the AdminTools and Collaboration applications *cannot* be run simultaneously.

## Viewing Detailed System Statistics

### To start Operating Statistics

1. Make sure the Collaboration application is running.
2. Choose *Start > Programs > PictureTel iPower> Administrator Information > Operating Statistics*.

### 3. Choose the category of statistics that you want to view.

Select Category:

- System Statistics
- H.323 Statistics
- H.320 Statistics
- Voice Statistics
- Configuration Summary
- Running Loopback Tests
- Logging
- Preferences

System Statistics

	Placed	Received
Total # H.323 Calls:	1	0
Total # H.320 Calls:	0	0
Total # Voice Calls:	0	0

---

Time Since SSW Startup (hh:mm:ss): 16:33:30

Time in Calls Since SSW Startup: 0:00:00

Time in Calls Since Install: 0:00:00

Time in Voice Calls Since SSW Startup: 0:00:00

Time in Voice Calls Since Install: 0:00:00

---

Total Commands from the Remote: 0

Total Local Camera Commands: 0

Help OK Cancel


Category	Description
System Statistics	Displays the total number of calls, total time of calls, and total number of remote control and camera commands issued.
H.323 Statistics	Displays information about H.323 calls on seven pages (State, Video, Audio, Video Channel, Audio Channel, Control Data, and Channel).
H.320 Statistics	Displays information about H.320 calls on six pages (State, Video, Video Errors, Audio, Channel, and Data).
Voice Statistics	Displays information about voice calls.

---

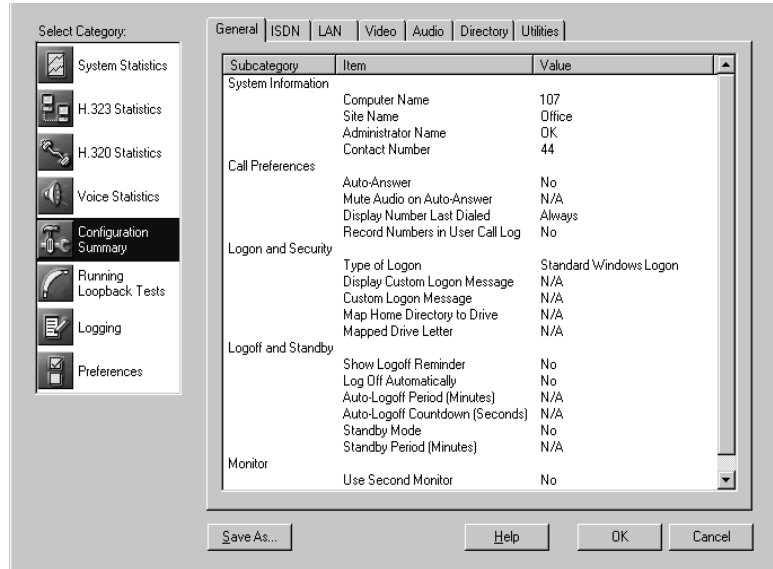
Category	Description
Configuration Summary	Displays summary information about the configuration on seven pages (General, ISDN, LAN, Video, Audio, Directory, and Utilities).
Running Loopback Tests	Displays a list of loopback tests available to run.
Logging	Displays information about the call log and the system logs.
Preferences	Displays preferences that can be set by the system administrator.

## Viewing the Configuration Summary

### To view the system configuration

1. Choose *Start > Programs > PictureTel iPower>Administrator Information > Operating Statistics*.
2. Click  *Configuration Summary*.





### 3. Choose a tab to view detailed information.

Page	Description
General	Provides details related to System Information, Call Preferences, Logon and Security, Logoff and Standby, and Monitor.
ISDN	Provides details related to ISDN, Advanced ISDN Configuration, ISDN Bandwidth, ISDN Setup, IMUX Setup, and Gateway Setup.
LAN	Provides details related to LAN Configuration, Gatekeeper Setup, and LAN Bandwidth.

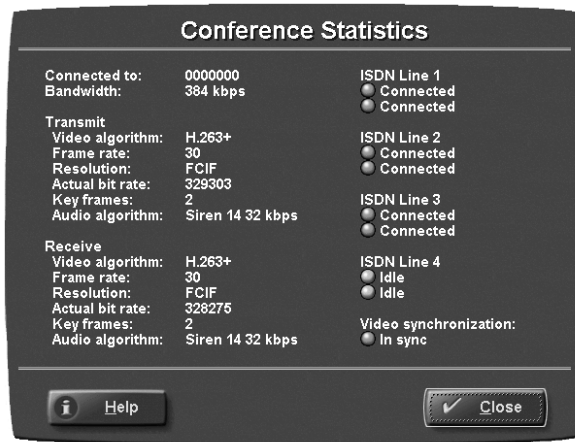
---

Page	Description
Video	Provides details related to Video Preferences, and Camera and Video Sources.
Audio	Provides details related to Audio Preferences and Audio Inputs.
Directory	Provides details related to Directory Options, Central Directory Server Setup, and ILS Registration.
Utilities	Provides details related to Document Server, File Transfer, Readiness, and Network Management.

## Viewing Statistics for the Current Call

### To display the Conference Statistics screen

Double-click the round  7:25 PM **Conference Statistics** icon in the Windows system tray at the bottom of the screen.



## Accessing and Viewing Logs

- From Operating Statistics:
  - Call Log — tracks general information on all of the calls made and answered by the system.
  - System Logs (four logs) — records a variety of technical information that can help you verify system performance and troubleshoot problems. The System Detailed Log, ISDN Log, and BAS Codes Log files are located at C:\DiagLogFile.ptl, C:\ISDNLog.log, and C:\BASCodesLog.log. A log containing a subset of the information in the System Detailed Log is located at C:\SysLogFile.ptl and is designed to be copied onto a diskette.
  - Configuration Summary — lists the specific system settings configured through the AdminTools application. From Operating Statistics, you can view the settings and save the settings as a text file to the location you specify and with a file name you specify. The default file name is PT900SeriesSysConfig.txt.
- From Hardware Diagnostics:
  - Hardware Diagnostics Error Log — tracks information generated by the Hardware Diagnostics application. The log file is designed to be copied onto a diskette and then sent to PictureTel for analysis, should you encounter problems you

can't resolve. This log is intended for use by PictureTel, not end users. The log file is located at  
C:\Program Files\PictureTel\VCS\Diagnostics\ErrorLog.txt.


- From Windows:
  - System, Security, and Application logs — track system, security, and application events. Use Microsoft Event Viewer to view and manage these event logs.

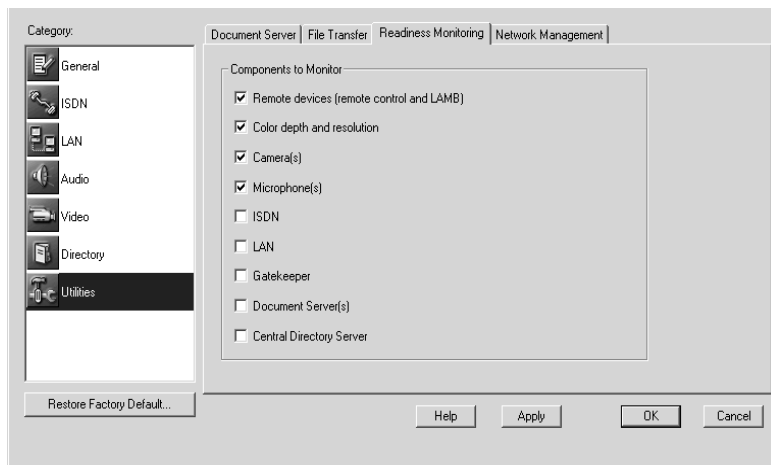
## Optimizing System Performance

The Readiness Monitor feature searches the system components for defects or a deterioration in performance. When you enable Readiness Monitoring, it runs in the background whenever the PictureTel 900 Series system is in use.

When Readiness Monitoring detects a problem, the system displays an exclamation mark icon in the system tray. Double-click the icon to see a message that specifies the problem and suggests one or more remedies.

### To set up Readiness Monitoring

1. Open the AdminTools *Readiness Monitoring* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the Readiness Monitoring tab.



**2. Check the system components you want to monitor.**

Option	Description
Remote devices (remote control and LAMB)	Enables monitoring of the state of the batteries in the remote devices.
Color depth and resolution	Enables monitoring for 16 bit color depth and 800x600 or 1024x768 resolution.
Camera	Enables monitoring of the main camera.
Microphone(s)	Enables monitoring of the microphone(s).
ISDN	Enables monitoring of the ISDN lines.
LAN	Enables monitoring of the LAN network.
Gatekeeper	Enables monitoring of the gatekeeper.
Document Server(s)	Enables monitoring of the document server(s).
Central Directory Server	Enables monitoring of the Central Directory Server.



ISDN Readiness Monitoring determines when a line becomes inactive. In North America, this indicates an error condition. In many other parts of the world, the network deactivates lines between calls. If your network deactivates lines between calls, you should not activate ISDN Readiness Monitoring, since you will get a problem report every time a user hangs up a call.

## Setting Up Virus Protection

Although infection from a computer virus is rare, you should be aware that the PictureTel 900 Series system uses a standard PC microprocessor and is therefore susceptible to virus infection.

PictureTel recommends that you obtain and install a virus protection application and keep it updated.

### To start the virus protection application

For complete information about the virus protection application's capabilities, see the application's hardcopy documentation or online help.



Periodically, you should update your system with a current list of virus definitions.

## Conserving Disk Space

You should conserve space on the hard drive by periodically checking for and eliminating unwanted files.

Check for unwanted files in the following places:

- Received files
- Document Server documents
- Documents placed on the hard drive

## Restoring the System

When you reinstall your software, your system is returned to its original factory state. Any Directory entries and any customized settings you have entered are lost, and any additional software is erased, including system upgrades that you may have applied.

When you install upgrades to the system, Directory entries are retained and any additional software you may have installed is not erased.



PictureTel 900 Series system software does not provide an uninstall program to remove the system software. However, reinstalling the system software will overwrite all of the files created and installed during the original installation.

To save your Directory data before reinstalling the system software, copy C:\Program Files\PictureTel\Vcs\tsdir.ini to diskettes or other external media.

**To restore the system:**

1. Power off the system.
2. Insert the *PictureTel 900 Series System Software* CD into the CD-ROM drive.
3. Insert the boot diskette into the diskette drive.
4. Power on the system.
5. Follow the onscreen instructions to complete the reinstallation.

# *Using Remote Management Tools*

The PictureTel 900 Series system supports two remote management tools:

- WebRemote
- SNMP (Simple Network Management Protocol)




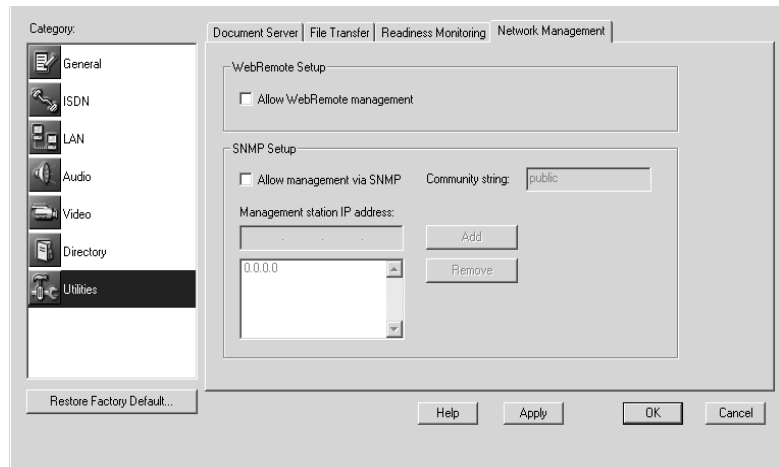
Your choice of management tool depends on your network environment. WebRemote requires only a web browser to control the PictureTel 900 Series system. SNMP requires network management software on your network management station.



## Setting Up WebRemote Management

### To configure the PictureTel 900 Series system for WebRemote management

1. Open the AdminTools *Network Management* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the Network Management tab.



2. Check the *Allow WebRemote management* check box.
3. Click *OK*.

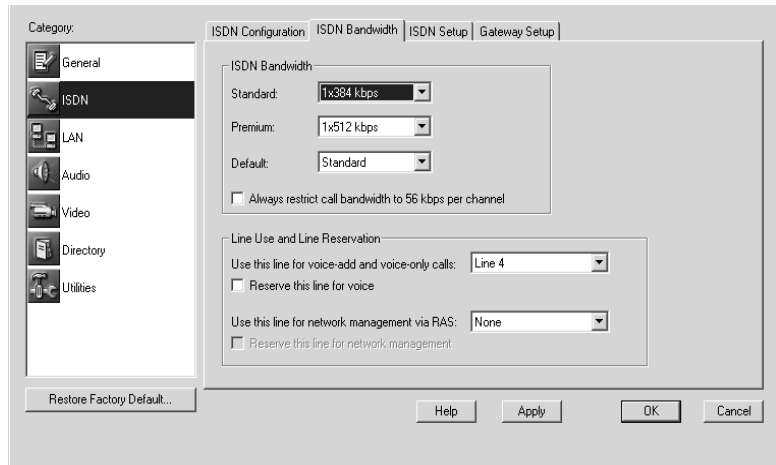
## Setting Up RAS Access Over ISDN

Set up RAS over ISDN if you need to perform network management of a PictureTel 900 Series system but your network management station (NMS) is not connected to the system via a LAN.



To help maintain system security, a PictureTel 900 Series system requires that you configure a RAS dial-up account user with administrative privileges and a password before using RAS dial-up to connect to a remote PictureTel 900 Series system.

1. Open the AdminTools **ISDN Bandwidth** page:
  - a. Start AdminTools and click  ISDN.
  - b. Click the ISDN Bandwidth tab.



2. Choose a line for remote access using the **Use this line for network management via RAS** drop-down list.

When choosing a line, please note the following:

- Do not choose Line 1, which is reserved for calls.
  - Do not choose a line that has been reserved for voice calls.
3. If you want to use the selected line exclusively for remote access, check the **Reserve this line for network management** check box.

## Using WebRemote to Manage the PictureTel 900 Series System

WebRemote requires you to log on with an administrator account and to have one of the following browsers:

- ❑ Microsoft Internet Explorer 5.0 or higher
- ❑ Netscape Navigator 4.6 or higher

### To use WebRemote

1. Launch your web browser.
2. Enter the system's IP address or DNS name.
3. Enter a user name and password that has administrator privileges on the PictureTel 900 Series system.

WebRemote opens.

4. Use WebRemote as follows:

Click...	To...
Call Control	Access the PictureTel 900 Series system Collaboration application.
AdminTools	Access the AdminTools application.
Diagnostics	Access the Hardware Diagnostics application to perform tests and download error log files.
System State	View Readiness Monitoring error messages, shut down the PictureTel 900 Series system applications, or restart the system.
Statistics	View the system statistics.
Alarms	View SNMP alarms.
Help	Access WebRemote online help.

## Setting Up SNMP Management

### Setting Up an SNMP Environment

To set up an SNMP environment, you must install network management software (such as HP OpenView) on the computer you intend to use as your network management station (NMS). You cannot use the PictureTel 900 Series system as the NMS.

### Installing the PictureTel MIBs

Once an SNMP environment is in place, you must install the PictureTel MIBs on the management station.

The PictureTel MIBs are available from the PictureTel web site at the following location: <http://www.polycom.com>.


#### To install the PictureTel MIBs

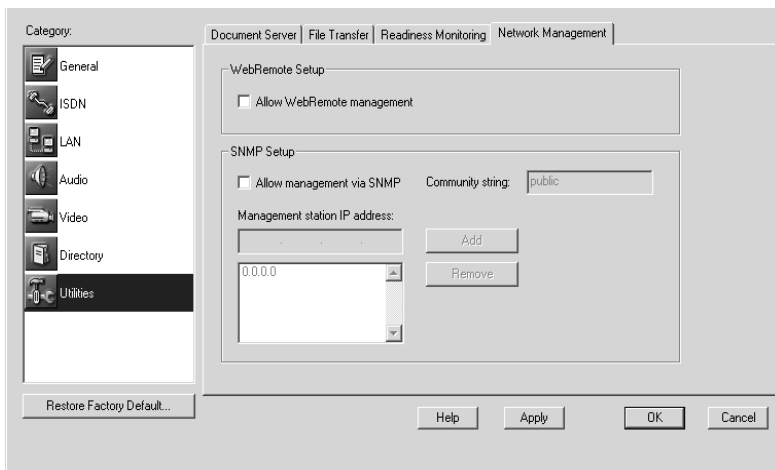
1. From the network management station, launch your web browser.
2. Enter the following URL:  
<http://www.polycom.com>
3. Download the appropriate PictureTel 900 Series collaboration system MIB file.
4. Install the MIBs on the network management station as required by your management software.

For details, see the management application's documentation.

## Configuring the System for SNMP Management

To configure the PictureTel 900 Series system for SNMP management.

1. Open the AdminTools *Network Management* page:
  - a. Start AdminTools and click  Utilities.
  - b. Click the Network Management tab.



2. Configure the system as follows:

Option	Description
Allow management via SNMP	Allows remote management through SNMP.
Community string	Specifies the community string for the system assigned by your network administrator. The community string is used as a type of password.

Option	Description
Management station IP address	Specifies the IP address of the computer with the SNMP management software installed.
Add	Adds the management station's IP address to the list.
Remove	Removes the management station's IP address from the list.

3. Click **Apply**.

### Adding the PictureTel Network Manager

Once you've configured the PictureTel 900 Series system to allow remote management via SNMP, you may choose to use the PictureTel Network Manager application, which is available on the *PictureTel Network Manager* CD. This optional application enhances HP OpenView or other network management software.

## Using SNMP to Manage the PictureTel 900 Series System

For specific instructions on how to use your SNMP network management application to control a remote system, see the documentation that came with the application.

For specific instructions on how to use the PictureTel Network Manager application, see the online help that is part of the application.

# Configuring Internal Multipoint

The Internal Multipoint option lets users add up to three additional sites to their LAN videoconference (for a total of four sites).


To use Internal Multipoint:

- ❑ You must have purchased the Internal Multipoint option.
- ❑ All sites must be connected as LAN calls.
- ❑ You must initiate the videoconference.

Users can also add voice-only calls to their multipoint conferences.

## Allowing Internal Multipoint

### To allow internal multipoint conferences

1. Open the AdminTools *Internal Multipoint* page:  
Start AdminTools and click  Multipoint.
2. Check the *Allow internal multipoint conferences on this system* check box.

## Setting the Default Video Display

### To set the default video display for internal multipoint

1. Open the AdminTools *Internal Multipoint* page:

Start AdminTools and click  Multipoint.

2. Set the *Default Video Display* as follows:

Option	Description
Voice-activated	<p>Enables conference participants to see the current speaker or current Content. The current speaker sees the previous speaker.</p> <p>When all the participants in a voice-activated multipoint conference use PictureTel iPower systems, the call automatically uses the highest video and audio quality and supports People+Content™. If a participant without an iPower system joins the conference, the call switches to the audio and video settings you specify on the Internal Multipoint page. If that participant leaves the call, the system automatically resumes using the higher quality connection.</p> <p>When participants in a voice-activated call share Content, the Content is displayed on the screen in place of the speaker. Participants can also share data using T.120 application sharing.</p>



Option	Description
Continuous presence	<p>Divides the screen into quadrants so that up to four conference participants can see each other (People or Content) simultaneously.</p> <p>The video bandwidth is split evenly among the four images that are displayed. For example, in a 384 kbps conference, the bandwidth for each quadrant is 96 kbps.</p> <p>In Continuous Presence conferences, the H.261 video algorithm is used. Participants whose systems cannot support CIF video or Continuous Presence view the call as if it were a voice-activated call.</p>

## Setting Audio and Video Preferences

### To set the audio and video preferences for internal multipoint

1. Open the AdminTools *Internal Multipoint* page:

Start AdminTools and click  Internal Multipoint.



If all conference participants are using PictureTel iPower collaboration systems, the system software automatically selects the best audio and video algorithm and the highest video frame rate.

2. Set the *Audio algorithm* as follows:

Option	Description
G.711	Specifies 3.4 kHz audio at 64 kbps.
G.722	Specifies 7 kHz audio at 64 kbps.
G.723	Specifies 3.4 kHz audio at 6 kbps.

**3. Set the Video algorithm for voice-activated as follows:**

<b>Setting</b>	<b>Description</b>
H.261 QCIF	H.261 is supported by all H.320 and H.323 enabled videoconferencing terminals. QCIF provides less fine video resolution than CIF, but handles video motion updates more quickly.
H.261 CIF	H.261 is supported by all H.320 and H.323 enabled videoconferencing terminals. CIF provides the finest video resolution, but handles video motion updates the most slowly.
H.263 SQCIF	Compared to H.261, provides better coding efficiency at video transmission rates of 384 or above. SQCIF provides the least fine video resolution, but handles video motion updates the most quickly.
H.263 QCIF	Compared to H.261, provides better coding efficiency at video transmission rates of 384 or above. QCIF provides less fine video resolution than CIF, but handles video motion updates more quickly.
H.263 CIF	Compared to H.261, provides better coding efficiency at video transmission rates of 384 or above. CIF provides the finest video resolution, but handles video motion updates the most slowly.

**4. Set the *Maximum video frame rate* as follows:**

Select a frame rate that is compatible with the other systems in your multipoint conference. If you call a system that cannot support a frame rate as high as the frame rate you have selected, that system will not see video.

<b>Setting</b>	<b>Description</b>
30	Displays the transmitted video at 30 frames per second. This rate provides the smoothest on-screen movement, particularly during image changes.
15	Displays the transmitted video at 15 frames per second
10	Displays the transmitted video at 10 frames per second
7.5	Displays the transmitted video at 7.5 frames per second

# Troubleshooting

For support or service, please contact your PictureTel service provider or call PictureTel Technical Support. You can find phone numbers for Technical Support in your area at the PictureTel web site, <http://www.polycom.com>.

## Solving Installation Problems

Problem	Corrective Action
First-time installation has failed	<ul style="list-style-type: none"> <li data-bbox="796 927 1272 1086">❑ Make sure that all monitor, ImageShare, infrared receiver, and power cables are correctly installed and secure. (If necessary, consult the manual that came with your monitor.)</li> <li data-bbox="796 1098 1076 1126">❑ Retry the installation.</li> </ul>
Windows Wizard has failed	<ul style="list-style-type: none"> <li data-bbox="796 1154 1208 1213">❑ Perform standard PC debugging procedures.</li> </ul>
PictureTel 900 Series Setup Wizard has failed	<ul style="list-style-type: none"> <li data-bbox="796 1241 1122 1269">❑ View any error messages.</li> <li data-bbox="796 1281 1260 1373">❑ From the Hardware Diagnostics application, start Automated Testing. If the test fails, call for service.</li> </ul>

## Solving Startup Problems

Problem	Corrective Action
Does not start	<ul style="list-style-type: none"><li data-bbox="796 326 1268 388">□ Check for bad hardware, especially if you hear beep codes on startup.<ul style="list-style-type: none"><li data-bbox="839 401 1253 526">a. From the Hardware Diagnostics application, start Automated Testing. If the test fails, call for service.</li><li data-bbox="839 539 1268 630">b. Check the Windows Event Viewer, either on the local system or from a remote PC.</li><li data-bbox="839 644 1239 706">c. Restart Windows using the last known good settings.</li></ul></li></ul>
Splash screen is frozen	<p data-bbox="779 734 1222 796"><b>Note:</b> A splash screen that does not move indicates bad hardware.</p> <ul style="list-style-type: none"><li data-bbox="796 829 1239 892">□ Close the Collaboration application (cview.exe) from the Task Manager.</li><li data-bbox="796 906 1222 968">□ Restart the system. If the problem persists, call for service.</li></ul>

## Solving General System Problems

Problem	Corrective Action
Parts of the system are not working	<ul style="list-style-type: none"> <li>❑ Make sure that all cabling is correctly installed and secure.</li> <li>❑ Make sure that all power cables are plugged into a power source (cart power strip, wall outlet, or uninterruptible power supply).</li> <li>❑ Make sure that the cart power strip or uninterruptible power supply is turned on.</li> <li>❑ Enable Readiness Monitoring in AdminTools. Address any warnings generated by the system.</li> </ul>
Keyboard is not working	<ul style="list-style-type: none"> <li>❑ Make sure that the keyboard and remote control are not being used at the same time. You can't use both infrared devices simultaneously.</li> <li>❑ Make sure that keys on the keyboard are not being accidentally held down.</li> <li>❑ Make sure that the infrared path from the keyboard to the keyboard's infrared receiver is not blocked.</li> <li>❑ Make sure that the keyboard's infrared receiver is plugged in correctly. Make sure that the LED indicator on the front of the receiver is on when the system is on.</li> <li>❑ Make sure that the keyboard contains fresh batteries. Check the keyboard batteries at least every two months.</li> </ul>

Problem	Corrective Action
Remote control is not working	<ul style="list-style-type: none"> <li>❑ Make sure that the keyboard and remote control are not being used at the same time. You can't use both infrared devices simultaneously.</li> <li>❑ Make sure that the infrared path from the remote control to the infrared receiver at the base of the main camera is not blocked.</li> <li>❑ Make sure that the remote control contains fresh batteries. <ul style="list-style-type: none"> <li>• Check the remote control batteries at least every two months with the Hardware Diagnostics application.</li> <li>• Enable Readiness Monitoring in AdminTools. The PictureTel 900 Series system will receive a message when the batteries are low.</li> </ul> </li> <li>❑ If the remote control still doesn't work, restart the system.</li> </ul>
ISDN or voice number is displayed incorrectly in the "To call this system" field	<ul style="list-style-type: none"> <li>❑ Make sure that your location information is correct. To correct the local area code or city code: <ol style="list-style-type: none"> <li>a. Choose Start &gt; Settings &gt; Control Panel &gt; Telephony.</li> <li>b. On the My Location page, type the correct code.</li> <li>c. On the My Location page, in the I am in field, choose the country.</li> <li>d. Click OK to close the Dialing Properties dialog box.</li> </ol> </li> <li>❑ Enter your local numbers without the area code or city code, in AdminTools.</li> </ul>

## Solving Network Problems

Problem	Corrective Action
Readiness icon is displayed in the corner of the taskbar	<ul style="list-style-type: none"> <li>❑ Double-click the exclamation mark icon in the system tray to view the Readiness message.</li> </ul>
Readiness message: TCP/IP Connection Error: Network cable unplugged or network configured improperly	<ul style="list-style-type: none"> <li>❑ Check the network cables to be sure that they are properly connected and secure.</li> <li>❑ Use the Windows Control Panel to check the TCP/IP settings.</li> <li>❑ Contact your network administrator.</li> </ul>
Readiness message: ISDN cable is unplugged or the ISDN line is not active <i>(continued on next page)</i>	<p><b>Note:</b> Use ISDN Readiness only in North America. Elsewhere, the network deactivates ISDN lines between calls, which will cause false Readiness messages.</p> <ul style="list-style-type: none"> <li>❑ Verify that the ISDN lines are connected and active. <ul style="list-style-type: none"> <li><b>a.</b> From the Hardware Diagnostics application, click Test ISDN Lines. If a line does not reach the active state, make sure that it is connected properly. See the <i>Installing the PictureTel 900 Series Collaboration System</i> document for information about how to connect ISDN lines.</li> </ul> </li> </ul>



Problem	Corrective Action
<p>Readiness message: ISDN cable is unplugged or the ISDN line is not active</p>	<ul style="list-style-type: none"> <li><b>b.</b> If you have NT-1 boxes, check each box to see if that line is ready to place calls (usually indicated by green lights). If a light is red, check the ISDN cable connections between the wall outlet and the NT-1 box and between the NT-1 box and the computer system.</li> <li><b>c.</b> If you make any changes to the system, open the Hardware Diagnostics application, and click Test ISDN Lines.</li> <li><b>d.</b> If the ISDN lines activate, close the Hardware Diagnostics application and start the Collaboration application.</li> <li><b>e.</b> If you still see an ISDN Readiness condition and your switch type is DMS100, NI1, 5ESS G3, or 5ESS Multipoint, you may have a problem registering your SPIDs with the network. From the Operating Statistics application, check your ISDN configuration or contact your network provider.</li> </ul> <p><input type="checkbox"/> If the problem persists, check the provisioning of the line or contact the network administrator.</p>
<p>Readiness message: Gatekeeper registration failed</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> From the Operating Statistics application, check the gatekeeper configuration.</li> <li><input type="checkbox"/> Notify the network administrator.</li> <li><input type="checkbox"/> Place LAN calls using IP addresses which do not require a gatekeeper.</li> </ul>

Problem	Corrective Action
<p>ISDN call attempt has failed; the user has received an error message (continued on next page)</p>	<ul style="list-style-type: none"> <li>□ Perform those tasks specified in the error message. For example: <ul style="list-style-type: none"> <li>• Check the dialed number.</li> <li>• Redial the call as “restricted”.</li> <li>• Ask the far end to call you.</li> <li>• Contact the network provider.</li> <li>• Redial the call later.</li> <li>• Verify that the far-end system is working.</li> </ul> </li> </ul> <p><b>Note:</b> A No ISDN Channel message may indicate a problem with the ISDN lines between your system and the network.</p> <ul style="list-style-type: none"> <li>□ Verify that the ISDN lines are connected and active. <ul style="list-style-type: none"> <li><b>a.</b> From the Hardware Diagnostics application, click Test ISDN Lines. If a line does not reach the active state, make sure that it is connected properly. See the <i>Installing the PictureTel 900 Series Collaboration System</i> document for information about how to connect ISDN lines.</li> <li><b>b.</b> If you have NT-1 boxes, check each box to see if that line is ready to place calls (usually indicated by green lights). If a light is red, check the ISDN cable connections between the wall outlet and the NT-1 box and between the NT-1 box and the computer system.</li> </ul> </li> </ul>

Problem	Corrective Action
<p>ISDN call attempt has failed; the user has received an error message <i>(continued on next page)</i></p>	<ul style="list-style-type: none"><li data-bbox="815 267 1243 388">c. If you make any changes to the system, open the Hardware Diagnostics application, and click Test ISDN Lines.</li><li data-bbox="815 406 1243 527">d. If the ISDN lines activate, close the Hardware Diagnostics application and start the Collaboration application.</li><li data-bbox="815 545 1243 822">e. If you still have call problems and your switch type is DMS100, NI1, 5ESS G3, or 5ESS Multipoint, you may have a problem registering your SPIDs with the network. From the Operating Statistics application, check your ISDN configuration or contact your network provider.</li></ul> <ul style="list-style-type: none"><li data-bbox="772 840 1243 1031">□ Make sure that the number being dialed is correct and properly formatted and try the call again. Callers may need to dial 9 or include a long distance access code or country code.</li><li data-bbox="772 1048 1243 1222">□ Verify that the far-end system is in working order. Telephone the far-end site and find out if the system is turned on and is functioning properly.</li><li data-bbox="772 1239 1243 1395">□ Have the far-end system call your system. To find out if the problem exists in one direction only, ask the person at the far-end site to call your system.</li></ul>

Problem	Corrective Action
<p>ISDN call attempt has failed; the user has received an error message</p>	<ul style="list-style-type: none"> <li data-bbox="796 267 1272 499"> <input type="checkbox"/> Check the ISDN configuration.            Contact your ISDN service provider and verify that the ISDN lines are provisioned according to the <i>Preparing Your Network for Collaboration</i> document, which is available at <a href="http://www.polycom.com">http://www.polycom.com</a>.             Check the configuration in the ISDN Setup page in AdminTools. (Obtain the correct numbers from your ISDN service provider.)         </li> <li data-bbox="796 656 1272 748"> <input type="checkbox"/> From the Operating Statistics application, start the Local Channel loopback test.         </li> </ul>
<p>Difficulty making LAN calls (<i>continued on next page</i>)</p>	<ul style="list-style-type: none"> <li data-bbox="796 774 1272 973"> <input type="checkbox"/> Check the number, system name, or LAN address of the far-end system that you are calling.             Make sure that the number being dialed is correct and properly formatted and try the call again.         </li> <li data-bbox="796 986 1272 1185"> <input type="checkbox"/> Make sure that the network cable is connected and secure.             The LAN cable must be connected properly, as shown in the <i>Installing the PictureTel 900 Series Collaboration System</i> document.         </li> <li data-bbox="796 1197 1272 1367"> <input type="checkbox"/> Have the far-end system call your system.             To find out if the problem exists in one direction only, ask the person at the far-end site to call your system.         </li> </ul>

Problem	Corrective Action
Difficulty making LAN calls	<ul style="list-style-type: none"> <li data-bbox="796 267 1229 328">❑ Verify that the far-end system is in working order. Telephone the far-end site and find out if the system is turned on and is functioning properly. Ask whether the far-end system is behind an IP network firewall. If it is, the far end must provide a way for LAN traffic to go through, which will allow a successful connection.</li> <li data-bbox="796 614 1268 831">❑ If you are using an extension or an alias to place the call to the far-end site, use the IP address instead. If you can place the call using the IP address, your H.323 gatekeeper or your access to the gatekeeper is faulty. Notify your network administrator.</li> <li data-bbox="796 848 1248 1013">❑ Check the LAN configuration. Check the configuration in the LAN Setup page in AdminTools. (Obtain correct numbers from your network provider.)</li> </ul>
The system can make calls but not receive them	<ul style="list-style-type: none"> <li data-bbox="796 1043 1236 1159">❑ From the Configuration Summary category of the Operating Statistics application, check the local phone numbers.</li> </ul>
A call stays in the "Connecting" state	<ul style="list-style-type: none"> <li data-bbox="796 1194 1226 1310">❑ Check the phone number, system name, or TCP/IP address to make sure that you are dialing a videoconferencing system.</li> <li data-bbox="796 1328 1172 1355">❑ Redial the call as "restricted".</li> </ul>

Problem	Corrective Action
<p>The call briefly enters the “Connecting” state and then disconnects <i>(continued on next page)</i></p>	<ul style="list-style-type: none"><li data-bbox="796 267 1229 392">❑ Check the phone number, system name, or TCP/IP address to make sure that you are dialing a videoconferencing system.</li><li data-bbox="796 406 1268 562">❑ Redial the call using a lower rate (1x512 to 1x384, 1x384 to 2x64, 2x64 to 2x56) because the far end or network may not support the call rate you requested.</li><li data-bbox="796 576 1268 1069">❑ Operationally test the lines for making outgoing calls:<ul style="list-style-type: none"><li data-bbox="839 652 1268 777">a. Make a 1x512 call to another PictureTel 900 Series system using a number that is known to be correct.</li><li data-bbox="839 791 1268 1069">b. After the call connects, check the call rate from the Conference Statistics screen.<ul style="list-style-type: none"><li data-bbox="886 895 1268 958">i. If the call connected at 1x512, all lines work.</li><li data-bbox="886 972 1268 1069">ii. If some lines do not come up, the lines may not be connected to the network properly.</li></ul></li></ul></li><li data-bbox="796 1083 1268 1451">❑ Verify that the ISDN lines are connected and active.<ul style="list-style-type: none"><li data-bbox="839 1159 1268 1451">a. From the Hardware Diagnostics application, click Test ISDN Lines. If a line does not reach the active state, make sure that it is connected properly. See the <i>Installing the PictureTel 900 Series Collaboration System</i> document for information about how to connect ISDN lines.</li></ul></li></ul>

<b>Problem</b>	<b>Corrective Action</b>
The call briefly enters the "Connecting" state and then disconnects	<ul style="list-style-type: none"><li data-bbox="839 265 1272 522"><b>b.</b> If you have NT-1 boxes, check each box to see if that line is ready to place calls (usually indicated by green lights). If a light is red, check the ISDN cable connections between the wall outlet and the NT-1 box and between the NT-1 box and the computer system.</li><li data-bbox="839 534 1272 656"><b>c.</b> If you make any changes to the system, open the Hardware Diagnostics application, and click Test ISDN Lines.</li><li data-bbox="839 668 1272 789"><b>d.</b> If all ISDN lines activate, close the Hardware Diagnostics application and start the Collaboration application.</li><li data-bbox="839 802 1272 1100"><b>e.</b> If you still have call problems and your switch type is DMS100, NI1, 5ESS G3, or 5ESS Multipoint, you may have a problem registering your SPIDs with the network. From the Operating Statistics application, check your ISDN configuration or contact your network provider.</li></ul>
The call connects at less than the requested rate; the system displays "Call connected at maximum available rate"	<b>Note:</b> Remain in the call at the reduced rate. The call is operating at the maximum rate supported by the far end.


Problem	Corrective Action
<p>The call connects at less than the requested rate; the system displays "Call connected at &lt;rate&gt;" <i>(continued on next page)</i></p>	<ul style="list-style-type: none"><li>□ Operationally test the lines for making outgoing calls:<ul style="list-style-type: none"><li>a. Make a 1x512 call to another PictureTel 900 Series system using a number that is known to be correct, or start the Local Channel loopback test from the Operating Statistics application. If the call connects, all lines work.</li><li>b. After the call connects, check the call rate from the Conference Statistics screen.<ul style="list-style-type: none"><li>i. If the call connected at 512, all lines work.</li><li>ii. If some lines do not come up, the lines may not be connected to the network properly.</li></ul></li></ul></li><li>□ Verify that the ISDN lines are connected and active.<ul style="list-style-type: none"><li>a. From the Hardware Diagnostics application, click Test ISDN Lines. If a line does not reach the active state, make sure that it is connected properly. See the <i>Installing the PictureTel 900 Series Collaboration System</i> document for information about how to connect ISDN lines.</li><li>b. If you have NT-1 boxes, check each box to see if that line is ready to place calls (usually indicated by green lights). If a light is red, check the ISDN cable connections between the wall outlet and the NT-1 box and between the NT-1 box and the computer system.</li></ul></li></ul>



---

<b>Problem</b>	<b>Corrective Action</b>
<p>The call connects at less than the requested rate; the system displays "Call connected at &lt;rate&gt;"</p>	<ul style="list-style-type: none"><li data-bbox="839 267 1268 392"><b>c.</b> If you make any changes to the system, open the Hardware Diagnostics application, and click Test ISDN Lines.</li><li data-bbox="839 406 1268 531"><b>d.</b> If all ISDN lines activate, close the Hardware Diagnostics application and start the Collaboration application.</li><li data-bbox="839 545 1268 829"><b>e.</b> If you still have call problems and your switch type is DMS100, NI1, 5ESS G3, or 5ESS Multipoint, you may have a problem registering your SPIDs with the network. From the Operating Statistics application, check your ISDN configuration or contact your network provider.</li></ul>


## Solving Video Problems

Problem	Corrective Action
<p>Poor video is reported from the far end or seen on the near-end system</p>	<ul style="list-style-type: none"> <li>❑ Double-click the  Conference Statistics icon (a small circle) on the taskbar in the lower right-hand corner of the screen. Check the video statistics.</li> <li>❑ Make sure that all video, camera, and monitor cables are correctly installed and secure. (If necessary, consult the manual that came with your monitor.)</li> <li>❑ From the Hardware Diagnostics application, start Automated Testing.             <ul style="list-style-type: none"> <li>a. If the test passes, the video board is good; from the Hardware Diagnostics application, click Test Video and select the appropriate video source. If no source is detected:                 <ul style="list-style-type: none"> <li>i. Unplug the camera video cable and then plug it in again.</li> <li>ii. Replace the video cable.</li> <li>iii. Change the cable connections.</li> </ul> </li> <li>b. If the test fails, the video board is faulty. Call for service.</li> </ul> </li> <li>❑ If the problem persists, call for service.</li> </ul>

<b>Problem</b>	<b>Corrective Action</b>
No thumbnail or blank thumbnail or Video Readiness indication <i>(continued on next page)</i>	<ul style="list-style-type: none"><li data-bbox="796 267 1243 392">□ Make sure that the video source is turned on. If you are using a laptop with or without an ImageShare or ImageShare II:<ul style="list-style-type: none"><li data-bbox="839 406 1253 499">a. Make sure that the laptop is selected as the source of input in the Collaboration application.</li><li data-bbox="839 513 1268 829">b. Make sure that the laptop screen has been sent to the ImageShare device or, if you're not using an ImageShare device, to the system by enabling your laptop to send to an external screen (as you would do if you connected a projector to your laptop). Note that the laptop is added to the People and Content list.</li><li data-bbox="839 843 1253 1065">c. Make sure that the laptop screen resolution is set to one of the following:<ul style="list-style-type: none"><li data-bbox="886 951 1011 979">– 480x640</li><li data-bbox="886 992 1011 1020">– 600x800</li><li data-bbox="886 1034 1025 1062">– 1024x768</li></ul></li></ul></li><li data-bbox="868 1100 1219 1260"><b>Note:</b> If you use a screen resolution of 1024x768, make sure the refresh frequency is set to 75 Hz or lower.</li></ul>


Problem	Corrective Action
No thumbnail or blank thumbnail or Video Readiness indication	<ul style="list-style-type: none"> <li>□ From the Hardware Diagnostics application, start Automated Testing.               <ul style="list-style-type: none"> <li>a. If the test passes, the video board is good; from the Hardware Diagnostics application, click Test Video and select the appropriate video source. If no source is detected:                   <ul style="list-style-type: none"> <li>i. Unplug the camera video cable and then plug it in again.</li> <li>ii. Replace the video cable.</li> <li>iii. Change the cable connections.</li> </ul> </li> <li>b. If the test fails, the video board is faulty. Call for service.</li> </ul> </li> <li>□ If the problem persists, call for service.</li> </ul>
Cannot control the camera using the remote or keyboard	<ul style="list-style-type: none"> <li>□ From the Hardware Diagnostics application, start Automated Testing.               <ul style="list-style-type: none"> <li>a. If the test passes, from the Hardware Diagnostics application, click Test Video and select the video source (such as Main Camera, Auxiliary Camera, or Document Camera) as appropriate. If the source is detected, attempt to control the camera.</li> <li>b. If the test fails, call for service.</li> </ul> </li> <li>□ If you still cannot control the camera, unplug the camera video cable and plug it in again; replace the video cable; change the cable connections.</li> <li>□ If the problem persists, call for service.</li> </ul>


Problem	Corrective Action
No video (VGA) output (blank VGA monitor)	<ul style="list-style-type: none"> <li>❑ Check all video and power cable connections to and from the VGA monitor.</li> <li>❑ Check the brightness setting on the monitor to be sure that it is not set to one extreme or the other.</li> </ul>
No video (NTSC or PAL) output	<p data-bbox="776 493 1222 618"><b>Note:</b> The NTSC/PAL monitor is used only if in a call. If the system is not in a call, this monitor will not display video.</p> <ul style="list-style-type: none"> <li>❑ Make sure that all cables to and from the NTSC or PAL monitor are correctly installed and secure, and that the monitor power is on.</li> <li>❑ From the Operating Statistics or AdminTools application, check the system configuration for the NTSC or PAL settings. If appropriate, enable dual-monitor use and restart the collaboration system.</li> <li>❑ From the Hardware Diagnostics application, start Automated Testing. <ul style="list-style-type: none"> <li>a. If the test passes, click Test Video and select the Internal NTSC Color Bar video source. If the color bar does not appear on the NTSC/PAL monitor, call for service.</li> <li>b. If the test fails, call for service.</li> </ul> </li> </ul>

Problem	Corrective Action
<p>Camera (main or auxiliary) is in Standby mode (powered down)</p>	<ul style="list-style-type: none"> <li>❑ Minimize and then maximize the Collaboration application, click a mouse button, press a remote control button, or clear the screen saver.</li> <li>❑ Unplug the camera video cable and then plug it in again.</li> <li>❑ From the Hardware Diagnostics application, click Test Video and attempt to control the camera.</li> <li>❑ Restart the collaboration system.</li> <li>❑ If the problem persists, call for service.</li> </ul>
<p>Slow video image in an ISDN call</p>	<p><b>Note:</b> An ISDN line sends signals on one or more B channels. If the call is using only one channel, the video image becomes slow.</p> <ul style="list-style-type: none"> <li>❑ Check to be sure that the call connected at the rate you requested. <ul style="list-style-type: none"> <li>a. With the call still connected, double-click the  7:25 PM Conference Statistics icon (a small circle) on the taskbar in the lower right-hand corner of the screen.</li> <li>b. Look at the ISDN Line indicators on the Conference Statistics screen. If only one of the indicators, within the pair, is green, the call is not using all available channels.</li> </ul> </li> </ul>


Problem	Corrective Action
No VCR output	<ul style="list-style-type: none"> <li>❑ Make sure that all power, audio, and video cables to and from the system, display, and VCR are correctly installed and secure.</li> <li>❑ Play a known good VCR tape. If the tape will not play:               <ul style="list-style-type: none"> <li>a. Restart the collaboration system.</li> <li>b. From the Hardware Diagnostics application, click Test Video and select the VCR Video Source option.</li> <li>c. Play a known good VCR tape again. If the tape still will not play, call for service.</li> </ul> </li> </ul>

## Solving Audio Problems

Problem	Corrective Action
Far-end participants cannot hear you	<ul style="list-style-type: none"> <li>❑ Make sure that the near end has not muted the call. A mute icon  appears in the status bar when the call is muted.</li> <li>❑ Make sure that all power and audio cables to and from the system, display, and peripherals are correctly installed and secure.</li> </ul>

Problem	Corrective Action
Cannot hear the far-end participants	<ul style="list-style-type: none"><li data-bbox="839 267 1272 392">❑ Make sure that the far-end site has not muted the call. A mute icon  appears in the status bar when the call is muted.</li></ul> <p data-bbox="825 427 1208 552"><b>Note:</b> If you are in a call and in Full-Screen mode, enable the status bar in order to see the icon.</p> <ul style="list-style-type: none"><li data-bbox="839 591 1258 682">❑ Make sure that all speaker cables to the system are correctly installed and secure.</li><li data-bbox="839 696 1272 786">❑ From the Operating Statistics application, start the Local Channel loopback test.</li><li data-bbox="839 800 1250 890">❑ From the Hardware Diagnostics application, start Automated Testing.<ul style="list-style-type: none"><li data-bbox="882 913 1265 1098">a. If the test passes, click Test Audio and select one of the Internal options as the Audio Source. If you do not hear the audio tones or noise, call for service.</li><li data-bbox="882 1112 1272 1142">b. If the test fails, call for service.</li></ul></li></ul>



Problem	Corrective Action
<p>Poor audio from the far-end system</p>	<ul style="list-style-type: none"> <li>❑ Double-click the  (a small circle) on the taskbar in the lower right-hand corner of the screen. Check the audio statistics.</li> <li>❑ From the Hardware Diagnostics application, start Automated Testing.</li> <li>❑ From the Hardware Diagnostics application, click Test Audio. Select one of the Internal options as the Audio Source. If the audio tones or noise have poor quality, call for service.</li> </ul>
<p>Cannot hear any audio or the volume is too low or too high</p>	<ul style="list-style-type: none"> <li>❑ If you are in a call, adjust the volume by using the control buttons on the remote or by manipulating on-screen controls with the keyboard.</li> <li>❑ If your audio speakers have their own volume control, check that the control is set appropriately.</li> <li>❑ Listen for the dial-up tones during the dial-up process.</li> <li>❑ From the Hardware Diagnostics application, start Automated Testing. If the test fails, call for service.</li> <li>❑ From the Hardware Diagnostics application, click Test Audio. Select one of the Internal options as the Audio Source. If the audio tones or noise have poor quality, call for service.</li> </ul>

---

<b>Problem</b>	<b>Corrective Action</b>
Poor Automatic Gain Control (AGC). Far end detects variations in audio from near-end sources that are different distances from the microphone	❑ From the Operating Statistics application, check the audio settings.
Poor Automatic Noise Suppression (ANS). Far end hears near-end background noise	❑ From the Operating Statistics application, check the audio settings.
Poor Integrated Dynamic Echo Cancellation (IDEC). Far-end participants hear echoes of themselves	❑ From the Operating Statistics application, check the audio settings.

## Solving ImageShare or ImageShare II Problems

Problem	Corrective Action
<p>Data or images will not pass through the Monitor or VGA In connector of the ImageShare device</p>	<ul style="list-style-type: none"> <li>❑ Make sure that all cables to and from the ImageShare device are correctly installed and secure.</li> <li>❑ If you are using a laptop with the ImageShare: <ul style="list-style-type: none"> <li>a. Make sure that the laptop screen has been sent to the ImageShare device by enabling your laptop to send to an external screen (as you would do if you connected a projector to your laptop). Note that the laptop is added to the People and Content list.</li> <li>b. Make sure that the laptop screen resolution, capture resolution, and frequency settings are correct. See the laptop documentation if you need information on setting up the laptop to send video from its VGA port.</li> <li>c. From the Hardware Diagnostics application, start Automated Testing. <ul style="list-style-type: none"> <li>i. If the test passes, from the Hardware Diagnostics application, start Test Video and select the ImageShare Video Source option; if the PC or laptop video image does not appear, call for service.</li> <li>ii. If the test fails, call for service.</li> </ul> </li> </ul> </li> </ul>

Problem	Corrective Action
<p>Projector connected to the ImageShare is not displaying output</p>	<ul style="list-style-type: none"> <li>❑ Make sure that all cables to and from the ImageShare device are correctly installed and secure.</li> <li>❑ Consult the documentation that came with the projector.</li> </ul>
<p>ImageShare capture feature is not working (no thumbnail)</p>	<ul style="list-style-type: none"> <li>❑ Make sure that all cables to and from the ImageShare device are correctly installed and secure.</li> <li>❑ Make sure that the laptop screen has been sent to the ImageShare device by enabling your laptop to send to an external screen (as you would do if you connected a projector to your laptop). Note that an icon for the laptop is added to the People and Content list.</li> <li>❑ Restart the collaboration system.</li> <li>❑ From the Hardware Diagnostics application, start Automated Testing. <ul style="list-style-type: none"> <li>a. If the test passes, from the Hardware Diagnostics application, start Test Video; select the appropriate Video Source option; if the video image does not appear, call for service.</li> <li>b. If the test fails, call for service.</li> </ul> </li> </ul>

<b>Problem</b>	<b>Corrective Action</b>
<p>Pushing the blue Selection button does not display the laptop content</p>	<ul style="list-style-type: none"><li>❑ Choose the ImageShare device on the People and Content list.</li><li>❑ If the ImageShare device becomes the Content source:<ul style="list-style-type: none"><li>a. Make sure that all cables to and from the ImageShare device are correctly installed and secure.</li><li>b. Make sure that the laptop settings are correct.</li><li>c. Make sure that the laptop is recognized as the source of input.</li></ul></li><li>❑ If the ImageShare device does not become the Content source, restart the collaboration system.</li></ul>

# A

## *System Default Settings*

Options not listed below do not have default settings.

<b>Option</b>	<b>Default Setting</b>
Allow far-end sites to control the camera on this system	Enabled
Allow ISDN calls on this system	Enabled
Allow near-end Automatic Camera Pointing	Enabled
Allow rate adaptation to 56 kbps if 64 kbps fails	Disabled in Italy. Enabled in all other countries.
Answer incoming video calls automatically	Disabled
Audio algorithm for ISDN (H.320) calls	Automatic
Audio algorithm for LAN (H.323) calls	Automatic
Components to monitor	Remote devices (remote control and LAMB)  Color depth and resolution  Camera(s)  Microphone(s)
Countdown for	30 seconds

<b>Option</b>	<b>Default Setting</b>
Display number last dialed	Always
Dual Images	Enabled
Encoding law for G.711	μ-law (in North America, Japan, and Korea) a-law (in most other parts of the world)
ISDN bandwidth: Default	Standard
ISDN bandwidth: Premium	1x512 kbps (normal configurations)
ISDN bandwidth: Standard	1x384 kbps (normal configurations)
[LAN] Incoming call transmission bandwidth	1x768 kbps
[LAN] Outgoing call bandwidth: Default	Premium
[LAN] Outgoing call bandwidth: Premium	1x768 kbps
[LAN] Outgoing call bandwidth: Standard	1x384 kbps
Local Directory (stored on system)	Enabled
Log file security	Disabled
Log off automatically after	30 minutes
Logon	Standard Windows logon
Mute audio for automatically answered calls	Enabled
Number type	Unknown
Numbering plan	Unknown
Pan direction of near-end camera	Normal

<b>Option</b>	<b>Default Setting</b>
Picture-in-Picture (PIP) position on second monitor	Bottom right
Put the system in Standby mode after	Disabled
Transmit a Sending Complete information element	Enabled for Euro ISDN, NET3 (Taiwan), and VN3. Disabled for all other dialects.
Use a second monitor	Disabled
Use Automatic Gain Control (AGC)	Enabled
Use Automatic Gain Control (AGC) for auxiliary audio source	Enabled
Use echo cancellation (IDEC)	Enabled
Use noise suppression	Enabled
Use this line for network management via RAS	None
Use this line for voice-add and voice-only calls	Line 4
VCR setup	One VCR (for both recording and playback)
Video algorithm for ISDN (H.320) calls	Automatic
Video algorithm for LAN (H.323) calls	Automatic



## System Documentation

### Documentation CD

You can find the following documents on the *iPower Documentation* CD that came with your system.

<b>This document...</b>	<b>Describes how to...</b>
<i>Installing the PictureTel 900 Series Collaboration System</i>	Install the system hardware and software.
<i>PictureTel iPower Collaboration System Getting Started Guide</i>	Make a call, use the remote control, use the Directories, set up the room for audio and video. Both .pdf and .doc versions of this guide are available.
<i>PictureTel iPower Collaboration System Quick Tips Sheet</i>	Participate in a successful call.
<i>PictureTel 900 Series Collaboration System Administrator's Guide</i>	Configure, maintain, and troubleshoot the system.


## Hardcopy Documentation

This document...	Describes how to...
<i>Installing the PictureTel 900 Series Collaboration System</i>	Install the system hardware.
<i>Microsoft Windows 2000 Licensing Agreement</i>	License Microsoft 2000 for use.

## Online Documentation

This document...	Describes how to...
<i>PictureTel iPower Collaboration System Getting Started Guide</i>	<p>Make a call, use the remote control, use the Directories, set up the room for audio and video.</p> <p><b>Note:</b> The .doc version of this guide is available on the system. You can customize this version, thereby making it more useful for your users (see “Customizing the Getting Started Guide” in Appendix C).</p>

## Online Help

You can open each help system within the corresponding application by pressing the  HELP button on the remote control or by clicking Help or pressing F1 on the keyboard.

<b>This help system...</b>	<b>Describes how to...</b>
AdminTools Help	Use AdminTools to configure and maintain the system.
Operating Statistics Help	Use Operating Statistics to verify system performance.
Hardware Diagnostics Help	Test the system hardware.
WebRemote Help	Manage the PictureTel 900 Series system remotely.
Collaboration Help	Use the collaboration system to make and answer calls, share data, and so on.
PictureTel Document Server Help (optional)	Use a Document Server to store data files and then access them during meetings.
PictureTel Personal Directory Editor Help (optional)	Create and maintain Personal Directories on a server.
PictureTel Network Manager Help (optional)	Use Network Manager to enhance remote SNMP management.

## Web Documentation

You can find web documents at the PictureTel support web site, <http://www.polycom.com>.

<b>This web document...</b>	<b>Describes how to...</b>
<i>Preparing Your Network for Collaboration</i>	Prepare for system installation by ordering ISDN, verifying requirements, and getting the network ready.
<i>PictureTel Product Regulatory Information</i>	Observe regulatory information, notices, and approvals.
<i>PictureTel 900 Series System Software Release Bulletin</i>	Observe usage notes and other release information.
<i>Installing the PictureTel 900 Series Collaboration System</i>	Install the system hardware.
<i>PictureTel iPower Collaboration System Getting Started Guide</i>	Make a call, use the remote control, use the Directories, set up the room for audio and video. Both .pdf and .doc versions of this guide are available.
<i>PictureTel iPower Collaboration System Quick Tips Sheet</i>	Participate in a successful call.
<i>PictureTel 900 Series Collaboration System Administrator's Guide</i>	Configure, maintain, and troubleshoot the system.
<i>Installing the PictureTel 70 Room Camera</i>	Install the PictureTel 70 camera with the system.
<i>Installing the PictureTel 80 Dynamic Locating Camera</i>	Install the PictureTel 80 camera with the system.
<i>Installing and Using the ImageShare Devices</i>	Install and use the ImageShare or ImageShare II with the system.

<b>This web document...</b>	<b>Describes how to...</b>
<i>Installing the PowerMic</i>	Install up to a total of four PowerMic microphones.
<i>Installing a Collaboration System on the Premier Cart</i>	Install the collaboration system on a Premier Cart.
<i>Installing a Collaboration System on the Utility Cart</i>	Install the collaboration system on a Utility Cart.

# Assisting Users

## Customizing the Getting Started Guide

The PictureTel 900 Series system includes an online user's guide, the *PictureTel iPower Collaboration System Getting Started Guide*, available as a .doc file. Since the options available to your users depend on your system configuration, the *Getting Started Guide* is somewhat generic. To maximize its usefulness for your particular users you should customize the original Microsoft Word version of the document according to your collaboration environment.

At a minimum, it is recommended that you add information in the "Site Info" section that is specific to your site, such as a name and phone number for users to call if they have trouble using the system.

After you customize the document using Word, you may want to make a .pdf version available to your users by putting it on your organization's intranet, for example. This way, users can view or print the document away from the system in preparation for system use.

### To edit the Getting Started Guide

1. **Locate and open the Microsoft Word version of the *Getting Started Guide* document.**

The file is located at


C:\Programs Files\PictureTel\VCS\Help\GetStart.doc.

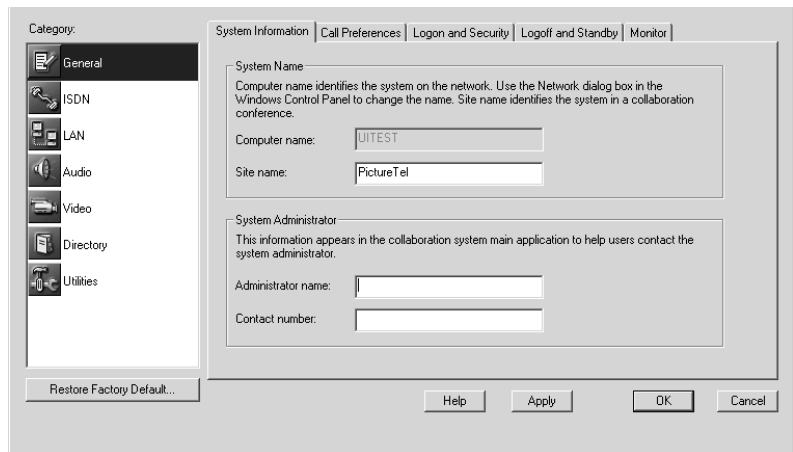
2. Use Microsoft Word to customize the document according to your environment.
3. Save the document as *GetStart.pdf* and distribute it to your users.

## Maintaining System Information

Another way to help your users is to make sure you keep the PictureTel 900 Series system information up-to-date.

### To update the system information

1. Open the AdminTools *System Information* page:
  - a. Start AdminTools and click  General.
  - b. Click the System Information tab.



**2. Update your system information as follows:**

Option	Description
Computer name	Identifies the PictureTel 900 Series system on the network. (You set this option through the Windows Control Panel.)
Site name	Identifies the PictureTel 900 Series system to callers.
Administrator name	Specifies the name of the PictureTel 900 Series system administrator. This name appears in the System Information and System Readiness dialog boxes.
Contact number	Specifies the phone number of the PictureTel 900 Series system administrator. This number appears in the System Information and System Readiness dialog boxes.

**Adding Applications to the System**

To extend your users' collaboration effectiveness, install the software applications you think users will use most often to create or edit documents.

To install software applications, follow the same procedure as you would to install a software application on a typical PC running Microsoft Windows. For specific instructions, see the Windows documentation.



# Index

## Symbols

μ-law 4-5

## Numerics

4CIF 5-7

## A

ACP. *See* Automatic Camera Pointing

Acrobat Reader 4.0, description of 1-6

Add/Edit Gateway page 3-15

administrative applications. *See* applications

AdminTools

description of 1-6, 1-11

starting 1-11

Advanced ISDN Configuration page 3-5

AGC. *See* Automatic Gain Control

a-law 4-5

ANS (Automatic Noise Suppression), solving problems with 11-23

answering automatically. *See* automatic answer

Application Log 8-7

applications

adding to system C-3

AdminTools 1-11

Hardware Diagnostics 1-12

installing 7-2

list of standard 1-6

on PictureTel collaboration system 1-6

Operating Statistics 1-11

PictureTel Directory Service Tools Setup 1-7

PictureTel Document Server 1-7

PictureTel Network Manager 1-7

Setup Wizard 1-11

audio

adding optional components 4-7

cabling with PictureTel 70 camera 5-12, 5-13

cabling with PictureTel 80 camera 5-13

choosing the G.711 encoding law 4-4

configuring 4-1

configuring microphones 4-5

muting 2-8

setting algorithms 4-1

setting multipoint preferences 10-3

solving problems with 11-20

audio algorithms, setting 4-1

for ISDN calls 4-2

for LAN calls 4-3

for LAN multipoint calls 10-3

Audio Inputs page 4-5  
Audio Preferences page 4-2, 4-3, 4-4  
Auto Logon  
    description of 2-1, 2-2  
automatic answer  
    muting audio for 2-8  
    security concerns 2-9  
    setting 2-8  
Automatic Camera Pointing (ACP)  
    description of 1-3  
    setting 5-9  
Automatic Gain Control (AGC)  
    description of 4-6  
    solving problems with 11-23  
automatic logoff  
    description of 2-5  
    using with Standby mode 2-6  
Automatic Noise Suppression (ANS), solving  
    problems with 11-23

## **B**

bandwidth, controlling  
    for ISDN 3-3  
    for LAN 3-13  
    with Dual Images 5-6

## **C**

cabling  
    for dual-monitor systems 5-10  
    for one VCR 5-15  
    for PictureTel 70 camera 5-12, 5-13  
    for PictureTel 80 camera 5-13  
    for two VCRs 5-17

Call Log  
    description of 8-6  
    recording numbers in 2-9  
call preferences  
    answer calls automatically 2-8  
    display last number dialed 2-9  
    mute audio for automatically answered  
        calls 2-8  
    record numbers in Call Log file 2-9  
    setting 2-8

Call Preferences page 2-8, 2-9

Calling Party Number 3-6

camera

    cabling for PictureTel 70 camera 5-12,  
        5-13  
    cabling for PictureTel 80 camera 5-13  
    configuring behavior of 5-8  
    description of 1-3  
    monitoring 8-8  
    placing in a dual-monitor system 5-10  
    setting up 5-6  
    solving problems with 11-17, 11-19

Camera Control and VCR page 5-8, 5-16, 5-18

Cameras and Video Sources page 5-6

capture resolution 5-7

carts, description of 1-9

Central Directory

    definition of 6-1  
    setting up 6-4

Central Directory Server, monitoring 8-8

CIF 5-7, 10-4

Collaboration application, description of 1-6

color depth, monitoring 8-8

- components, optional 1-8
  - cart 1-9
  - ImageShare 1-5
  - Look-At-Me-Button 1-10
  - monitor 1-8
  - projector 1-10
  - VCR 1-10
- components, standard 1-2
  - cameras 1-3
  - computer box 1-2
  - PowerMic 1-5
  - remote control devices 1-4
  - software 1-6
- computer box, description of 1-2
- Conference Statistics screen 8-5
- conference statistics, viewing 8-5
- Configuration Summary
  - listing settings 8-6
  - viewing 8-3
- Configuration Summary page 8-3
- configuring
  - advanced ISDN 3-5
  - audio 4-1
  - ISDN support 3-1
  - LAN support 3-11
  - system settings 8-3
  - system to use gatekeeper 3-16
  - system to use gateway 3-14
  - system to use IMUX 3-7
  - video 5-1
- continuous presence, for multipoint
  - conferences 10-3
- control panel, allowing use of 2-9
- custom control panel, allowing use of 2-9

## D

- data sharing
  - allowing 7-1
  - allowing Document Server use 7-3
  - allowing file transfer 7-1
  - installing user applications 7-2
  - managing options 7-1
  - tips and guidelines for 7-6
- default user account 2-4
- DICA OASIS IMUX, configuring system to
  - use 3-7
- Directory Services
  - description of 1-7
  - installing setup utility 6-4
  - setting up 6-1
  - setting up Central Directories 6-4
  - setting up Directories on a server 6-3
  - setting up Local Directory 6-1
- disk space, conserving 8-9
- Document Server
  - allowing use of 7-3
  - configuring system to use 7-4
  - description of 1-7
  - installing software 7-4
  - monitoring 8-8
  - setting up 7-3
  - system requirements 7-3
  - tips and guidelines for 7-6
- Document Server page 7-4
- documentation B-1, B-2
  - on CD B-1
  - online documentation B-2
  - online help B-3
  - standard hardcopy B-2
- domain account 2-4
- Dual Images 5-5

dual-monitor. *See* second monitor

## E

echo cancellation 4-6

encoding law 4-4, 4-5

encryption device 3-11

external encryption device 3-11

## F

Far-End Camera Control (FECC) 5-9

FCIF 5-7

FECC (Far-End Camera Control) 5-9

File Transfer

allowing 7-1

configuring 7-2

description of 1-6

tips and guidelines for 7-6

File Transfer page 7-2

files, sharing. *See* data sharing

files, transferring. *See* File Transfer

flicker reduction, enabling 5-4

frame rate

setting for multipoint conferences 10-5

## G

G.711

choosing the G.711 encoding law 4-4

for ISDN 4-2

for LAN 4-3

for LAN multipoint conferences 10-3

G.722

for ISDN 4-2

for LAN 4-3

for LAN multipoint 10-3

for LAN multipoint conferences 10-3

G.722.1

for ISDN 4-2

for LAN 4-4

G.723.1

for LAN multipoint conferences 10-3

G.723.1, for LAN 4-4

G.728, for LAN 4-4

G.729, for LAN 4-4

gatekeeper

configuring system to use 3-16

monitoring 8-8

setting up 3-17

Gatekeeper Setup page 3-17

gateway

configuring system to use 3-14

setting up 3-14

Gateway Setup page 3-14

*Getting Started Guide*

customizing C-1

location of C-1

## H

H.261

for ISDN 5-2

for LAN 5-4

for LAN multipoint 10-4

H.263

for ISDN 5-2

for LAN 5-3

for LAN multipoint 10-4

- H.263+
  - for ISDN 5-2
  - for LAN 5-3
- H.320. *See* ISDN
- H.323. *See* LAN
- hardcopy documentation
  - list of standard B-1, B-2
- Hardware Diagnostics
  - description of 1-6, 1-12
  - starting 1-12
- Hardware Diagnostics Error Log 8-6
  
- I**
- IDEC. *See* Integrated Dynamic Echo Cancellation
- ImageShare
  - description of 1-5
  - solving problems with 11-24
- IMUX
  - configuring another IMUX 3-10
  - configuring DICA OASIS IMUX 3-7
  - configuring Lucent Multiband IMUX 3-8
  - configuring system to use 3-7
- IMUX Setup page 3-8, 3-10
- installation, solving problems during 11-1
- Integrated Dynamic Echo Cancellation (IDEC)
  - description of 4-6
  - solving problems with 11-23
- internal multipoint
  - allowing 10-1
  - configuring 10-1
  - continuous presence conferences 10-3
  - setting audio and video preferences 10-3
  - setting the default video display 10-2
  - voice-activated conferences 10-2

- inverse multiplexer. *See* IMUX
- ISDN
  - choosing advanced options 3-5
  - configuring support for 3-1
  - controlling bandwidth 3-3
  - monitoring 8-8
  - setting bandwidth options 3-3
  - setting basic configuration 3-1
  - setting up RAS access over 9-2
  - setting video algorithm 5-1
- ISDN Bandwidth page 3-3, 9-3
- ISDN Configuration page 3-1

- K**
- keyboard
  - description of 1-4
  - solving problems with 11-3

- L**
- LAMB. *See* Look-At-Me-Button

- LAN
  - configuring support for 3-11
  - controlling bandwidth 3-13
  - monitoring 8-8
  - setting audio algorithm 4-3
  - setting bandwidth options 3-13
  - setting basic configuration 3-12
  - setting video algorithm 5-3

- LAN Bandwidth page 3-13
- laptop, adding output from 4-7
- Local Area Network. *See* LAN
- Local Directory
  - definition of 6-1
  - setting up 6-1
- Local Directory page 6-2

- local user account 2-4
- logging off
  - automatically 2-5
  - logoff options 2-5
- logging on
  - choosing the logon method 2-2
  - logon options 2-1
- Logoff and Standby page 2-5, 2-7
- logoff. *See* logging off
- Logon and Security page 2-2
- logon. *See* logging on
- logs, accessing and viewing 8-6
- Look-At-Me-Button, description of 1-10
- Lucent Multiband IMUX, configuring system to use 3-8

## M

- maintenance, of system 8-1
  - monitoring system statistics 8-1
  - optimizing system performance 8-7
  - restoring the system 8-9
- Management Information Bases. *See* MIBs
- MIBs
  - description of 9-5
  - installing 9-5
- microphones
  - adding PowerMic microphones 4-7
  - configuring 4-5
  - description of 1-5
  - monitoring 8-8
- monitor
  - adding second 5-10
  - description of 1-8
  - solving problems with 11-18

- Monitor page 5-14
- monitoring, readiness 8-7
- MSN (Multi-Subscriber Number) 3-5
- multipoint conferencing
  - setting video preferences 10-3
- Multipoint Conferencing page 10-2
- multipoint. *See* internal multipoint
- Multi-Subscriber Number (MSN) 3-5
- muting
  - audio for automatically answered calls 2-8
  - solving problems with 11-20

## N

- NetMeeting Chat, description of 1-6
- network
  - configuring ISDN support 3-1
  - configuring LAN support 3-11
  - configuring system to use gatekeeper 3-16
  - configuring system to use gateway 3-14
  - configuring system to use IMUX 3-7
  - installing network management software 9-5
  - network management station (NMS) 9-5
  - solving problems with 11-5
- Network Management page 9-2, 9-6
- Network Manager. *See* PictureTel Network Manager
- noise suppression 4-6
- NTSC/PAL monitor 1-8, 5-10
- number
  - displaying last number dialed 2-9
  - recording in Call Log file 2-9

## O

online documentation

accessing B-2

list of B-2

online help

accessing B-3

list of B-3

Operating Statistics

description of 1-6, 1-11

starting 1-12, 8-1

options. *See* components, optional

## P

PC. *See* laptop

picture-in-picture (PIP). *See* PIP

PictureTel

phone numbers iii

Technical Support iii, 11-1

web site iii, 11-1

PictureTel 80 Dynamic Locating Camera,

description of 1-3

*PictureTel 900 Series System Software* CD,

applications on 1-6

PictureTel collaboration system

administrative applications 1-11

allowing data sharing 7-1

components 1-2

configuring audio 4-1

configuring network use 3-1

configuring video 5-1

customizing behavior 2-1

default settings A-1

documentation B-1, B-2

introduction to 1-1

maintaining 8-1

setting up Directory Services 6-1

troubleshooting 11-1

using remote management tools 9-1

*PictureTel Directory Service Tools* CD,

applications on 1-7

PictureTel Directory Services. *See* Directory Services

*PictureTel Document Server* CD, applications

on 1-7

PictureTel Document Server. *See* Document Server

PictureTel Network Manager

adding to SNMP management 9-7

description of 1-7

*PictureTel Network Manager* CD, applications

on 1-7

PIP

description of 1-8

setting location for second monitor 5-15

PowerMic

adding 4-7

description of 1-5

Premier Cart, description of 1-9

problems, solving. *See* troubleshooting

PT716*plus*, for ISDN 4-2

PT724, for ISDN 4-2

## Q

QCIF 5-7, 10-4

## R

RAS, setting up access over ISDN 9-2

rate adaption 3-6

- Readiness Monitoring page 8-7
- redial
  - security concerns 2-9
  - setting call preference options 2-9
- remote control
  - description of 1-4
  - solving problems with 11-4
- remote control devices
  - description of 1-4
  - monitoring 8-8
  - solving problems with 11-3
- remote management
  - selecting tools for 9-1
  - setting up SNMP 9-5
  - setting up WebRemote 9-2
  - using SNMP to manage system 9-7
  - using tools for 9-1
  - using WebRemote to manage system 9-4
- resolution, monitoring 8-8
- restoring, system 8-9

## S

- Scart adapter 5-11
- second monitor
  - adding 5-10
  - setting PIP location on 5-15
- security concerns, for automatic answer and redial options 2-9
- Security Log 8-7
- serial number iii

- servers
  - installing Directories on 6-3
  - loading server software 6-4
  - managing 6-6
  - See also* Directory Services and Document Server
- service, contacting PictureTel iii, 11-1
- setup utility, installing for Directory Services 6-4
- Setup Wizard
  - description of 1-6, 1-11
  - starting 1-11
- sharing, data. *See* data sharing
- Simple Network Management Protocol. *See* SNMP
- Siren 14
  - for ISDN 4-2
  - for LAN 4-4
- SNMP
  - configuring system for 9-6
  - installing PictureTel MIBs 9-5
  - setting up 9-5
  - setting up network management station (NMS) 9-5
  - using to manage the system 9-7
- software
  - installing 7-3
  - loading server software 6-4
  - See also* applications
- solving problems. *See* troubleshooting
- space, conserving on disk 8-9
- SQCIF 10-4
- Standard Windows logon
  - description of 2-1, 2-2
  - setting up user accounts for 2-4



- Standby mode, configuring 2-6
- startup, solving problems during 11-2
- statistics
  - monitoring for system 8-1
  - starting Operating Statistics 8-1
  - viewing detailed system statistics 8-1
  - viewing general call statistics 8-5
- support, contacting PictureTel iii, 11-1
- SVGA/XGA monitor 1-8
- system configuration, viewing 8-3
- System Information page C-2
- system information, maintaining C-2
- System Log 8-6, 8-7
- system management. *See* AdminTools
- system serial number iii
- system statistics
  - monitoring 8-1
  - viewing 8-1, 8-2
- system. *See* PictureTel collaboration system

## T

- Technical Support, PictureTel iii
- telephone numbers, PictureTel iii
- troubleshooting 11-1
  - audio problems 11-20
  - general system problems 11-3
  - ImageShare problems 11-24
  - installation problems 11-1
  - network problems 11-5
  - startup problems 11-2
  - video problems 11-15

## U

- user access, managing 2-1
- user accounts
  - domain account 2-4
  - local user account 2-4
  - PictureTel collaboration system default user account 2-4

User Guide. *See* *Getting Started Guide*

Utility Cart, description of 1-9

## V

### VCR

- adding one 5-15
- adding two 5-17
- cabling for one 5-15
- cabling for two 5-17
- solving problems with 11-20

### video

- adding optional components 5-9
- adding second monitor 5-10
- adding VCR 5-15
- cabling with PictureTel 70 camera 5-12, 5-13
- cabling with PictureTel 80 camera 5-13
- configuring 5-1
- configuring camera behavior 5-8
- configuring video sources 5-6
- setting frame rate for multipoint conferences 10-5
- setting multipoint preferences 10-3
- setting video preferences 5-1
- solving problems with 11-15

### video algorithms

- setting for ISDN calls 5-1
- setting for LAN calls 5-3
- setting for LAN multipoint calls 10-4

- video frame rate
  - setting for multipoint conferences 10-5
- Video Preferences page 5-1, 5-3, 5-4, 5-5
- video sources, configuring 5-6
- virus protection
  - setting up 8-9
  - starting 8-9
- voice-activated, for multipoint conferences
  - 10-2

## **W**

- web documentation B-4
- web site, PictureTel iii, 11-1
- WebRemote
  - configuring system for 9-2
  - requirements for 9-4
  - setting up 9-2
  - setting up RAS access over ISDN 9-2
  - using to manage system 9-4
- Windows logon
  - description of 2-1, 2-2
  - setting up user accounts for 2-4

## **X**

- XGA 5-7