



Concorde•4500™

Software Version 6.50.01 Release Bulletin

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Software Version 6.50.01 Release Bulletin

This software release bulletin provides information about Concorde•4500™ system software version 6.50.01. It includes the following topics:

- Release Description
- Compatibility
- Interoperability
- Restrictions Removed
- Usage Notes
- Restrictions

Release Description

System software version 6.50.01 can be installed on the following systems:

- ❑ Concorde•4500
- ❑ System 4200ZX
- ❑ System 4000EX

Software version 6.50.01 contains all of the new features and enhancements included in software version 6.50. Additionally, it includes an enhancement of the network robustness feature for X.21 interfaces (described on page 4) and several restrictions removed (described on page 9).

Expanded Video and Audio Options

- ❑ *H.263+ video at 30 frames per second* — This video transmission capability offers the best standards-based video quality possible at 30 frames per second at speeds up to 384 kbps.

Note: The hardware required for H.263 is included on all Concorde•4500 and System 4000 systems shipped with software version 6.30 and above. Systems shipped prior to 6.30 without the 30 frames per second (fps) option will require an H.263 upgrade. For details, see Section 5, "Performance," of the *PictureTel Price Book*.

- ❑ *PT716plus™ audio* — The full implementation of this proprietary audio algorithm enables the system to adjust the bandwidth used for audio to allow more room for video. PT716plus offers performance comparable to PT724™ at speeds of 16 kbps, 24 kbps, or 32 kbps. Software version 6.30 offered this audio format at 16 kbps only.
- ❑ *Gain Adjustment for Voice Calls* — This setting allows users to adjust the sound they hear from telephone participants in their conferences. A graphical representation of the voice call gain appears on the screen as users adjust it.

Simplified Dialing

- *One-Step Dialing* — One-Step Dialing lets users make calls from the initial PictureTel Ready screen without having to open any menus to begin dialing. Once users begin typing the numbers for their call, the appropriate dialing screen appears automatically.
- *Single-Number Dialing* — Single-Number Dialing lets users make two-channel video calls as easily as they do telephone calls — by dialing a single number. The system determines and dials the second number automatically.

Note: Since Single-Number Dialing requires the near-end system to receive the second number from the far-end system, both ends of the call must be configured to use the feature for it to work properly.

- *Auto Network Prefix* — Auto Network Prefix lets users make calls without having to enter the prefix required to access an outside line.

Improved Usability

- *Network Prefix Find & Replace* — This global search and replace routine automatically updates the network prefixes stored in your Dialing Directory entries. When you change network prefixes, this routine allows you to make the change globally without having to update each entry manually.
- *Visual Volume Indicator* — This graphical representation of the system volume appears on the screen as users adjust it.
- *On-Air Indicator* — The new “eyeglasses” icon appears on the screen during multipoint calls (through bridges that support this feature) to inform users when they are being seen by another site.
- *Relocated Camera Adjustment Menus* — The camera adjustment menus have been reorganized and relocated within the regular system menus, making them easier to find and use.

Expanded Data Port Options

- *High Speed Data Transmission* — Data Ports A and C are now capable of transmitting data at speeds up to 115.2k using an RS-232 connector under the ITU-T T.120 standard.

Note: The hardware required for this feature (a new DI board) is included on all systems shipped with software version 6.50 and above. For systems shipped prior to 6.50, a hardware upgrade is available. For details, see Section 5, "Performance," of the *PictureTel Price Book*.

Additional Camera and Monitor Support

- *PictureTel 80™ Support* — Software version 6.50.01 supports the new PictureTel 80 Dynamic Locating Camera, which offers an integrated and improved automatic camera pointing device.
- *Expanded Standby Mode* — Systems can now simulate Standby mode for monitors that don't utilize the standard Standby mode because their power cords aren't connected to the system's electronics module.

Enhanced Network Robustness for X.21 Interfaces

- For software versions 6.30 and 6.50, the network robustness feature is only supported up to 128 kbps for X.21 interfaces. This feature enhances the system's ability to achieve frame alignment in cases of high network error rates. Software version 6.50.01 supports this feature up to 768 kbps.

Compatibility

A system using software version 6.50.01 is compatible with the following PictureTel-released products.

Videoconferencing Systems

- ❑ Concorde•4500, System 4200ZX, or System 4000EX videoconferencing system using software version 6.00.00 or later
- ❑ System 4000EX videoconferencing system using software version 5.00.04, 5.01.00, or later
- ❑ System 4000 videoconferencing system using software version 4.3V
- ❑ Venue•2000™ videoconferencing system using software version 1.21 or later
- ❑ System 1000™ videoconferencing system using software version 1.2 or later
- ❑ SwiftSite™ videoconferencing system using software version 1.01 or later
- ❑ SwiftSite II videoconferencing system using software version 1.0 or later
- ❑ PictureTel Live200™ videoconferencing system using software version 1.1 or later
- ❑ PictureTel Live100™ videoconferencing system using software version 1.6 or later
- ❑ PictureTel Live50™ videoconferencing system using software version 1.6 or later
- ❑ PictureTel LiveLAN™ videoconferencing system using software version 3.1 or later

Multipoint Bridges

- ❑ Montage™ multipoint bridge using software version 5.0E or later
- ❑ Prism™ multipoint bridge using software version 5.0E or later
- ❑ M-8000™ multipoint bridge using software version 2.5.2

Data Conferencing Systems and Software

- ❑ GroupBoard™ data conferencing system version 1.1 or later
- ❑ GroupShare™ data conferencing software version 1.1
- ❑ GroupView™ data conferencing system version 2.01 or later
- ❑ LiveShare Plus™ data conferencing software version 4.0
- ❑ MultiBoard™ data conferencing software version 1.1 or later
- ❑ Microsoft® NetMeeting™ software version 2.1

Networking Products

- ❑ ASCEND® Multiband Plus TRI-BRI version 3.4K or PRI version 3.4R
- ❑ ASCEND VSX version 4.5C
- ❑ Promptus IMX-1B version 3.62V2 or later (Rev F)
- ❑ Promptus IMX-1B version 3.54V7 or later (Rev D)
- ❑ Promptus IMX-1 version 3.54V7
- ❑ PictureTel 210™ Terminal Adapter version 1.0

Other PictureTel Products

- ❑ Socrates™ videoconferencing podium version 1.3.1 or later
- ❑ PictureTel Remote™ diagnostics software version 1.0 or later
- ❑ PictureTel 910™ Management and Collaboration Tool version 1.0

Interoperability

System software version 6.50.01 supports the ITU-T Recommendation H.320 for "Narrow-band Visual Telephone Systems and Terminal Equipment."

ITU-T Recommendations

Version 6.50.01 software complies with these ITU-T Recommendations:

- General
 - H.320
 - H.331 Broadcast Mode
- Audio
 - G.711
 - G.722
 - G.728
- Video
 - H.261
 - H.263

While the H.263 standard does not include provisions for graphics transfer, PictureTel has chosen to support graphics in its implementation of H.263. PictureTel intends this implementation to allow graphics interoperability with other PictureTel products that include H.263 graphics support. PictureTel cannot guarantee graphics interoperability with other vendors' implementations of H.263.

- H.263+

Note: While the ITU-T had not ratified H.263+ at the time of printing, it is expected to in May 1999.

- Communications
 - H.221 Frame Structure
 - H.224 Real-Time Control Protocol
 - H.242 Communication Procedure
 - H.230 Control and Indications
 - H.243 Multipoint Procedures
 - H.281 Far-End Camera Control

- Data conferencing

- T.120

- T.120 data conferencing peripherals are supported via T.123 data transport over a multi-layered protocol (MLP) channel or a high speed multi-layered protocol (HMLP) channel.

Some videoconferencing manufacturers may not have included all of these choices in their product designs, or they may have added their own proprietary choices. If you experience video or audio problems while interoperating with an H.320 system not produced by PictureTel, verify that the other manufacturer's system is configured as recommended for H.320 operation.

Products Tested

PictureTel has performed interoperability testing between the Concorde•4500 and the products listed below, though PictureTel does not guarantee that they are fully compatible.

- CLI Eclipse Gold versions 3.012 and 3.013
- CLI Eclipse One version 1.3
- CLI Radiance version 9.18
- Intel® ProShare® version 2.0 and 4.0
- Intel TeamStation™ versions 3.0 and 4.0
- Lucent Technologies™ (AT&T) MCU version 4.2 (with and without the Continuous Presence option)
- Polycom® ViewStation version 2.0
- Sony™ Mini 1000
- Sony 5100
- Tandberg MV6000I versions B2.1, B2.2Beta2, and B2.3Beta1
- Tandberg 5000 version 4.0
- VTEL® Team Conferencing™ version 2.0
- VTEL SmartStation version 4.0
- Zydacron Z250
- Zydacron Z350

Restrictions Removed

Software version 6.50.01 removes the following restrictions:

- ❑ The problem with using low speed data with Lucent Technologies MCU version 4.2 has been corrected.
- ❑ The problem with low audio levels on the playback of recorded videoconferences has been corrected.
- ❑ The problems with graphics transfer during multipoint videoconferences that use multiple bridges have been corrected.
- ❑ The problems with V.25 bis interfaces dialing through private branch exchange (PBX) configurations have been corrected.

Usage Notes

This section contains information you should take note of before you use this release.

Recommendations

- ❑ PictureTel strongly recommends you leave the audio and video transmission formats set to Automatic mode. If you set the audio or video format manually, call reliability may be compromised. The manual format selections are intended primarily for testing and troubleshooting.

Note: There is a single exception to this recommendation. When you want to call Concorde running software version 6.01.03, and you want to be able to view snapshots sent from the far end, set your video format to H.261.

- ❑ PictureTel recommends you use the wireless keypad with the Concorde•4500. The older, wired keypad does not support many of the new features.
- ❑ PictureTel recommends the following T.120 data transfer rates:
 - For systems with a new DI board, 115.2 kbps for Data Ports A and C and 38.4 kbps for Data Ports B and D
 - For systems without a new DI board, 38.4 kbps for all data ports

- ❑ When you upgrade to software version 6.50.01, the system resets the password to the factory default of 123. PictureTel recommends you take this opportunity to create a new password.

Data Conferencing

- ❑ When using NetMeeting, always make the data conferencing call to the VCS before you dial the video call; similarly, when you hang up, stop the data call before you end the video call.
- ❑ Often the first attempt to initiate a data conferencing call between NetMeeting nodes fails. Redialing the data conferencing call should result in a successful connection.
If the NetMeeting nodes are unable to connect after redialing, close and restart NetMeeting on both ends and again redial the data conferencing call. If this is unsuccessful, try again, this time changing which site initiates the call.
- ❑ If you are data conferencing with two Concorde•4500s running software version 6.50 or later using NetMeeting on both ends, configure the Flow Control setting on each end to Hardware.
- ❑ If you are data conferencing with NetMeeting nodes using a Concorde•4500 and a Venue•2000, Live200, or LiveLAN, you must initiate the video call from the Concorde•4500 to connect successfully.
- ❑ If you are data conferencing using NetMeeting and want to stop sharing data but continue videoconferencing, close any shared applications and terminate NetMeeting.
- ❑ If you are using LiveShare Plus in a call between two Concorde•4500s, the application on one end may fail to connect and display the following message: NodeMgr Fatal Error. To recover, hang up the call, reboot the PC that failed, restart the applications on both ends, and retry the call.
- ❑ You can connect only one T.120 application to your data ports at a time; when you configure one of your data ports to use a T.120 device, T.120 options won't appear in the selection screens for the other data ports.

Automatic Camera Pointing

- When using Socrates version 1.3.1 or earlier, use the AUTOMATIC button in the NEAR END section of the keypad to turn Automatic Camera Pointing on and off. Do not use any of the other buttons on the keypad while using Socrates.

Infrared Peripheral Devices

- PictureTel recommends that you do not use the SHOW ROOM button as another preset button. Once you change the setting, you must reprogram it manually if you want to go back to the general room view.
- Concorde•4500 allows you to store Look-At-Me-Button™ (LAMB™) presets for the PowerCam 100 and PictureTel 80 only. You cannot store LAMB presets for other cameras.

Inverse Multiplexers

- If your system is set to manual answer mode, and is operating with an X.21 network interface through a Promptus IMX-1B using software version 3.62 V2, you must set the Echo Cancellation Tone Setting on the IMX-1B to Off.
- If you are using a Promptus IMX-1B and you want to configure your system to use Single-Number Dialing, you must also configure your system to use Auto IMUX Dialing. (The IMX-1B requires a unique call record for each channel, and if you do not install Auto IMUX Dialing, the Single-Number Dialing function will use the same call record twice.)
- If you are using an Ascend IMUX to call other Concorde•4500s via a bridge, and your two-line dialing mode is set to Delayed, you may occasionally lose far-end camera control. To regain it, hang up, set two-line dialing to Simultaneous, and redial the call.

User Interface

- If you are viewing a snapshot and the call is disconnected, the snapshot will be removed and replaced with a blank screen. To return to normal viewing, press VIEW FAR END.
- Normally, when the far end hangs up a call, the system displays the message Call disconnected: Far end. However, at times, the following messages may appear: Line dropped or Call aborted. These messages, when associated with a normal far end hang up, do not indicate errors.

Networks

- ❑ If you are using a nondialed RS-449 switched-56 network and you are making a 1x56 call, occasionally the call will connect without audio. To recover, hang up and redial the call.
- ❑ For X.21 interfaces, the network robustness feature (introduced in software version 6.30) is only supported up to 128 kbps. This feature enhances the system's ability to achieve frame alignment in cases of high network error rates.

Previous Versions

- ❑ Neither the PictureTel 80 camera nor the new DI board will function properly with software earlier than software version 6.50, although version 6.50 supports older hardware.

Miscellaneous

- ❑ If you connect to an H.320 system that uses low speed data (LSD) but does not comply with H.224 and H.281 standards, you may not be able to use far-end camera control or other low speed data applications.
- ❑ To send asynchronous data to a Venue•2000, either configure both systems' data ports for GroupShare or configure your system's Data Port A for asynchronous data and the Venue•2000's Data Port B for transparent data.
- ❑ When calling a CLI Eclipse Gold system at 1x256 or 1x384, both ends may experience problems transmitting and receiving video. To recover, redial the call at a different rate.
- ❑ H.263+ Annex F, Advanced Prediction Mode, runs at 15 frames per second (15 fps), regardless of the video transmission format.
- ❑ Occasionally, when a PictureTel 550™ using a HotLink IMUX running software version 1.40v4 dials a 2x64 call to a Concorde•4500 running software version 6.50 or later, the call may connect without audio and video. To correct the error, the PictureTel 550 should hang up and redial a 1x64 or 1x384 call.
- ❑ As with previous Concorde•4500 releases, software version 6.50.01 is year 2000 compliant.

Restrictions

This section lists three categories of restrictions:

- ❑ Those that apply to all calls
- ❑ Those that apply only to calls that use a bridge
- ❑ Those that apply only to calls that use data conferencing devices

Restrictions Applying to All Calls

- ❑ When used with software version 6.50 or 6.50.01, the PictureTel 210 software version 1.0 supports only H.323, G.711, and G.728.
- ❑ When you call a CLI Eclipse Gold system, the far end won't be able to control your cameras.

Restrictions Applying to Calls Using a Bridge

- ❑ The wireless keypad is required to use the Browse, Director, and Chair Control modes in multipoint calls.
- ❑ A call may disconnect if both of the following circumstances exist:
 - The call is placed through an ASCEND inverse multiplexer.
 - One system has two data conferencing devices enabled and another system has one data conferencing device enabled.
- ❑ If you are calling into an M-8000 multipoint bridge, use of the BROWSE button on the wireless keypad is allowed only in SG3 conferences.
- ❑ If you are dialing into a password-protected H.243 Lucent MCU (version 4.0), and the password is not entered within 60 seconds, the call will connect on one channel only. If this happens, press CALL/ADD and redial the second channel. To avoid this condition, enter the password within 60 seconds.
- ❑ When you are using a Montage or Prism bridge, the minimum MLP rate is 24k. The bridge automatically sets the maximum limit.
- ❑ If you are using a Montage or Prism bridge with an X.21 network interface, and a password is required to enter the conference, occasionally you may not connect successfully. To recover, redial the call.

- ❑ When you are using a Montage or Prism bridge and you choose an invalid video source (for example, a camera you don't have), the message **Warning: No video input** appears. If the other sites in the multipoint videoconference try to browse your site while you have an invalid video source selected, the message **MCU denied browse request** appears. To recover, select a valid video source (such as the main camera).
- ❑ When you are using a Montage or Prism bridge during multipoint calls and employ Browse mode, the on-air indicator will not appear as it should when your site is being viewed by another site. The on-air indicator will appear properly in the other multipoint modes.

Restrictions Applying to Calls Using Data Conferencing Devices

The following notes are general data conferencing restrictions for the Concorde•4500. Refer to your bridge or T.120 device documentation for more complete information on configuring a data conference.

- ❑ A call using the SG3 algorithm requires both your system and the far-end system(s) to use the same physical data port for the data conferencing device port (for example, Data Port B).
- ❑ Each site in a data conference uses a T.120 port on the bridge, whether or not that site is T.120-compliant. Be sure to check the type of bridge and T.120 device you are using to determine the number of devices you can connect. Here are some guidelines:
 - A Montage supports a T.120 module with either 12 ports or 24 ports.
 - A Prism supports a T.120 module with 8 ports.
- ❑ As sites that use different MLP rates join a conference, the bridge adjusts the common MLP rate to match the slowest site's MLP rate. If the slowest site leaves the conference, the conference stays at the adjusted rate until a faster site joins the conference using the port vacated by the "slow" site.

- If you are daisy-chaining your T.120 devices together, no more than two devices can be supported (for example, a Concorde•4500 can be daisy-chained to two devices).

When T.120 devices are daisy-chained, make sure that the data transfer rate between the devices is equal to or less than the MLP rate between the primary T.120 device and the bridge. If the rate between the devices is greater than the MLP rate, data will be lost or the endpoint may freeze.

