

PCS-XG80

Release Note

Application Ver. 2.04.00

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PCS-XG80 Release Note

Revision History

#	Date	Version	Changes and comments
1	2008/07/28	1.01	First ex-factory version
2	2008/08/01	1.02	Anti-noise functions for display when receiving presentations
3	2008/08/29	1.03	<ul style="list-style-type: none"> ● Added Functions <ul style="list-style-type: none"> - Support for Welsh ● Corrected Problems <ul style="list-style-type: none"> - Saving the log - Video and audio defects in point-to-point and multi-point connection - Connection defect in ISDN - Defects when receiving presentations when dual monitor is set - Time keeping error - Video is distorted when sending presentation at 50 Hz
4	2008/09/09	1.04	For factory operation purpose (no function changes)
5	2008/10/29	2.00	Ver 2.00
6	2008/12/04	2.01	<ul style="list-style-type: none"> ● Main Corrected Problems <ul style="list-style-type: none"> - Error in presentation data transmission, remote camera control, and the point name display function with LAN cascade connection - Error in presentation data transmission, remote camera control, and point name display function with multipoint connection using both LAN and ISDN terminals ● Improved Main Functions/Operability <ul style="list-style-type: none"> - Restrictions such as connection order when connecting or disconnecting with LAN cascade - Restrictions so that remote operations cannot start the annotation function in situations where it cannot be used - Restrictions on remote camera control and video input selection on the remote terminal during multipoint connection in split screen mode
7	2009/1/21	2.01 (rev)	<ul style="list-style-type: none"> ● Following items are added to "Main Corrected Problems" (No changes on firmware. Release note revision only) <ul style="list-style-type: none"> - NAT setting problem - QoS setting problem
8	2009/2/12	2.02	<ul style="list-style-type: none"> ● Corrected Problems" <ul style="list-style-type: none"> - Once an XG80 communicates as a sub-terminal of a multipoint conference, it may get some disorders on the Far-End Camera Control (FECC) function.

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9	2009/03/31	2.03	<ul style="list-style-type: none"> ●Major additions - 720p audio detection broadcast to multipoint connections - Czech and Hungarian language compatibility - 720p compatibility over ISDN - MPEG-4 AAC-LD compatibility - Commander Function Key assignments - Adjustable menu transparency - URL dialing compatibility - New functions related to Web I/F ● Major improvements to functions/operations - The screen layout can be changed, warning messages have been added and settings can now be controlled from the commander. - Framerate succession after an H.239 stop ●Corrected Problems - The child terminal with broadcast rights on a multipoint connection over ISDN does not show the broadcaster mark - Other errors related to connectivity
10	2009/4/13 2009/4/16	2.03(rev)	<ul style="list-style-type: none"> ●Release note revision only((No changes on firmware.) -Applicable sections: 2.9, 3.1 (Changing default FREQUENCY and VIDEO settings) , 3.2, 3.3, and 5.4
11	2009/4/22	2.03(rev)	<ul style="list-style-type: none"> ●Release note revision only((No changes on firmware.) - Deletes description of "WXGA input compatibility" from "Revision History" #9 - Applicable section: 6.3
12	2009/8/31	2.04	<ul style="list-style-type: none"> ●Major additions -External control commands to start and stop recording and streaming added -Service command to switch video inputs upon reception of an incoming call added - Service to shrink an RGB image to be output to an HDMI monitor added ● Major improvements to functions/operations -Improvement of the BrightFace and noise reduction functions of the standard camera -Change in the condition of use for the Voice Activate 720p mode in the H.323 multi-point connection -Bitrate restriction while using a recording function removed -Improvement in sending/receiving presentation data in a multi-point connection -Adjustment of the transmission bit rate of the video data in the connection to terminals other than PCS-XG80 -Derestriction in a multipoint connection with LAN and ISDN - Improvement in Zoom(RGB) function - Message during the operation prohibition period while the communication is disconnected added

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			<ul style="list-style-type: none">- Inhibit the standby time setting during the simple stanby mode-Derstriction on the settable range of the RTP/RTCP port-Reduction of noise occurrence when other terminal than PCS-XG80 is connected●Corrected Problems-Connection to an HDMI monitor- Improvements in connectivity
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1 Application Version 2.04

1.1 General information

This version is Ver. 2.04.

This document contains the corrected problems and improved functions/operability from Ver. 2.03 to Ver. 2.04.

This release note contains detailed information about the changes.

2 New Functions

2.1 Addition of external control commands to start/stop recording and streaming

- Commands to start and stop recording and streaming are added as external control commands.

Recording	Start	<i>record start</i>
	Stop	<i>record stop</i>
Streaming	Start	<i>stream start</i>
	Stop	<i>stream stop</i>

2.2 Service Command: INCAMERA=[A][B]

- A service command to switch video inputs upon reception of an incoming call has been added. The video input to switch upon reception of an incoming call and the video input to switch upon disconnection can be specified.

[A]: Specify here the video input to switch automatically upon reception of an incoming call.

- C Switch to camera
- S Switch to S-VIDEO
- R Switch to RGB
- Y Switch to YPbPr

[B]: Specify here the video input to switch automatically upon disconnection.

- C Switch to camera
- S Switch to S-VIDEO
- R Switch to RGB
- Y Switch to YPbPr
- K Do not switch input

If nothing is specified, the video input returns to the one before connection.

2.3 Service Command: RGBREDUCE

- Service to shrink an RGB image to be output to an HDMI monitor has been added. Using this command allows you to shrink the picture from the equipment connected to the RGB IN connector so that a full screen can be displayed on the HDMI monitor when "Monitor Output" is set to HDMI.

3. Major improvements to functions/operations

3.1 Improvement of the BrightFace and noise reduction functions of the standard camera

Noises have been reduced to produce clearer image.

3.2 Change in the condition of use for the Voice Activate 720p mode in the H.323 multi-point connection

- With Ver. 2.03, the Voice Activate 720p mode was available for both transmission and reception when the communication rate between an MCU and a terminal was 1146 Kbps or higher. With Ver. 2.04, the Voice Activate 720p mode is available when the communication rate is 1 Mbps or higher.

3.3 Conference recording function

- When recording a visual communication of split screen, using the MCU terminal, the video bit rate (to be set under "Video" in Administrator 5 (Streaming/Recording) page of the Administrator Setup menu) was limited to 128kbps or less. This restriction has been removed in Ver. 2.04.

(Restricted from Ver. 2.00) [Improved in Ver. 2.04]

3.4 Improvement in sending/receiving presentation data in a multi-point connection

- In a multi-point connection, after a remote party was disconnected (or an additional remote party was connected) while an MCU terminal was sending presentation data, Ver.2.04 enables you to send/receive presentation data correctly even if the MCU terminal does not resend it. There are exceptions mentioned below, however.

#1 In a point-to-point connection, after an additional remote party is connected and it results in a multi-point connection while any terminal (either MCU or sub-terminal) is sending/receiving presentation data, you cannot send/receive presentation data correctly.
In such case, you need to disconnect all the sessions once.

#2 In a multipoint connection, after an additional remote party (sub-terminal) is connected while any "sub-terminal" is sending presentation data, the presentation data cannot be displayed properly.
In such case, the sub-terminal is required to stop sending presentation data and then restart and all the terminals can receive it without fail.
You do not need to disconnect the session.

3.5 Adjustment of the transmission bit rate of the video data in the connection to terminals other than PCS-XG80

- In the connection to terminals other than PCS-XG80 (except for the connection only with the PCS-XG80 units), it sometime happened that the transmission bit rate of the video from PCS-XG80 became about 5% higher than the specified value. An adjustment has been made to make the transmission bit rate to be equal to the specified value.

3.6 Multipoint Connection with Mixed LAN and ISDN

- When connecting multiple points with mixed LAN and ISDN connection, you were required to perform the LAN connection first, and then the ISDN connection. This restriction has been removed in Ver. 2.04.

(Restricted from Ver. 2.00.) [Improved in Ver. 2.04]

3.7 Zoom(RGB) function

- When the video is in a 4:3 aspect ratio, using the Zoom(RGB) mentioned in item 2.6 after sending a presentation caused the unit sending the presentation may cause the start position of the video to move to the right. To avoid this, you were sometimes required to repeat the operation. This restriction has been removed in Ver. 2.04.

(Restricted from Ver. 2.03.) [Improved in Ver. 2.04]

3.8 Display of a message during the operation prohibition period while the communication is disconnected

- When a disconnection operation is performed, a message "Operation disabled." is displayed during a few seconds of the operation prohibition period.

3.9 When using the simple standby mode

- When using the service command VIDEEOFF, setting the standby time was not possible but it looked as if it were possible. It has been corrected so that the standby time cannot be set while this service command is enabled.

3.10 Derestriction on the settable range of the RTP/RTCP port

- With Ver. 2.03, only the range between 49152 and 65535 could be set. However, older models from other companies use the ports outside of this range, so this restriction has been deleted.

3.11 Reduction of noise occurrence when other terminal than PCS-XG80 is connected

- It was found that in the connection between PCS-XG80 and other than PCS-XG80, when the room where PCS-XG80 was installed was dark, there was a problem in infrequent cases that a noise occurred in the image displayed on the remote terminal and it gradually spread. The problem occurrence can be reduced by

entering the service command IFRAMExx. This service command enables i-Frame to be sent periodically from PCS-XG80. The interval of i-Frame transmission can be specified in xx (in second) by entering numeric values. The transmission interval that can be specified is between 20 seconds and 240 seconds. However, using this command may adversely affect the smoothness of the video motion or other performances depending on the video transmission rate. Before using this command, make sure to check the operation in an actual environment.

4 Corrected Problems in Ver. 2.04

4.1 Connection to an HDMI monitor

- When using an HDMI monitor with PCS-XG80, if the power to the HDMI was turned on immediately (about 4 seconds) after the power to PCS-XG80 was turned on, either video or audio, or both of them might not be output correctly in some cases. This problem has been corrected in Ver. 2.04.
(Problem from Ver. 1.00) [Corrected in Ver. 2.04]

4.2 Mixed frame rates

- The video feed lost its smoothness when the sending frame rate was 60 fps and the receiving frame rate was 30 fps. This occurred if, for example, a terminal with “Video frame (for transmission)” set to “Auto”, “Video Frame” (for reception) set to 30 fps and “Individual setting for transmission/reception” set to “ON” was connected to a terminal with “Video frame” set to “Auto” and “Individual setting for transmission/reception” set to “OFF”. To avoid this, you were required to make configurations so as for the frame rates to be equal between the sender and receiver. (This is not a problem when 30 fps devices are mixed with 15 fps devices) This problem has been corrected in Ver. 2.04.
(Problem from Ver. 2.00) [Corrected in Ver. 2.04]

4.3 Terminal name display when the conventional SD unit is conducted as MCU on a multipoint connection.

- In the multipoint conference with a PCS-G70 as MCU, the terminal name was not displayed on PCS-XG80 sub-terminals in some cases. (Likewise for the PCS-G50) This problem has been corrected in Ver. 2.04.
(Problem from Ver. 2.00) [Corrected in Ver. 2.04]

4.4 Screen size indication in video mode status

- When the “Screen size” was set to 720, and the communication bit rate was 256 Kbps or more but less than 512 Kbps, the video mode status for encoding read 720, which was different from the actual value (the actual value was WCIF). This problem has been corrected.
(Problem from Ver.2.00)[Corrected in Ver.2.04]

4.5 Problem when two or more voice phones were connected

- When establishing a connection with an incoming call from the telephone that was making an anonymous call, the connection with the second and subsequent

telephones could not be established correctly. This problem has been corrected.
(Problem from Ver.2.00)[Corrected in Ver.2.04]

4.6 Streaming setting from Web I/F

- As a multicast IP address for streaming, unicast IP address could not be set via the Web I/F. This problem has been corrected.
(Problem from Ver.2.03)[Corrected in Ver.2.04]

5 Network Environment

5.1 Recommended settings for networks with significant packet loss

- Depending on the network configuration, constantly-found packet loss of 2% or more, or one-way latency of 50 ms or more may cause sent video to freeze. If this occurs, set ARC to "OFF", ARQ to "ON" and FEC to "ON" under "QoS1" on the setting screen.

6 Restrictions

6.1 ISDN Connection

- Presentation cannot be started for 50 seconds after connecting or disconnecting ISDN. This restriction does not occur during LAN connection.
(Restricted from Ver. 2.01.)

6.2 Multipoint Connection Including Current Model

- When PCS-1, PCS-G70, PCS-G50, or PCS-TL50 is included as a sub-terminal for an ISDN multipoint connection with PCS-XG80 as the host terminal, set the audio format for all the terminals to G.722, select All as the video format for PCS-XG80, and select Auto as the video format for PCS-1, PCS-G70, PCS-G50, or PCS-TL50.
(Restricted from Ver. 2.00.)

7 Known Issues

7.1 Multipoint connections with current models

- If sub-terminals include a PCS-G70 of the older version, the H.239 function of the PCS-G70 may not operate at the first IP connection after the power turns on. Reconnect the PCS-G70. (Likewise for the PCS-G50) (Problem from Ver.2.00)
This problem has been corrected in PCS-G70 Ver. 2.65 / PCS-G50 Ver. 2.70.

7.2 Terminal name display over multipoint connections

- In IP/ISDN-mixed multi-point connection, some terminals may display the wrong terminal name.
(Problem from Ver.2.00)

This is because acquisition of terminal name information is ill-timed among the terminals. We confirm that this problem happens under the following condition:

When another terminal is newly connected over IP during an ISDN point-to-point connection, and it results in an IP/ISDN mixed multi-point connection, the terminal names of the MCU terminals and those of sub-terminals connected over IP cannot be displayed correctly.

7.3 Order of disconnection in a cascade connection

- When a cascade connection is made in the order mentioned below, and you disconnect between terminals A and B first during the cascade connection, there are some cases where other connection cannot be disconnected correctly.

Connection order:

1. Set the multipoint mode" to "Auto" for terminals A and B, and connect them for a point-to-point connection.
2. Connect an additional terminal to the terminal A to establish a multipoint connection.
3. Connect another additional terminal to the terminal B to establish a cascade connection.

(Problem from Ver. 2.00)

8 Updates

8.1 Cautions when updating

Take the following precautions when updating.

- Perform updates when the power supply is reliable. If a power outage occurs during an update, the update will not complete properly and the system may not be able to start up.

8.2 Updating with a memory stick

Procedure for updating with a memory stick

Follow the procedure below to complete an update.

1. Prepare a memory stick (512 MB or larger)
* Files to be used: [bellini20400.upd]
2. Copy the files listed above into the root directory on the memory stick. Use the write-protect function on the memory stick, if there is one. There is no need to format the stick for use with PCS-1/G70/G50.
3. Insert the memory stick into the device and turn on the power.
4. The application will start and the progress screen will appear.
5. The device will automatically restart when the update is complete.
6. The home screen will be displayed when the device has restarted. Confirm that the host version is 2.04.00.

8.3 Updating from the Web

Procedure for updating from the Web

Follow the procedure below to complete an update.

1. Open a web browser and log in to the device.
2. Select the "Setup" tab.
3. Click the "Version Up" button in the lower left of the browser window.
4. The version up screen will appear. Specify the update file.
* Files to be used: [bellini20400.upd]
5. Click the "Upload" button after specifying the file.
6. File transfer will begin and "File Uploading ..." will be displayed.
7. When the file has been uploaded, a message saying "Uploading upgrade files to PCS-XG80 has been completed. You may shut down your browser. Installation procedures for PCS-XG80 start soon. Never power off the unit during installation. After the completion of installation, PCS-XG80 restarts automatically." will appear and the update progress screen will appear on the device.
8. The device will automatically restart when the update is complete.
9. The home screen will be displayed when the device has restarted. Confirm that the host version is 2.04.00.