SONY

Video Conferencing

Video Conferencing Products
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Date: **November 17, 1997**

Subject: **FIRMWARE UPGRADE—VERSION 3.10**

Model: **PCS-4000, PCS-5000, PCS-5100**

Serial No: **10,001–10,100 (PCS-4000)**
10,001–10,550 (PCS-5000)
20,001–20,290 (PCS-5100)

DESCRIPTION

New version firmware V3.10 is now available for the above units. The new firmware implements the following program improvements.

- Multiple Subscriber Number function
- Connection with VideoServer MCU
- Power ON/OFF function for PVM-2950QJ monitor
- Speech mode connection using Northern Telecom PBX in Mexico
- Enhanced user data performance
- Improved bonding connection with outside manufacturers
- Improved PCS-2000 connection
- PCS-5100 V3.00 program improvements
- Elimination of problems related to automatic disconnect under poor line conditions
- Extended V2.62 functions (PCS-4000/5000) now incorporated into PCS-5100. Connection with GPT CODEC (Focus 400) supported.

ORDERING INFORMATION

To order the new firmware, contact:

Product Operational Support Center (P.O.S.C.)
Sony Electronics Inc.
3 Paragon Drive
Montvale, New Jersey 07645-1735
Telephone (800) 883-6817
Fax (201) 358-4944

INSTALLATION PROCEDURE

1. Turn processor power OFF.
2. Insert memory card into processor memory card slot.
3. Turn processor power ON.
4. After several minutes the system starts up automatically, and the Dial List appears.
5. Confirm that V3.10 is displayed in the SYSTEM SETUP menu.

NEW FUNCTIONS/PROGRAM IMPROVEMENTS

1. Multiple Subscriber Number Function is now supported in which a network provides different line numbers to several ISDN terminals connected to the same bus. In this version, the correct incoming call is responded to. In the previous version, a line number received from the network was not identified with an LDN (local directory number) registered in that line's terminal. Therefore, sometimes a call other than one from that terminal was responded to. (National ISDN-1 in USA did not experience this problem.) (See Figure 1.)
To use Multiple Subscriber Number function:

—When a call is received, a network call number must be available.
—Line numbers of terminals must be registered in PCS-4000/5000/5100 LDN menu.

- Setup is as follows (see Figure 2):
    a. To open the LDN menu, select the LDN icon in SYSTEM SETUP menu.
    b. Enter line numbers to be connected to processor.
    c. If the Multiple Subscriber Number function is used, enter "-" at the end of A1 entry. If the function is not used, do not enter "-".
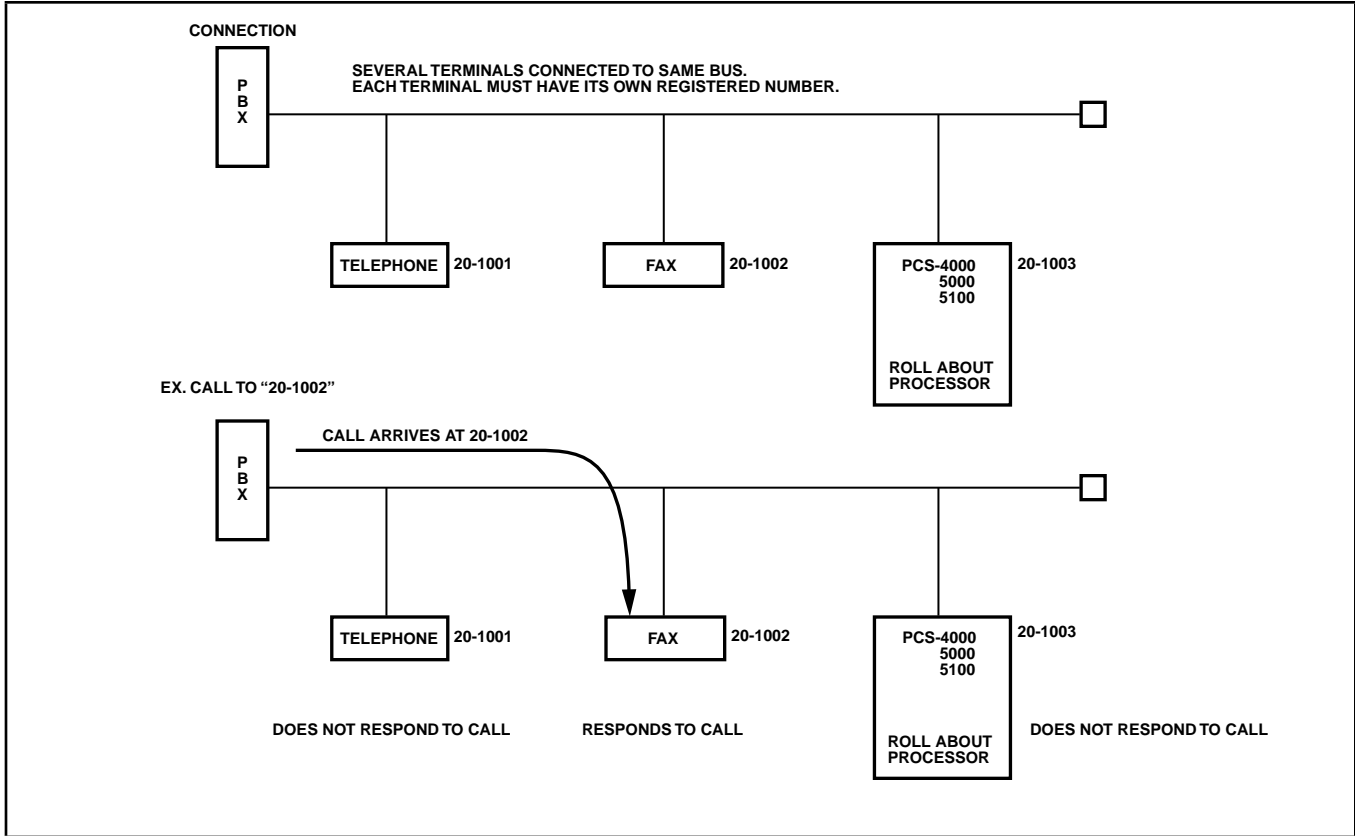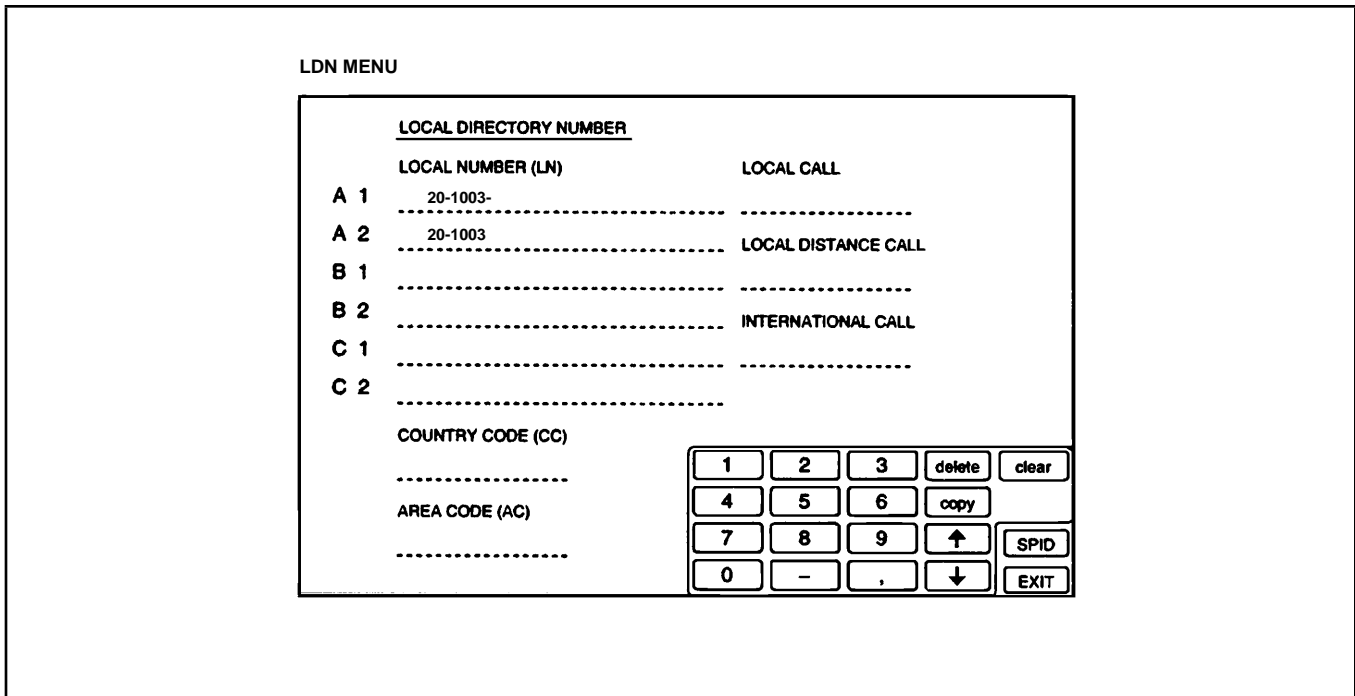
Figure 1

Figure 2

2. VideoServer MCU—Connection with VideoServer MCU, V5.0 and higher, no longer fails when a request to send ITU-TH.230 MCC BAS or TIA BAS is made

3. Power ON/OFF for PVM-2950QJ Monitor—By extending the duration of SIRCS code output from the processor, a PVM-2950QJ monitor can now properly receive SIRCS code.

4. Support of Speech Mode Connection Using Northern Telecom PBX in Mexico—Since a public ISDN was not available in Mexico, a request was made that PCS-5000 be connected in conventional telephone (speech) mode. According to Sony Mexico, if a Northern Telecom PBX (Meridian) is used, it is possible to transmit transparent data from sender to receiver in speech mode. Therefore, connection with Northern Telecom PBXs is now supported. The setting is done by extending a country code in the LDN menu. To set CC-6XX, where CC is the country code and XX is the ISDN mode, use the following:

04: CTR3   09: Singapore
05: National ISDN-1/2 10: AT&T Custom P-Mp
06: NTT   11: NTI Custom
07: AUSTEL   12: AT&T Custom P-P
08: VN4

Example: To use Northern Telecom PBX (Meridian) in speech mode, set "52-605."

Summary:

CC-4XX → Setting of insertion of forced send complete. Comparison of call number with line numbers registered in LDN not done forcibly.

CC-5XX → Setting nullifies comparison of call number with line numbers registered in LDN. Setting is employed in DMS-100 unlimited digital mode in Mexico.

CC-6XX → Setting done at both caller and receiver ends in speech mode. Setting of insertion of forced send complete. Setting nullifies comparison of call number with line numbers registered in LDN. Setting employed in Meridian PBX speech mode in Mexico.

5. Enhanced User Data Performance—When a free-hand drawing was made on a liquid crystal drawing tablet made by outside manufacturers, transmission of the drawing failed at the end of the line during communication in 4800bps or 9600bps. This has been fixed.

6. Improved Bonding Connection with Other Makes, (e.g., Zydacron Co., Aethra Co.)—Previously, even if the line connection was completed, the mutual connection failed due to failure of capacity exchange of ITY-TH.320. Because the H0 and B stipulated in ITU-TH.221 was received as mixed, the PCS-4000/5000/5100 could not recognize H0. This has been corrected.

7. PCS-2000 Connection—The following have been corrected. (See Figure 3.)

- When connected to a PCS-2000, a camera at the end of the line could not be controlled from the "EASY MENU" in the PCS-5000.
- When making a mutual connection of a PCS-2000 in 56 kbps and a PCS-5000 in 64 kbps ISDN, audio and video were not output.

NOTE: In 64 kbps network areas such as Europe or Japan, the 56 kbps connection causes no problem.

8. Automatic Disconnect under Poor Line Conditions—This function now operates properly under all conditions. During communication, if a line condition is poor, the line is automatically disconnected, showing the message "CORRECTIVE DATA STREAM, TERMINATE THE CONNECTION." Automatic disconnect occurs under the following conditions:

- BCH correction errors occur continuously 5 times in 2 seconds.
- ITU-TH.221 FAS errors occur continuously 5 times in 2 seconds.

If either of the above errors is detected within 2 minutes after the communication starts, the processor automatically disconnects the line, judging that the conference cannot be continued.

Previously, when either of the above errors was detected and the mode changed to ITU-TH.242 forcible mode 0 to disconnect the line, line disconnect was not done. This problem was duplicated only when connected with other makers' units, and has been corrected.

9. PCS-5000 V3.00—The following have been corrected:

- Inactive AT icon in camera menu—Set PCS-5000 to dual monitors and enter camera menu during communication. Previously, the AT icon was inactive when selected.
- Unhighlighted FOCUS AUTO icon in the camera menu—After setting manual focus in PCS-5100 camera menu, when reentering camera menu, the FOCUS AUTO icon was not highlighted regardless of auto focus setting. To match the camera focus state with FOCUS AUTO icon, the FOCUS AUTO icon is now highlighted.

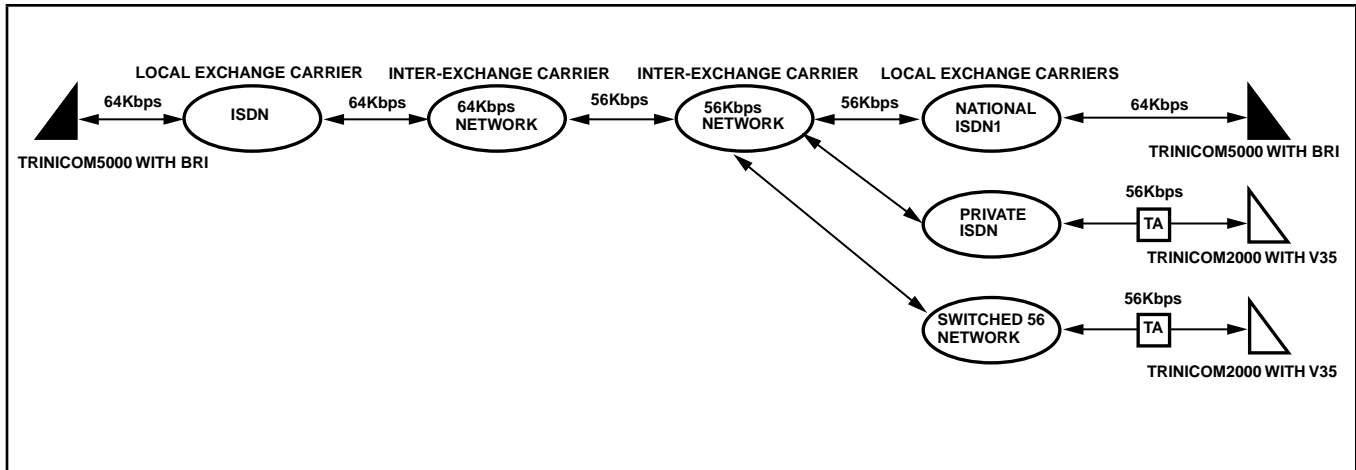**HISTORY**

Table 1 shows ROM history.

Figure 3

Table 1

IC16	BRI ROM	System Software	Serial No.	Tech Memo No.
PCS-4000				
RAP0V1	BRIV1	Version 2.00	10,001–10,050	VCM96-016
RAP0V2	BRIV2	Version 2.11	10,051–10,060	VCM96-017 VCM96-019
	BRIV2.1	Version 2.21	10,061–10,070	VCM96-020
	BRIV2.1	Version 2.60	10,071–10,100	VCM97-002
	BRIV2.1	Version 3.10	10,101 and higher	VCM97-007
PCS-5000				
RAP0V1	BRIV0	Version 1.23	10,001–10,050	
	BRIV1	Version 1.23	10,051–10,170	
	BRIV1	Version 2.00	10,171–10,191 10,194–10,208 10,211–10,244	VCM96-016
RAP0V2	BRIV2	Version 2.11	10,192–10,193 10,209–10,210 10,245–10,250	VCM96-019
	BRIV2.1	Version 2.21	10,251–10,383 10,385–10,430	VCM96-020
	BRIV2.1	Version 2.60	10,384	VCM97-002
	BRIV2.1	Version 2.61	10,431–10,550	VCM97-002
	BRIV2.1	Version 3.10	10,551 and higher	VCM97-007
PCS-5100				
RAP0V2	BRIV2.1	Version 3.00	20,001–20,290	
	BRIV3	Version 3.10	20,291 and higher	VCM97-007