NEC

NEC America, Inc.

Release Note
NEAX®2000 IVS
Business / CCIS

1800 Series Software Release

1.0 Overview

The release of 1800 Series Software provides new features and enhancements to the **NEAX**®**1000 IVS** and **NEAX**®**2000 IVS**. 1800 Series Software offers small business features especially designed for the square key system. 1800 Software also provides advanced features such as; Event Based CCIS and ISDN PRI NI2. Additionally, 1800 software offers many enhancements to features such as; Call Forwarding Outside and DSS/BLF functionality on line keys.

2.0 New Business Features and Hardware

2.1 Caller ID Display – Prior to answering the first incoming call, the calling party's information is automatically displayed on the Multiline Terminal LCD. While idle or engaged in a conversation with calls holding or receiving incoming calls to multiple line keys, pressing the Caller ID Key (CID) and the desired line key will display the calling party information for six seconds. While engaged in conversation and Camp-On tone is received, pressing the CID key will display the calling party information for six seconds. If information is required for more than six-seconds, simply press the CID key and the desired line key. This includes incoming station calls, T1 ANI, Analog Caller ID, ISDN both PRI & BRI.

2.1.1 Required Hardware - 1800 Series Software, PN-4COTG & SPN-4RSTC (AP) for Analog Caller ID. SPN-24DTAA-C (AP) & SPN-4RSTB (AP) for Automatic Number Identification (ANI). SPN-24DTAAA-C (AP) & SPN-SC01 DCH-UA (AP) for Calling Party Number (CPN) ISDN PRI. SPN-BRTA-C (AP) for Calling Party Number (CPN) ISDN BRI.

2.1.2 Typical Application – All applications where Caller ID information of single or multiple calls are required to the Multiline Display Terminal LCD.

2.2 Call Redirect – Prior to answering the first incoming call, the calling party's information is automatically displayed on the Multiline Terminal LCD. By pressing the Call Redirect (CRD) Feature Key, the call can be immediately transferred to a station or Voice Mail System. Two transferring destination numbers can be designated per tenant, by system data programming. This feature applies to trunks assigned as DID, DIT, DOD and Trunk Direct Appearance.

2.2.1 Required Hardware - 1800 Series Software, PN-4COTG & SPN-4RSTC (AP) for Analog Caller ID. SPN-24DTAA-C (AP) & SPN-4RSTB (AP) for Automatic Number Identification (ANI). SPN-24DTAAA-C (AP) & SPN-SC01 DCH-UA (AP) for Calling Party Number (CPN) ISDN PRI. SPN-BRTA-C (AP) for Calling Party Number (CPN) ISDN BRI.

2.2.2 Typical Application – All applications where it is necessary to identify the incoming call and make a decision to either answer the call or automatically transfer it to another station or Voice Mail System.

2.3 SPN-PW00 w/CA-C – Negative 48 Volt Direct Current (DC) power supply card. One SPN-PW00 provides power for either 2 Zone Transceivers (ZT) or one SN716 Desk Con. (**Note:** SN-716 DESK CON-A will be available for **NEAX®1000 IVS** & **NEAX®2000 IVS** first quarter 1998) The SPN-PW00, when mounted, occupies two card slots. Wiring is accomplished via a connector on the front of the SPN-PW00 with the cable that comes with the card. A maximum of three SPN-PW00 cards can be mounted in one PIM and a maximum four in four PIM's. A maximum 16 ZT's can be mounted per eight PIM system or maximum of eight SN-716 DESK CON-A can be mounted per eight PIM system.

2.3.1 Required Hardware - SPN-PW00 w/CA-C and 1600, 1700 or 1800 Series Software for Wireless Zone Transceivers. SPN-PW00 w/CA-C and 1800 Series for SN-716 DESK CON-A.

2.3.2 Typical Application – **NEAX®1000 IVS** & **NEAX®2000 IVS** when one or two Wireless Zone Transceivers are required. **NEAX®1000 IVS** & **NEAX®2000 IVS** when SN-716 Desk Con is required.

3.0 Enhanced Business Features & Hardware

3.1 Call Forwarding - Provides a maximum of 240 Call Forwarding (combination of Call Forwarding All Calls, Busy and No Answer) to outside number(s).

3.1.1 Enhancement - Previously maximum of 96 Call Forwarding combinations to outside number(s) was allowed.

3.1.2 Typical Application – All applications requiring users to Call Forward their Terminals to numbers outside the **NEAX®1000 IVS** & **NEAX®2000 IVS** systems.

3.2 Analog Port Adapter w/Ringer (APR) – 1800 Series software provides the ability for Hook-Flash and Disconnect Supervision to the Analog Port Adapter w/Ringer (APR) on a D^{term} Series **E** Terminal.
3.2.1 Enhancement – Previously no Hook-Flash or disconnect supervision was provided.

3.2.2 Typical Application – APR connected to analog single line telephone or analog cordless can transfer calls. APR connected to facsimile machine

(FAX) or other analog devices can recognize disconnect supervision and disconnect line.

3.3 Flexible Line Key Assignment – Provides the ability to assign a line key on a Multiline Terminal as a One-Touch Key. This key has DSS/BLF capability and an extension number is assigned to the line key by the end-user.

3.3.1 Enhancement – Previously when assigning a line key as One-Touch, no BLF was available.

3.3.2 Typical Application – To keep costs down, Series *E* Terminals without the DSS keys down the side can be used. By assigning line keys as One-Touch (DSS/BLF) for example to an 8 Button Display Terminal, you can have features set as soft keys and still have up to seven One-Touch Keys.

3.4 ISDN PRI NI2 - Provides support for PRI services offered by GTD5 Central Offices.

3.4.1 Enhancement – Previously ISDN PRI supported AT&T #4, #5 ESS and Northern DMS 100 and 250 Central Offices.

3.4.2 Typical Application – Applications where PRI is required from a GTD5 Central Office.

3.5 Trunk-Direct Appearance – 1800 provides the ability to place a Trunk Appearance on hold and free your Prime Line to make and receive additional calls. By dialing a feature code plus the trunk number, any single line can pick up a held Trunk Appearance. Additionally, the single line when completed with the call has the ability to put the call back on hold (flashing Trunk-Direct Appearance). Once the single line puts the Trunk appearance back on hold it can hang-up and be free to make and receive new calls.
1800 also provides the ability for on hold Trunk Direct Appearance to recall to an alternate destination. One alternate destination can be provided per tenant.
3.5.1 Enhancement – Previously when Trunk-Direct Appearance was placed on hold, both the Trunk-Direct Appearance and the Prime Line were occupied. The Prime line was not free to receive and place calls.
A single line could not pick-up an on hold Trunk-Direct Appearance. The Trunk Direct Appearance had to be transferred to the single line. The single line could not place the call back on hold, the single line would have to transfer the call to another station.

3.5.2 Typical Application – Square Key System with Trunk-Direct Appearance. The answering station can page the single line user to pick-up call on line one.

3.6 Whisper Page – 1800 Series Software allows Whisper Page to be set to a call in progress with the Primary Extension, Sub-Line or Trunk-Direct Appearance.

3.6.1 Enhancement – Previously Whisper Page could only be set to a call in progress with the Primary Extension.

3.6.2 Typical Application – Square Key System with Trunk-Direct Appearance.

4.0 New CCIS Features

4.1 Event Based CCIS (E-CCIS) – This feature allows the use of various CCIS features by using ISDN lines as CCIS virtual tie lines between **NEAX®2000 IVS** - **NEAX®2000 IVS**, **NEAX®2000 IVS** – **NEAX®1000 IVS**, **NEAX®1000 IVS** – **NEAX®1000 IVS** connections. Also available in the future **NEAX®2400 ICS** connection to **NEAX®2000 IVS** and/or **NEAX®1000 IVS**. The maximum number of virtual tie lines are 16 channels per system, including common signaling channels and voice channels. The ISDN lines used for virtual tie lines can also be used as regular ISDN lines.

4.1.1 Required Hardware – Each **NEAX®2000 IVS** and/or **NEAX®1000 IVS** in the E-CCIS network must have one SPN-SC00 CCH (AP) for each local and distant office connection(same as tie line based CCIS). Each local and distant office can be equipped with either SPN-24DTAA-C (AP) & SPN-SC01 DCH-UA (AP) for ISDN PRI or SPN-BRTA-C (AP) for ISDN BRI.

4.1.2 Typical Application – Provides network cost savings by using ISDN lines for local and/or long distance calling and for low traffic CCIS connections.

5.0 Enhanced CCIS Features

5.1 Calling Number Display CCIS – 1800 Series Software provides a maximum of 16 digit called party number to be displayed on a Multiline Terminal Display .

5.1.1 Enhancement – Previously 8 digit called party number was displayed.

5.1.2 Typical Application – CCIS network applications where Analog Caller ID, ANI and/or CPN is required to be passed between local and distant offices.