

UNIVERGE® SV8100

Product Release Note

Software Version R4.01

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NEC Corporation of America

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1. Overview

The **UNIVERGE SV8100®** provides new and enhanced features with the release of SV8100 R4.01 Software. A short description of these capabilities is outlined in the following pages. This release note provides a quick reference of R4.01 enhancements and may not cover all service and operation conditions. Please refer to the UNIVERGE SV8100 Features and Specifications Manual and the UNIVERGE SV8100 Hardware Manual for additional information.

2. Embedded Voice Response System (VRS)

2.1 Description

Embedded VRS provides one channel of VRS without having the PZ-VM21 (VMDB) and Compact Flash installed on the CPU, therefore allowing the voice prompt to be saved on flash memory on the CPU (Embedded VRS).

The following applies to the Embedded VRS Feature:

- Number of VRS channels 1
- Number of VRS prompts: 4
- Maximum of eight minutes recording time, including stored VRS and outside caller messages.

2.2 Benefits

An ideal solution for a small office, the Embedded VRS can be used as an auto attendant and take messages from the auto attendant in a general mailbox. Additionally no hardware is required (value of \$695.00).

2.3 Conditions

- This feature is disabled when the InMail Compact Flash is installed.
- Up to four ACD Delay Announcements are supported.
- When all 10 messages have been recorded or if all eight minutes of the recording time has been used, auto attendant callers will be dropped without notification when trying to leave a message.
- The VRS Upload Download Audio feature is not available for Embedded VRS.
- When using Embedded VRS and single line loop back (Virtual Loop Back), the beep to record tone is not available.
- When using Embedded VRS and standard trunks, the beep to record tone is available.
- This feature supports US English, Mexican Spanish and Canadian French languages. Only one language can be installed and used at one time. Languages are available for download at www.necntac.com.

2.4 Required Hardware, Software and License

- Hardware
 - None
- Software
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com
- License
 - Version 4000 Main Version feature license (Part Number: 670963)

3. 2B Channel Transfer

3.1 Description

This ISDN PRI 2 B-Channel Transfer feature allows the UNIVERGE SV8100 to receive a call on one B-Channel and transfer it back out on a second B-Channel (Trunk-to-Trunk transfer on the Telco side). When the transferred call connects, both of the B-Channels are then released and available for either making or receiving another call.

3.2 Benefits

This feature eliminates the need to hold two ISDN trunks in the SV8100 for a single call providing more efficient use of B Channels on an ISDN PRI by allowing a customer to transfer calls without tying up their B Channels for the duration of the call.

3.3 Conditions

- This feature is provided if TELCO Service Provider supports this feature
- This feature is only supported with a Manual Transfer
- This feature is not supported with Automatic Transfer
- This feature is not supported with Unsupervised Conference
- This feature is only supported when both trunks are ISDN/PRI and the bearer capability of the two trunks meets the same service requirements
- Both ISDN/PRI trunks must reside in the same system for this feature to work

3.4 Required Hardware, Software and License

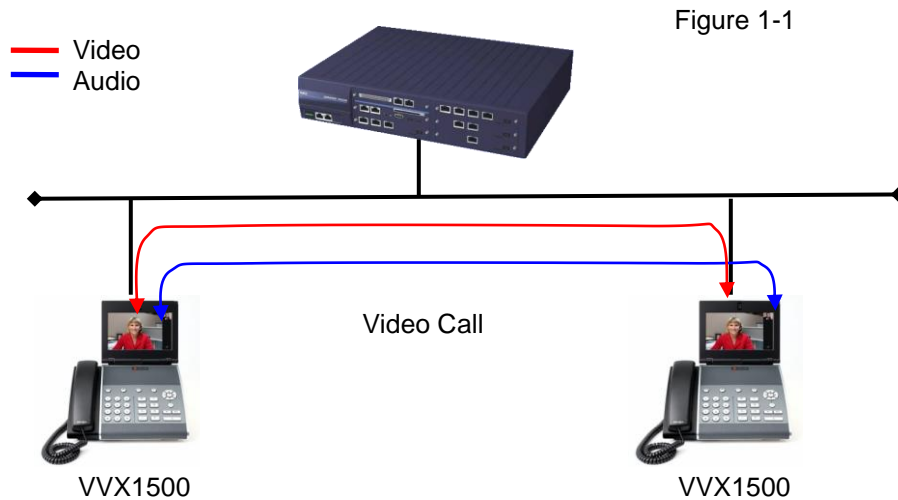
- Hardware
 - CD-PRTA (ISDN PRI blade)

- Software
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com
- License
 - Version 4000 Main Version feature license (Part Number: 670963)

4. Video Function of Standard SIP

4.1 Description

This function makes it possible to communicate with Video between standard SIP Terminals during a Peer to Peer Call when residing on the same network. (Figure 1-1) Video Function can enable or disable per SIP terminal.



4.2 Benefits

Easy access to video allows increased remote collaboration and ability to view body language. Enable video conference right from the desktop. Integrate Communications into business processes allowing for faster decision making.

4.3 Conditions

- Video Codecs H.264, H.263 and H.261 are supported
- Video is supported when P2P for standard SIP is turned on
- Standard SIP video Codecs are not supported across CCIS and Netlink
- Standard SIP terminal **can not negotiate** video Codec with **SP310**

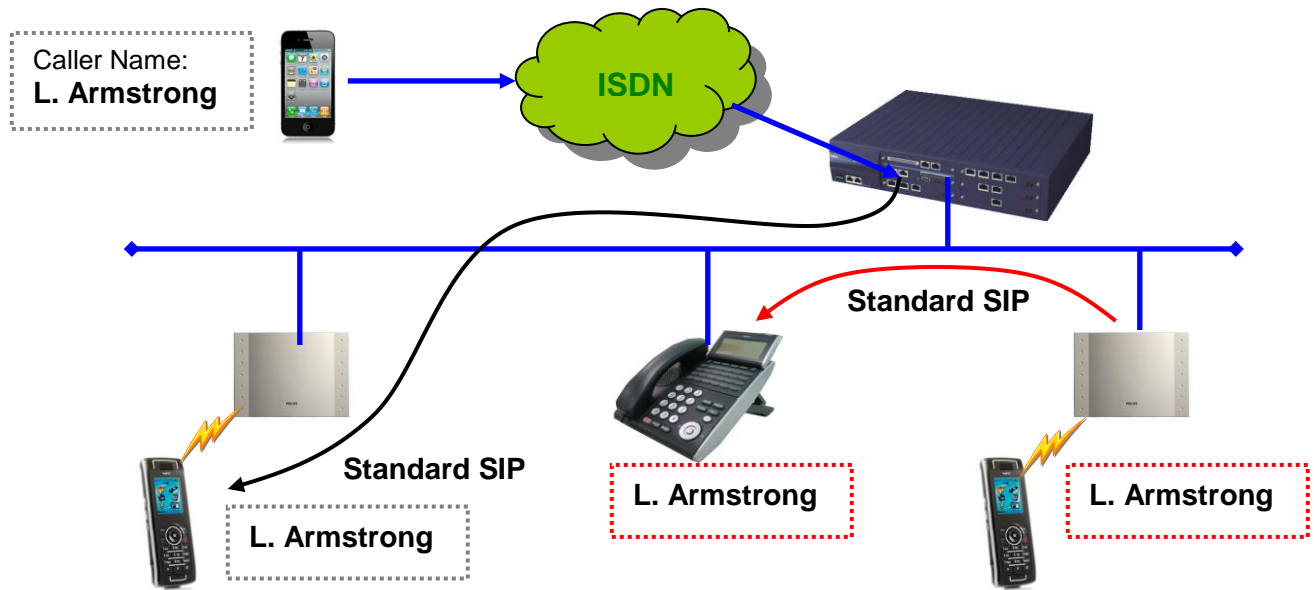
4.4 Required Hardware, License and Software

- **License**
 - System base SIP Video License (Part Number: 670965)
 - Version 4000 Main Version feature license (Part Number: 670963)
 - Standard SIP 3rd Party Licenses (Part Number 670721)
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com

5. SIP Enhancement (Send Calling Name)

5.1 Description

Calling name information will be added to calls on standard SIP extensions (IP DECT). SIP DECT handset can display the calling name on an inbound call.



5.2 Benefits

The enhancement is improvement of terminal display for incoming calls. Increase user productivity by receiving the calling name on an incoming internal/external call over SIP DECT. Even while mobile, the user can choose to answer only those important calls that are applicable to business use.

This feature was requested because of the comparison with KIRK DECT. Until version 4.01 software, the name translation was missing in the IP DECT. This can be a problem for a customer who upgraded from KIRK DECT.

5.3 Conditions

- Hold recall will not display calling name
- Call back from trunk will not display calling name
- Transfer recall will not display calling name
- Call forward from trunk is not supported
- The *priority* for the display is as follows:
 - If calling from a standard SIP terminal:
 - Calling name from originating standard SIP caller
 - Extension number
 - If calling from an SLT, DT300 (including virtual extensions) or a DT700
 - Extension name
 - Extension number
 - If calling from a trunk, (i.e. SIP trunk, ISDN, Analog C.O.)
 - Calling party name of incoming trunk. (Caller ID information)
 - Program abbreviated dial Name (with matching Caller ID).
 - Calling party number.
 - For trunks, new system program controls what is displayed and has the following options
 - Both Name and Number
 - Name only
 - Number only
 - None

5.4 Required Hardware, Software and License

- **Hardware**
 - NEC DECT Access Point AP200S
 - NEC SIP DECT Handset - NEC C124/G955
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com
- **License**
 - Version 4000 Main Version feature license (Part Number: 670963)
 - Standard SIP Clients for each handset Part Number: 670721)

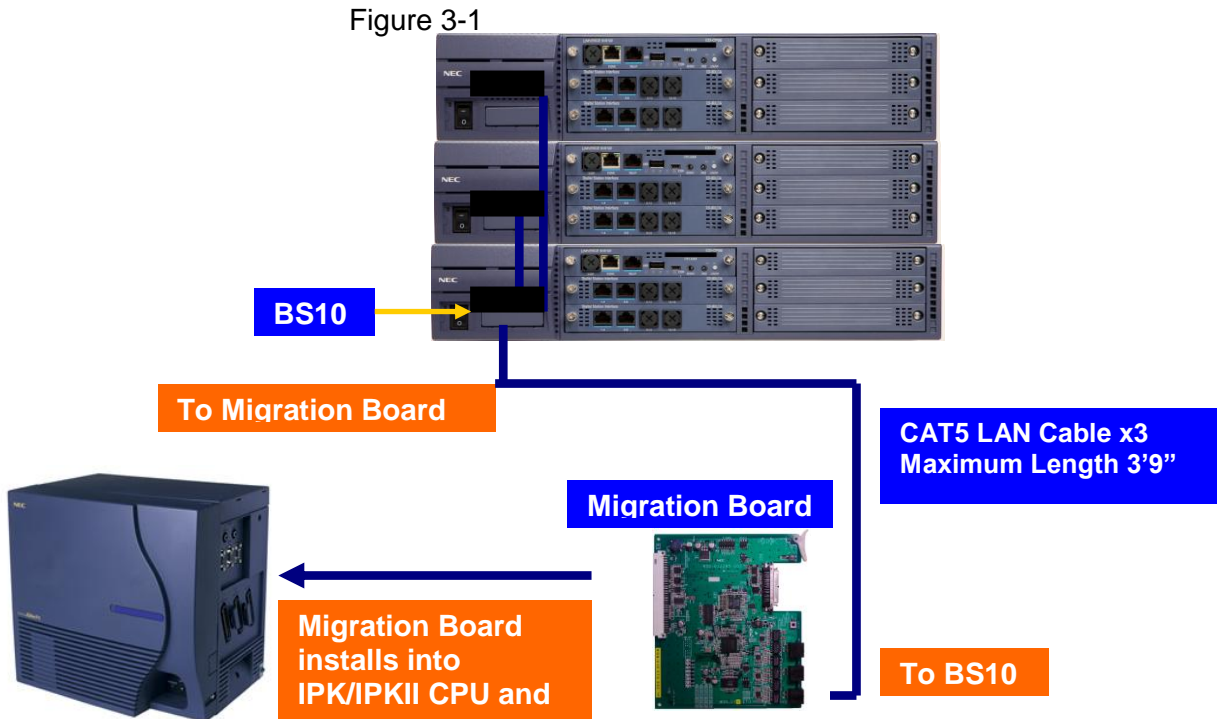
ENHANCED FEATURES

6. IPK/IPKII Migration – Combination Cabinet

6.1 Description

The IPK/IPKII Migration package allows the user of an existing NEC IPK/IPKII platform to utilize the enhanced capabilities of the SV8100. R4.01 enhancement supports a flexible combination of UNIVERGE SV8100 and IPK/IPKII cabinets.

Figure 3-1 Multiple SV8100 to IPK/IPKII Connection. One cable is connected to the MGN-U10 (Migration Board) and two cables are connected to the (PZ-BS11).



In addition to the layout in figure 3-1, the following configurations are also supported:

- Two SV8100 to single IPK/IPKII Connection
- Two SV8100 to three IPK/IPKII Connection
- Single SV8100 to three IPK/IPKII Connection (supported with R2.5 or higher software)

Note: See *SV8100 Hardware Manual for complete configuration*

6.2 Benefits

This enhancement makes the migration solution an even more valuable tool in customer retention by maximizing investments dollars. Prior to Release 4.01, the customer could only expand with a single SV8100 or the IPK/IPKII. By expanding migration capabilities to support multiple SV8100s, customers will be able to grow their business to an even larger capacity and take advantage of today's technology advancements as well as new features and enhancements.

6.3 Conditions

- IPK/IPKII license does not transfer to SV8100 CPU
- Refer to release note RNSSV8100-09-001 for supported Terminals, IPK/IPKII Hardware and Optional Equipment. Refer to SV8100 Features and Specifications Manual and SV8100 Hardware Manual for conditions

6.4 Required Hardware, Software and License

- **Hardware**
 - MGN-U10 (Migration Board)
 - Controlling CHS2U-US
 - CD-CP00-US
 - PZ-ME50-US
 - PZ-BS10
- **License**
 - Version 4000 Main Version feature license (Part Number: 670963)
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com

7. E911 Compatibility (911 Cut Through / Calling Party Number)

7.1 Description

E911 Compatibility ensures that emergency calls always get through. If an emergency occurs, a user goes to any telephone, lifts the handset and dials 911. The 911 Cut Through feature has been enhanced to work when dialing **trunk Access+911**. E911 Compatibility has also been enhanced to support **Calling Party Number (CPN)** Presentation for 911 calls allowing the calling number for the ISDN trunk to be sent when making a normal call.

7.2 Benefits

Calls made to 911 services are of great urgency and responders typically do not have a moment to spare. Enhancing E911 Compatibility ensures callers are able to “make calls when it counts”. Start a 911 call by dialing the trunk access code or if the caller forgets to dial the trunk access code, 911 calls still cut through. Extending 911 to support CPN when sent out ISDN increases our opportunity to work in most customer’s offices regardless of trunk type.

In addition to 911 Cut Through and CPN enhancement, there is no additional hardware required to support EMERGENCY 911 Compatibility enhancements.

7.3 Conditions

- When a trunk call is made by way of CCIS from extension terminal, it uses CPN from CCIS
- CAMA trunks are not supported
- If a 911 call originates from a Virtual Extension, the system sends the Virtual Calling Party Number (CPN) Presentation from Station

7.4 Required Hardware, Software and License

- **Hardware**
 - None
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com
- **License**
 - Version 4000 Main Version feature license (Part Number: 670963)

8. Caller ID – Caller Log on Busy

8.1 Description

Calls to a busy extension or busy tones returned to the caller are logged in the Caller ID List. When a busy call is logged, the Caller ID List key flashes the same as it does with a new missed call.

8.2 Benefits

Helps improve productivity as calls to a busy extension are logged in the Caller ID List. Office administrators can use the Caller ID list as a reminder to contact important individuals they may have otherwise forgotten during their busy work day.

8.3 Conditions

- Programming is required for the Caller ID List to show calls to a station that received a busy tone. Programming is system wide and not per station
- Caller ID Name can display up to 12 characters
- Caller ID Number can display up to 11 characters
- When you shut down the system, incoming history data is cleared. But you can back up the history data by pressing Speaker + # * # 9.

8.4 Required Hardware, Software and License

- **Hardware**
 - CD-4C0TB
 - CD-2BR1A
 - CD-PRTA
- **License**
 - Version 4000 Main Version feature license (Part Number: 670963)
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com

9. K-CCIS – IP

9.1 Description

KCCIS-IP has been improved to support Peer-to-Peer calls between IP Terminals residing in different offices, without using DSP resources. With software lower than Version 4000 (4.01), two DSP resources in each office/system were consumed for calls between IP Terminals.

9.2 Benefits

The use of less DSP resources could increase call efficiency. The use of a smaller IP Pad card adds immediate cost savings for the customer.

9.3 Conditions

- DT700 terminals are supported for Peer-to-Peer connections via a P2P CCIS call
- Standard SIP terminals are not supported for Peer-to-Peer connection
- When port translation is done through a NAT router, Peer-to-Peer is disabled
- When RTP encryption is enabled, Peer-to-Peer is disabled

9.4 Required Hardware, Software and License

- **License**
 - Version 4000 Main Version feature license
(Part Number: 670963)
- **Software**
 - SV8100 Main software Version 4000 (4.01 or higher) - available through a download from www.necntac.com

10.1 Software and Hardware

Unit Name	Description	Part No.
LK-SYS-MAINVERSION 4-LIC	<p>Enhanced Release 4.0 Main feature license supports:</p> <ul style="list-style-type: none"> - Embedded VRS* - 2B Channel Transfer* - Video Function of Standard SIP* - SIP Enhancement (Send Calling Name)* - IPK/IPKII Migration – Combination Cabinet* - Calling Party (CPN) out ISDN* - E911 Cut Through (9911)* - Caller ID – Caller Log on Busy* - IP-KCCIS Peer to Peer* - SIP registry own remote system - SIP Fax over IP (T.38) - InMail Enhancements <ul style="list-style-type: none"> - Upload / download audio - Cascading Message Notification' - Find-Me / Follow – Me - Security Code - Netlink trimming fail-over condition - 3rd Party CTI and SOAI collaboration - PC Pro Enhancements - Automatic IP duplication group - Function Key Enhancement - Up to 16 InMail Ports - InMail Netlink support - InMail Language Setting <p>*Requires Version 4000 or higher (R4.01 system software)</p>	670963
LK-SYS-SIP VIDEO-LIC	<p>SIP VIDEO LICENSE is a system wide license that enables the ability for Standard SIP Terminals to communicate via video when residing on the same network.</p>	670965

11.1 Technical Documentation

Technical documentation available for download on the Information Portal:

SV8100:

- SV8100 / SV8300 Hardware Manual
- SV8100 General Description
- SV8100 Features and Specifications
- SV8100 PC Programming
- SV8100 Networking Manual
- SV8100 Feature Availability by Software Revision

R4.01 Feature	Related Documentation	Features and Specification Name Description for each new Feature
Embedded VRS	Features and Specifications General Description	Voice Response System – Embedded VRS
2B Channel Transfer	Features and Specifications General Description	ISDN Compatibility
SIP Video	Features and Specifications General Description	IP Single Line Telephone - SIP
SIP Enhancement (Send Calling Name)	Features and Specifications General Description	Wireless DECT SIP
IPK/IPKII Migration	Features and Specifications General Description Hardware Manual	IPK/IPKII Migration
CPN Presentation and E911 Cut Through	Features and Specifications General Description	E911 Compatibility
Caller ID – Caller Log on Busy	Features and Specifications General Description	Caller ID
IP-KCCIS Enhancement	Features and Specifications General Description Networking Manual	K-CCIS-IP

Note: VVX1500 SIP Terminal

(AN2700-10-018 Application Note and RN27-10-052 Release Note) Future

12. R4.01 Master Quote Change

SIP Video license has been added to Master Quote. Select Yes when the SIP Video License is desired. The SIP VIDEO LICENSE is a system wide license that enables the ability for Standard SIP Terminals to communicate via video when residing on the same network. Standard SIP license is still required for each terminal.

The screenshot displays the 'MQ-306358-1-1' configuration window. The 'SIP Licenses' section is highlighted with a purple border and contains the following items:

Item	Value
110.00 SV8100 Licenses	Reset
SIP Licenses	
<input type="checkbox"/> Dterm SIP (IP Terminal)	
<input type="checkbox"/> 3rd Party SIP (IP Single Line)	0
<input type="checkbox"/> Encryption	<input type="checkbox"/> YES
<input checked="" type="checkbox"/> SIP Video License	<input checked="" type="checkbox"/> YES
Network Licenses	
<input type="checkbox"/> Peer-to-Peer CCIS	0
<input type="checkbox"/> SIP Trunks	0
<input type="checkbox"/> CCIS via PVAA	0

Below the network licenses, it states: 'VoIP board is supplied in each IP Package'.

The 'Attention' box on the right contains the following text:

Attention
SIP, Softphones, and 3rd Party SIP Licenses are shared throughout the total system configuration. This includes the main site and all remote sites. There are 4 SIP Licenses built-in the CPU. When selecting IP Package, these licenses are shared across the system configuration. Each SV8100 daughter board. MQ will supply the required IP package depending upon the system configuration.

NOTE: The amount of VoIP PAD Channels varies from configuration to configuration, so it is not necessary for the system to be non-blocking for proper system functionality. Even though the capacities, traffic, and requirements vary, the ratio of ports to PAD Channels are similar to the ratio between stations and trunks. 20-30 percent to 70-80 percent still holds true for a system configuration.