
GENERAL DESCRIPTION

OfficeServ™ SVMi-20E

Complete Integrated Voice Processing

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Officeserv SVMi-20E

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System Overview

The OfficeServ SVMi-20E

The SVMi-20E is designed to meet the demands of the sophisticated voice mail user without sacrificing simplicity.

The SVMi-20E is a self contained plug in (In-Skin) Auto Attendant and Voice Mail card.

- o The SVMi-20E is made to work exclusively for the OfficeServ 7000 Series systems.

The SVMi-20E may act as an Auto Attendant system only, a Voice Mail System only or both. Out of the box:

- The SVMi-20E is equipped with 4 Ports built onto the main PCB assembly and can handle 4 calls simultaneously. The SVMi-20E can currently (at the time of this writing) be upgraded to 8 and/or 12 Ports by adding one or two 4 Port VPMs to handle up to either 8 and/or 12 calls simultaneously.
 - o VPMs are Voice Processing Modules. These are cards that provide 4 additional Ports of Voice Processing to the SVMi-20E.
 - o There are two different types of VPMs compatible with the SVMi-20E and SVMi-16E. They are the VPM-E and the VPMF-E.
 - Both offer 4 additional ports of Voice processing.
 - The VPMF-E also allows for one FAX DSP to allow for Fax-On-Demand and FaxMail functionality.

NOTE: Both the VPM-E and VPMF-E used on the SVMi-20E are the same as used on the previously released SVMi-8E and SVMi-16E cards.

On the SVMi-20E unit, no external line or power connections is necessary as it is an In-Skin product. The power and telephone connections are accomplished directly through the phone system on the backplane edge connectors. Because the SVMi-20E does not draw from the -48DC supply it has a Zero (0) SEPU rating under all possible configurations.

Currently the Message Storage capacity, on the SVMi-20E is approximately 7 hours with the 128MB Compact Flash configuration or approximately 140 hours with the Hard Drive configuration.

- Message Storage Capacities may vary from installation to installation. Number of custom Prompts and Personal greetings recorded can affect the overall Message Storage Capacity. Also Audiotex and Fax applications can decrease the overall Message Storage Capacity.
- Message Storage Capacities are reflective of the total amount of drive space available after the Operating System, Voice Drivers, Application Software, and three standard System Languages are installed. Adding

more languages will decrease the Message Storage Capacity by 30 to 40 minutes for each language added. Conversely, removing one or two of the three standard languages can increase the Message Storage Capacity by 30 to 40 minutes for each of the languages removed.

- As time goes on, improvements in technology will allow for changes in storage time.

The modular design of the SVMi-20E allows it to be expanded to add voice ports as needed. Only one SVMi-20E card can be installed in a system and another voice mail system can NOT be used in combination with the SVMi-20E.

The OfficeServ SVMi-20E Capacity and Compatibility Chart

	SVMi-20E		
Port Upgrade Type	VPM-E and/or VPMF-E		
Ports	4	8	12
Compact Flash Size	128 MB		
Compact Flash MSG Storage	7 Hrs. [†]		
Hard Drive Size	2G Partition		
Hard Drive MSG Storage	140 Hrs. [†]		
Mailboxes	Virtually Unlimited [‡]		
E-Mail Gateway Users	5 - Unlimited [‡]		
FAX Ports with optional VPMF-E	N/A	1	2
LAN	Yes		
Modem Daughter Card	Optional		
Serial I/O	Yes		
Fax Application Software	Yes		
Audiotex Application Software	Yes		
SEPU	0	0	0
System Compatibility	OfficeServ 7000 Series		

[†]: Message storage times can vary based on the number of installed languages. The times in this table were calculated with the three languages (English, Spanish, and French) that are installed standard. Each language installed will consume 30 - 40 Minutes of Message Storage.

[‡]: The SVMi-20E software can literally have an Unlimited number of mailboxes created. However a practical physical limitation based on size of data storage device, number of installed languages, number and length of personal greetings, number and length of custom Prompts, and size of the over all application may be between approximately 1,000 to 10,000 mailboxes.

Auto Attendant

The SVMi-20E Auto Attendant application works by automatically answering calls and playing one or more custom prompts to the caller along with some dialing instructions. The caller may then press digits on the keypad to direct themselves to the appropriate person or department.

The SVMi-20E Auto Attendant application can work in conjunction with your system operator by answering calls with a pre recorded prompt or prompts, and offering the caller several possible dialing options including dialing another extension number, transferring to an operator, accessing pre recorded and stored information, or connecting to voice mail.

Voice Mail

Voice Mail provides services if called stations are unavailable. Upon dialing an extension number, callers may be routed directly to voice mail or transferred to the extension first. The call may be forwarded from the station according to various conditions (busy, no answer or all the time).

The system will answer calls with a custom greeting in the Subscriber's (mailbox owner's) own voice. The caller can then leave a message.

The Subscriber (mailbox owner) can access the mailbox from any location with a DTMF phone and retrieve their messages. Many options are available to handle the message.

SVMi-20E Subscribers can be authorized to use the E-Mail Gateway to have their Voice Mail Messages sent to their INBOX on virtually any Mail Server that supports SMTP.

System Capacities

Capacities not mentioned in the OfficeServ SVMi-20E Capacity and Compatibility Chart are:

	DEFAULT	RANGE
Maximum Subscribers Digits in Length	4 Digit Length	Any length from 1 - 16 Digits
Message Retention	9999 days	0—9999 days
Total Messages per Mailbox	999	0—9999
Total Message Duration	600 seconds	0—9999 seconds

E-Mail Gateway Capacities

	SVMi-20E
Default	5
Unlimited User License	Unlimited [†]

[†]: The Unlimited E-Mail Gateway User License is optional and must be purchased separately.

2

Hardware Description

OfficeServ SVMi-20E

Unlike traditional PC based Voice Mail / Auto Attendant Systems, the SVMi-20E installs inside the telephone equipment and operates as an integral part of it. This is referred to as "In-Skin" and makes the SVMi-20E proprietary to the Samsung family of Phones Systems.

SVMi-20E

The component parts of the SVMi-20E are as follows:

SBC (SVMi-20E Motherboard)

SBC (Single Board Computer) is the main circuit card that connects to the backplane of the phone systems. The disk drive and voice processing modules connect to this card.

- The SVMi-20E connects to the OfficeServ 7000 Series Systems.

On the front of the card there are two connectors. The use of these connectors is optional and it is not necessary to have anything connected in order for the SVMi-20E to run.

The Serial Interface

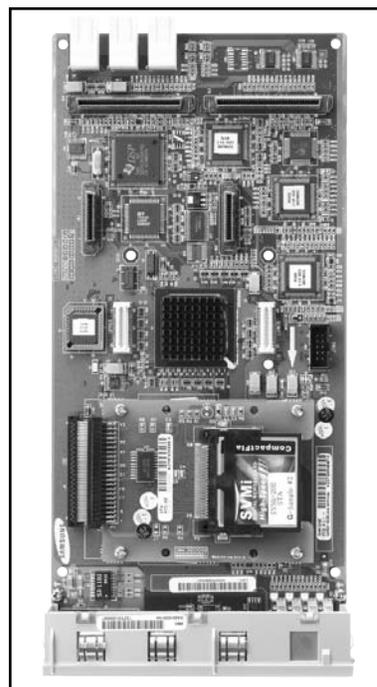
This can be used to connect a modem or PC to provide local or remote PC based administration. The connector is called the SIO connector.

The LAN Interface

This is used for data transfer or database back up. The connector is called the LAN connector. The main purpose for this connector is for system file transfer (Back-up and Restore) as well as for use with E-Mail Gateway functionality. The SVMi-20E is designed to back up and restore data to the customer provided LAN, or directly to a PC or Laptop connected to this LAN connector. The E-Mail Gateway functionality is used to send voice messages to E-Mail.

Reset Button

The sunken button marked RST is the reset button. Pressing this will immediately restart the SVMi-20E system and will disconnect any calls in progress.



SVMi-20E

Since pressing the RESET button during operation will disconnect all callers and immediately restart the SVMi-20E, it should only be used as directed. Pressing this button when the system is performing Disk I/O could result in data loss or file corruption. This button should not be pressed if the SVMi-20E is actively processing calls.

LED Indications

These connectors are next to the two DLI connectors and are not used at this time. There are Eight (8) LEDs on the SVMi-20E, the one marked HD will flash whenever the hard disk drive is being accessed, others will give indications of various board functionality.



SVMi-20E LED Indications

VM1 Status LED

This indicates that one or more of the embedded ports (port 1 thru 4) are off hook. If you were to reset or turn the power off you would disconnect the caller connected to the active port(s).

VM2 Status LED

This indicates that one or more of the ports on the 1st installed VPM are off hook. If you were to reset or turn the power off you would disconnect the caller connected to the active port(s).

VM3 Status LED

This indicates that one or more of the ports on the 2nd VPM are off hook. If you were to reset or turn the power off you would disconnect the caller connected to the active port(s).

HDD Access LED

The HDD access LED will flash whenever the Hard Drive or CF is being accessed. This works in a similar way to the Hard Disk access LED on your desk top PC.

LAT Status LED

This indicates that the LAN port is active.

LRT Status LED

This indicates that the LAN port is Receiving and/or Transmitting Data.

SDN Status LED

This is the System Status LED showing the operating status of the card. A status of green indicates the SVMi-20E is down and it is safe to power off the switch. A status of red indicated the SVMi-20E is up and running and it is NOT safe to power down the switch without possible corruption to the SVM databases.

PGD Status LED

Green indicates that good Power is being provided to the SVMi-20E through the Back Plane.

Back Plane Connectors

There are three connectors on the back edge of the card. These are used to connect the SVMi-20E to the phone system.

VPM Connectors

This is a proprietary connector for installing up to 2 Voice Processing Modules (VPMs) on the SVMi-20E. Any of the VPM connectors can be used for either of the two types of VPMs. The VPMs are, a VPM-E that provides an additional 4 voice ports and a VPMF-E that also provides an additional 4 ports but also includes one FAX DSP that enables any port† on the SVMi-20E to be used for Fax applications.

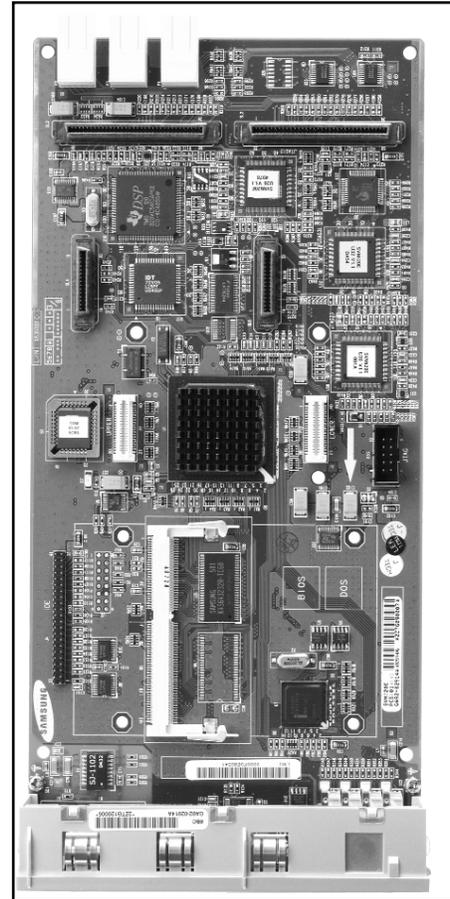
† Though any port can be used to send or receive a FAX with a VPMF-E installed; only ONE Fax call can be handled per available FAX DSP. There are a Maximum of two FAX DSP's per SVMi-20E system when two VPMF-Es are installed.

Modem Connectors

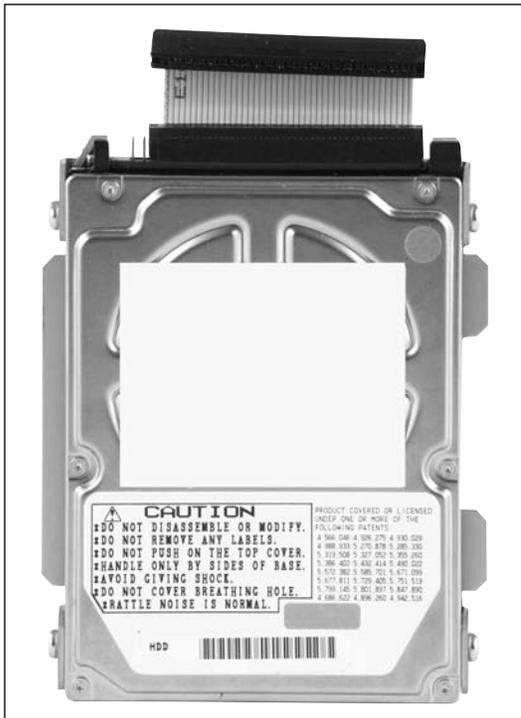
The SVMi-20E can be equipped with an option internal Modem Daughter Board. This Modem Daughter Board is sold and priced separately. When installed, the Modem will allow for remote System Administration with all the same capabilities as plugging a terminal device directly into the SIO.

DRAM Connectors

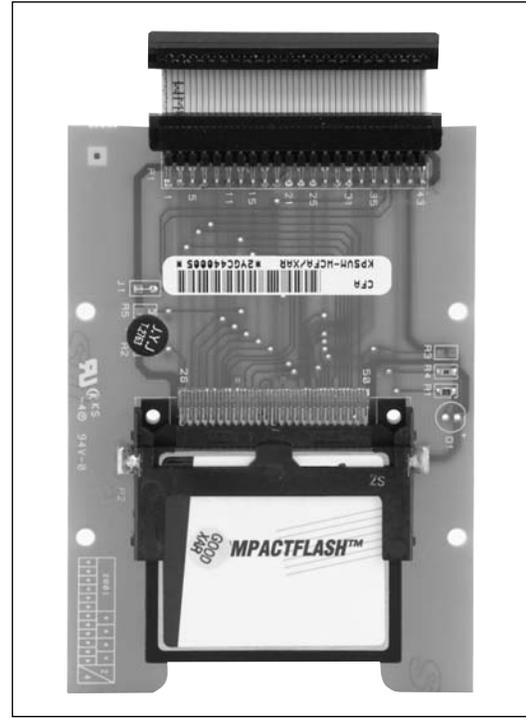
The SVMi-20E comes equipped with 8MB of RAM. The DRAM connector, located directly under the HDD or CF Controller, is for upgrading to 64 MB of RAM. Adding the 64MB DRAM is required when going beyond eight (8) Ports. This added RAM requirement is used solely for loading the Voice and other various drivers used by the SVMi Application. The DRAM is NOT used for message storage.



SVMi-20E with no optional boards installed



Hard Drive



Compact Flash and Adaptor

Data Storage Device

The SVMi-20E is available with two different types of data storage devices, Hard Drive and Compact Flash units. Only one or the other can be used on a single system. Both device types are used for storing the main system program as well as all messages, and prompts. The amount of storage time is determined by the size of the drive measured in Mega Bytes (MB).

Hard Drive

The current Hard Drive provides approximately 140 hours of message storage. The hard drive for the SVMi-20E card is available only from SAMSUNG. The Hard Disk Drive can be removed or replaced in the event of a problem or upgrade. It is held in place on the SBC by 4 screws.

The Hard Disk Drive is connected to the SBC with a ribbon cable. Note that the connector on the Hard Drive has 4 extra pins on the end of the connector. Do not use these pins.

Compact Flash

The Compact Flash is used in the same way as the Hard Drive and is also only available from SAMSUNG. The current Compact Flash on the SVMi-20E provides approximately 7 hours of message storage. One of the benefits of using the Compact Flash is that it can be removed from the System for archiving data purposes.

Systems must be properly shut down and off before removing the Compact Flash card from the SVMi-20E.



Compact Flash

Back Up Adapter (Optional)

The Back Up Adapter allows the removable memory card to be installed in the PCMCIA card slot of a Laptop PC. When this is done a back up may be made of the customer database. This item is available from www.sandisk.com or Insight Direct.

Voice Processing Module (VPM)

The 4 port Voice Processing Module is a small removable hardware board called a VPM. It connects to the SVMi-20E PCB. When it is installed in the SVMi-20E card it increases the number of available ports by 4.

IMPORTANT NOTE: The VPMs used in this product appear very similar to the VPMs in our previous CADENCE and SVMi-8 products, but they are not interchangeable. If the VPMs are not labeled with the letters SEC and/or do not say VPM02 they will not work in the SVMi-20E products.

The VPM is used to:

- Move the digital speech and fax information between the SVMi-20E system and the phone system.
- Generate and detect DTMF
- Record and play back speech

Each VPM has 4 channels. This means that for each VPM installed, up to four additional simultaneous callers can be connected to the SVMi-20E.

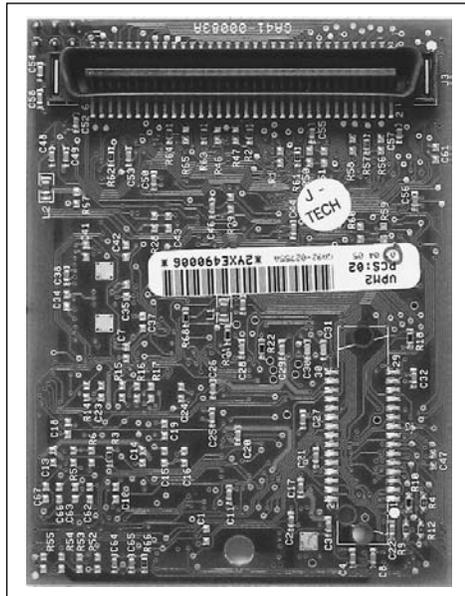
The VPM is attached to the SBC by an edge connector.

The SVMi-20E card can accommodate up to 2 of these cards allowing up to 12 simultaneous callers. At the time of this writing[†] the SVMi-20E can not be expanded beyond 12 ports.

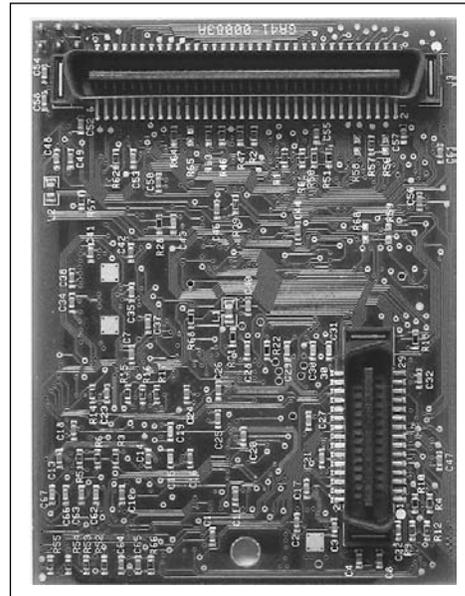
[†] As of July 2005 plans are in place to create a third type of VPM. This new type of VPM will use the same connectors but allow for up to 8 additional Ports of simultaneous voice connections. By adding two of these new types of VPMs will increase the capabilities of the SVMi-20E to 20 simultaneous voice Ports.



Back Up Adapter



VPM-E-4 Voice Processing Module Board-Back View



VPMF-E-4 Voice Processing Module Board with 1 Port Fax Support-Back View

Types of VPM

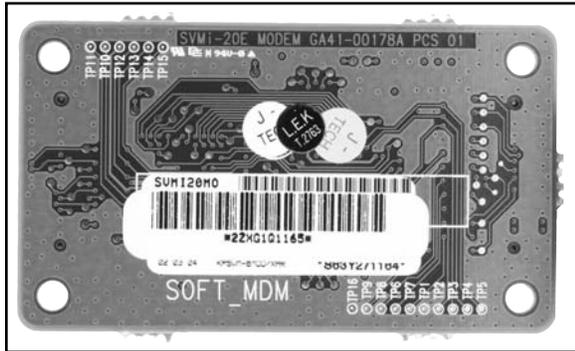
There are two types of VPM. The VPM-E and the VPMF-E.

- **VPM-E-4 Port Voice Processing Module**

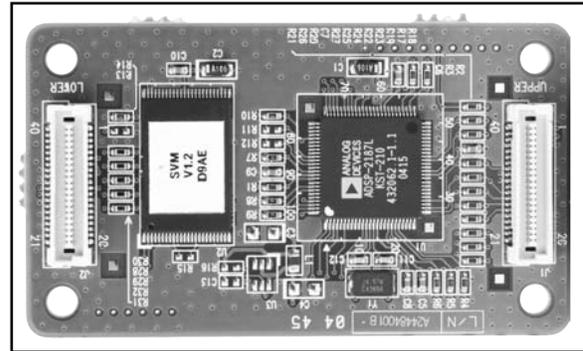
This add-on-card provides 4 channels of voice otherwise known as ports. It allows 4 simultaneous callers to use the services of the SVMi-20E. Up to two of these cards can be added to the SVMi-20E.

- **VPMF-E-4 Port Voice Processing Module with 1 Port Fax Support**

This add-on-card provides 4 channels of voice otherwise known as ports. It allows 4 simultaneous callers to use the services of the SVMi-20E. Any one of these ports can use the fax services of the SVMi-20E card. Up to two of these cards can be added to the SVMi-20E. On the SVMi-20E you can use any combination of VPMs.



Top/Back View



Bottom/Front View

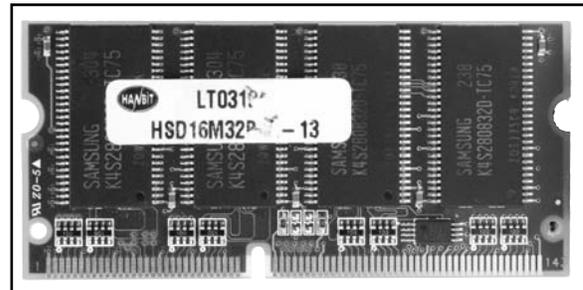
Modem Daughter Board

This Modem Daughter Board is sold and priced separately. When installed (as described in the Installation Guide), the Modem will allow for remote System Administration with all the same capabilities as plugging a terminal device directly into the SIO. The modem is accessed through the TUI System Administration as explained in the SVMi-20E Programming Overview, Programming Methods, DTMF System Administration, Modem Login.

The modem is installed component side down.

64 MB DRAM Module

The SVMi-20E comes equipped with 8MB of RAM. The DRAM connector, located directly under the HDD or CF Controller, is for upgrading to 64 MB of RAM. Adding the 64MB DRAM is required when going beyond eight (8) Ports. This added RAM requirement is used solely for loading the Voice and other various drivers used by the SVMi Application. The DRAM is NOT used for message storage.

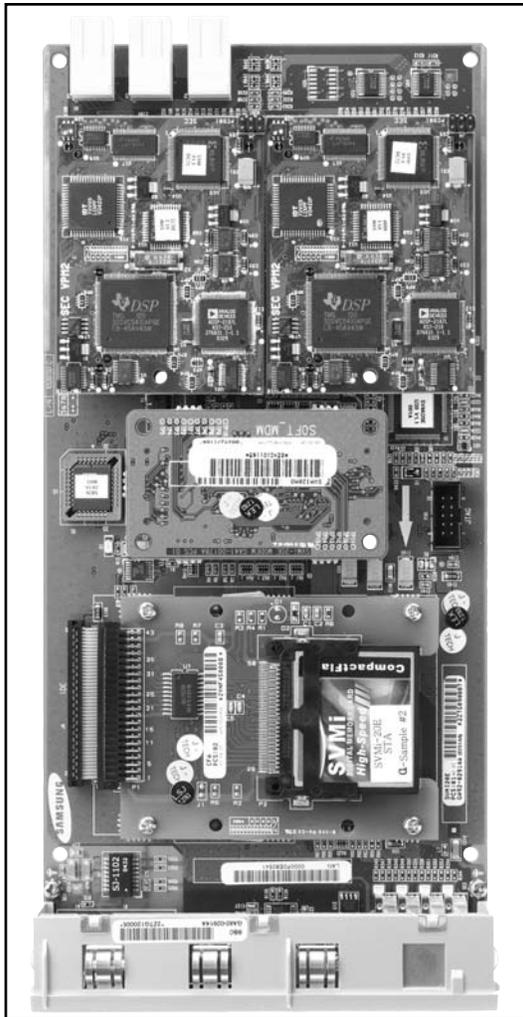


64 MB DRAM Module

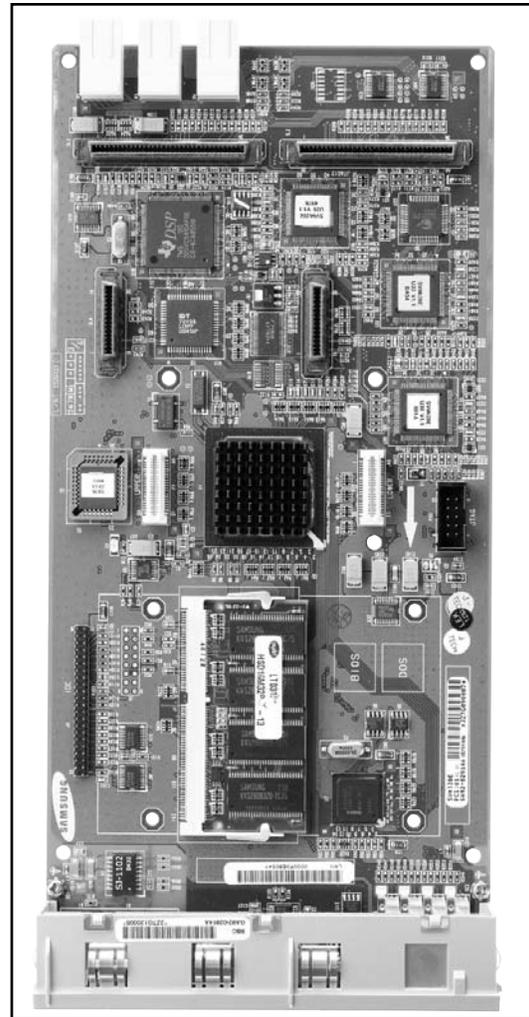
Hardware Description

The SVMi-20E displayed on the left has all optional boards installed; (2) VPMF-Es, (1) Modem, (1) DRAM Module (this is located directly under the Compact Flash Controller). Also shown are the SVMi-20E Compact Flash Controller and 128MB Compact Flash Media.

The SVMi-20E displayed on the right is shown with the 64MB DRAM installed and all other connectors unpopulated. You can see with the CF Controller removed where the DRAM and it's connector are located and positioned.



SVMi-20E/CF with all optional boards installed



SVMi-20E with 64MB RAM installed

Software Features

The software for the OfficeServ SVMi-20E is installed at the factory. All that is needed is for it to be customized to meet the individual requirements of each installation. In some cases even this may not be necessary.

The OfficeServ SVMi-20E software comes equipped with many useful features to fit a wide range of call processing requirements.

SYSTEM FEATURES

- Caller ID Compatible
- Expandable
- Fax Detection and Transfer
- Flexible Numbering Plan
- Individually Defined Mailboxes and Extensions
- Keypad Display and Soft Key Support
- MOH Supply
- Multiple Mailbox Support
- Operating Mode-Oriented Call Processing
- Operating Mode Override
- Proprietary Design
- Recordable System Prompts
- Schedule Table
- Synchronized Clock
- UCD First and Second Message Supply

AUTO ATTENDANT FEATURES

- Alphabetic Directory (Multiple)
- Auto Attendant Routing
- Automatic After Hours Answering
- Announce Hold Position
- Announce Hold Time
- Camp On Support
- Direct to Mailbox

- Holidays and Special Events Scheduler
- Incoming Call Overflow
- Interruptible Voice Prompts
- Maximum Greeting Length
- Multiple Call Handling
- Multiple Language Support
- Operator Access
- Single Digit Call Routing

ACCESS MANAGER

- Blocked Personal Greeting
- Busy Personal Greeting
- Call Blocking
- Call Forwarding
- Day Primary or No-Answer Personal Greeting
- Find Me
- Follow Me (Off Premises Transfer)
- Hold for Busy Station
- Multiple Personal Greetings (9)
- Night Intercept
- Night Personal Greeting
- Park and Overhead Page
- Personal Customized Options
- Retrieve Public Caller from Hold
- Screened Rejected Personal Greeting
- Stored Telephone Numbers
- Weekly Availability Schedule

VOICE MAIL FEATURES

- Answer Machine Emulation
- Auto Forward
- Auto Log In
- Auto Message Play
- Broadcast
- Call Back
- Call Forward to Voice Mail
- Call Record
- Call Back Request Messages
- Conversation Record
- Date and Time Stamp

- Delivery Imperative
- Direct Messaging / Quick Memo
- Distribution Lists
- Extended Prompting
- External Number Notification
- External Pager Notification
- FaxMail (requires VPM-E installed)
- Future Delivery
- Group and Sort Messages Prior to Play
- Individual Mailbox Greeting
- Individual Mailbox Name
- Individual Mailbox Password
- Maximum Number of Messages
- Message Address Verification
- Message Alert Notification Schedule
- Message Counter
- Message Delete
- Message Delivery Options
- Message Fast Forward
- Message Forward With Append
- Message Length Controls
- Message Pause
- Message Play Order
- Message Replay
- Message Reply
- Message Retention Time by Subscriber
- Message Retrieve
- Message Rewind
- Message Save
- Message Send
- Message Scan
- Message Skip
- Message Undelete
- Message Waiting Light Indication
- Multiple Subscriber Mailbox Login
- Multiple Subscriber Mailboxes
- Name Addressing
- Net Mailbox (AMIS)
- New / Old Selection
- One Touch Access
- Pager Notification Schedule

- Personal Mailbox Administration
- Private (Confidential) Messages
- Quick Memo
- Reminder
- Reply Required
- Retrieve Public Caller from Mailbox
- Return Receipt (Certified Messages)
- Self Memo / Reminder
- Self Memo / Reminder Categories
- Speed Control
- Subscriber Workload Manager
- Until... Scheduling
- Urgent Messages
- Volume Control

ADMINISTRATION FEATURES

- Activity Display
- Administrators Mailbox
- Auto Delete Subscribers
- Automatic Setup
- Back Up and Restore
- Default Operation
- Password Security
- Programming - On Site Or Remote (LAN connectivity and/or Optional Modem Daughter Card is required)
- Subscriber Administration
- Subscriber Database
- System Reports
- Voice Prompted Programming
- Voice Studio

AUDIOTEX FEATURES

- Audiotex
- Audiotex Librarian
- Automatic Announcement Delete
- Announcement Replay

E-MAIL GATEWAY

- Adjustable Message Retention
- E-Message Delivery
- E-Message Notification
- Multiple E-Mail Addresses

FAX-ON-DEMAND FEATURES (Requires optional VPMF-E)

- Caller Selected Delivery
- Compound or Multiple Documents
- Document Librarian
- Guaranteed Fax
- Voice Labels

VOICE FORM QUESTIONNAIRE (Q & A) FEATURES

- Multiple Response Destinations
- Playback Header Prompt
- Team Transcription
- Unlimited Questions
- VoiceForm

Feature Descriptions

SYSTEM FEATURES

Caller ID Compatible Caller ID Compatible If you subscribe to Central Office based Caller ID, the SVMi-20E is compatible. The Caller ID data appearing on keysets is also saved in your voice mail box for each message you receive. This can be used for call back or simply to identify the caller.

Expandable

- The SVMi-20E can be easily field upgraded from 4 ports, to 8 or 12 ports by simply adding one or two additional 4 port Voice Processing Module(s).

Fax Detection and Transfer The SVMi-20E can detect a fax call and transfer it to any extension in the system. This detection can be enabled at any 'menu' and assigned different destinations. For instance, in a menu offering choices for sales a fax tone would be sent to the sales fax machine, but in a menu offering choices for the finance department a fax tone would be sent to the finance fax machine (NOTE: This feature does NOT require a VPMF-E to be installed).

Flexible Numbering Plan An organization can assign an extension, a mailbox, or an announcement to any identification number from one to ten digits. All of these resources can share the same identification numbering plan without conflict. For example, an organization can have, in one SVMi-20E, an extension numbered 123, a mailbox numbered 123 and an announcement numbered 123. In addition, the SVMi-20E can distinguish between variable length identification numbers beginning with the same digit, such as extension number 1, or 12, or 1234567890.

Individually Defined Mailboxes and Extensions Extensions and Mailboxes are separate and independent system resources. A mailbox does not have to be defined in terms of an extension, or an extension in terms of a mailbox, in order for the SVMi-20E to associate them.

An Extension is used for routing callers to the Subscriber. This gives the Subscriber complete control (if authorized) over how, where and when they take their calls.

A Mailbox is simply used for taking and controlling messages for the subscriber in the event he/she can not (or do not wish to) speak to their callers.

Keypad Display and Soft Key Support If you have a display keypad the number of new messages will be displayed on it. The display will also echo many of the options available. You will be able to negotiate through the SVMi-20E menus using the keypad display and the soft keys below the display to respond to the prompts.

MOH Supply Music or announcements may be recorded in the SVMi-20E memory and used by the phone system for Music On Hold. The recorded announcement or music will play in a continuous loop and may be used to provide custom on hold announcements or promotional messages.

Multiple Mailbox Support The SVMi-20E can, in principle, support up to 1000 mailboxes, although obviously having only the 4 or 8 port hardware places practical limits on the system according to the individual system traffic, and type of application.

Operating Mode-Oriented Call Processing The SVMi-20E can be configured to automatically change between up to 99 different customer operating modes, based upon the time of day, day of week, or specific calendar date. During an operating mode, every aspect of the call automation application, including port utilization; caller scripts; routing solutions; and call coverage options can be customized to meet the organization's operating

requirements. SVMi-20E's Schedule Table automatically changes to the correct mode without human involvement.

Operating Mode Override Under exceptional circumstances, such as adverse weather conditions or other organizational emergencies when the office may be inaccessible, the administrator can override the Schedule Table. The administrator calls the SVMi-20E, enters the administrative password, and selects a new operating mode for any or all ports. The new operating mode can be programmed for the circumstances, or the administrator can simply record a new company greeting which explains the circumstances to callers.

Proprietary Design

- The SVMi-20E is designed to work specifically with the OfficeServ 7000 Series Systems.

This proprietary design allows tighter integration with the phone system and allows for enhanced features like Call Record, Answer Machine Emulation and Display and Soft Key support not normally available with third party Voice Mail / Auto Attendant systems.

Recordable System Prompts Although the SVMi-20E contains all the spoken prompts to provide an operational system, some people may want to add or record some additional prompts. This can easily be done using the built in voice studio. Any prompt in the system can be re recorded.

Schedule Table The schedule table automatically controls system mode by individual ports, time of day, day of week and calendar date without human intervention. It is capable of scheduling ninety-nine mode changes per day for 366 consecutive days. The administrator can manually override the schedule table at any time from a touchtone telephone, the system console, or from an administration terminal. For Holidays and Calendar of Events, the Schedule Table can be used to schedule holiday and special event caller prompts to better inform and serve callers.

Synchronized Clock The SVMi-20E clock is responsible for providing each message with a date and time stamp. This clock is always synchronized with the phone system, as is changing between day and night modes.

UCD First and Second Message Supply Music or announcements may be recorded in the SVMi-20E memory and used by the phone system for the UCD First Message and Second Message. The recorded announcement or music will play in accordance to the Switch UCD functionality.

AUTO ATTENDANT FEATURES

Alphabetic Directory (Multiple) Callers who do not know an extension number in the system but do know a name, may enter the first few letters of the person's name and be transferred. This system may even be used internally if an extension number is not known. The SVMi-20E allows for over 1000 unique directory systems, each one can search on either the first or last name.

Auto Attendant Routing The Auto Attendant can transfer or route callers based on the digits they enter. Callers may be transferred to station, groups or the system directory to select a subscriber based on their name. Additionally, the Auto Attendant will integrate directly with 'Question and Answer', 'Audiotex', and 'Fax-on-Demand' applications.

Automatic After Hours Answering The Main Auto Attendant greeting for the SVMi-20E changes from the day to the night greeting automatically when the phone system changes from day to night mode. Multiple additional modes may be defined for special applications.

Announce Hold Position If callers are allowed to hold for a busy extension, the SVMi-20E is able to intermittently inform the caller of their place in the queue.

Announce Hold Time If callers are allowed to hold for a busy extension, the SVMi-20E is able to intermittently inform the caller of the estimated hold time before being answered.

Camp On Support Each station user on the system may decide if they want the SVMi-20E to transfer additional calls to them if they are on the phone. Calls transferred to a busy station, if unanswered will be sent to voice mail or any other destination according to the user's needs.

Direct to Mailbox You may have mailboxes on the SVMi-20E that do not have associated stations. This is ideal if you have a small number of employees in your office but numerous employees outside the office that need to keep in contact.

Holidays and Special Events When your business closes because of a holiday or special event the SVMi-20E can provide a special appropriate prompting to your callers. You may create specific holiday schedules so that this process becomes automatic.

Incoming Call Overflow The SVMi-20E may be programmed to answer any or all lines immediately or answer only the calls that your operator does not pick up. Overflowed calls may be routed to either a mailbox or the main company prompt.

Interruptible Voice Prompts At any time during an announcement or greeting, callers may dial a selection and the SVMi-20E will immediately respond. It is not necessary to listen to all the options if you are a 'power user' and know what you are doing.

Maximum Greeting Length The maximum greeting length can be configured for each subscriber. For example, greeting length for sales personnel may be up to three minutes, purchasing staff up to five minutes and production staff two minutes.

Multiple Call Handling

- The SVMi-20E can answer and process up to 12 calls simultaneously (at the time of this writing), with two additional VPMs installed.

Multiple Language Support The SVMi-20E supports multiple languages. Up to nine (9) simultaneous languages can be supported. The default language is English (United States). Spanish (Castilian) and French (Canadian) are also installed by the factory as standard languages. A list of available languages can be obtained and installed by your local authorized Samsung Service provider.

NOTE: Each language installed will take up approximately 5 Megs (30 to 40 minutes) of message storage.

Operator Access Callers may connect with an available operator any time by dialing 0. This is provided that the customer has someone answering the Operator's calls.

Single Digit Call Routing A menu processor can be configured to recognize single digit routing options, or use the same digit as the leading entry of a multi-digit routing option. For example, in the menu processor, "1" can be used to route a caller to the sales department and "103" to transfer the caller to a subscriber's extension.

ACCESS MANAGER

The Access Manager empowers the Subscriber with control over how, what, when, and where they wish to speak to their callers. The Subscriber may prevent calls from ringing at their extension, or have the calls transferred to any other extension in the phone system, transferred off-site to any other phone number, or screen the call before answering them. Any of these conditions can be set to be active until a specified time. The SVMi-20E can even be set with a high priority 'Find Me' instruction that will try to reach the subscriber at multiple locations.

Blocked Personal Greeting This greeting is played to the caller anytime the subscriber enables the Call Blocking feature in the SVM or sets their keyset to Call Forward All/DND.

Busy Personal Greeting This greeting is played to the caller anytime the subscriber is on the phone and they have their keyset set to Call Forward Busy or Call Forward Busy/No-Answer.

Call Blocking While a subscriber has call blocking set active, the SVMi-20E does not attempt to transfer a caller to the subscriber's extension. Instead, it immediately plays the subscriber's Call Blocking Greeting - if recorded. If the Call Blocking Greeting is not recorded, SVMi-20E plays the subscriber's Primary No-Answer Greeting - if recorded.

When that greeting is not recorded, SVMi-20E advises the caller that the called party is not available and offers to the caller additional options. A subscriber sets Call Blocking active through Access Manager Services. After activating Call Blocking, the subscriber is prompted to indicate how long blocking is to remain active. This feature can be activated for a number of hours, 1 to 9, for the end of the current business day, for the beginning of the next business day, for a day of the coming week, for Monday through Sunday, for a specific date, for hour and minute, or until further notice.

Call Forwarding Forward All Calls allows a subscriber to have their incoming calls answered by an associate at another internal extension - it is not used to forward calls to an external telephone number. To have calls connected an external number, the subscriber use the Designated Location Service.

When calls are forwarded to another associate's extension, a caller entering the forwarder's extension number will immediately hear... "Transferring to 'Called Party's Name'. Calls are being forwarded to 'Associate's Name' ". If the associate answers the call, the associate will be prompted as to who the call is forwarded from.

This feature can be activated for a number of hours, 1 to 9, for the end of the current business day, for the beginning of the next business day, for a day of the coming week, for Monday through Sunday, for a specific date, for hour and minute, or until further notice.

Day / Night Personal Greeting The Night Personal Greeting works in conjunction with the subscriber's Weekly Availability Schedule.

During the defined availability period the SVMi-20E will automatically play the Primary No-Answer Greeting to callers, unless the subscriber is busy on another call and has recorded a Busy Greeting or Call Blocking is set active, and a Call Blocking Greeting is recorded.

During the time periods a subscriber is not scheduled available to take calls, and does not have Call Blocking activated, SVMi-20E plays the subscriber's Night Greeting If recorded.

Find Me When Find Me is set active, the SVMi-20E attempts to deliver calls to the subscriber's designated location, provided neither Call Blocking, nor Forward All Call, is active. The SVMi-20E first tries to locate the subscriber at the subscriber's designated location. Then, if necessary, it tries each of the subscriber's Stored Telephone Numbers until all numbers have been called.

After each stored telephone number, the SVMi-20E will prompt the caller that it is continuing to locate the subscriber. If SVMi-20E cannot locate the subscriber, the subscriber's Call Blocking Greeting is played to the caller.

This feature can be activated for a number of hours, 1 to 9, for the end of the current business day, for the beginning of the next business day, for a day of the coming week, for Monday through Sunday, for a specific date, for hour and minute, or until further notice.

Calls transferred to a designated location are automatically a confirmed transfer. The subscriber must press a digit to accept the transfer or they can press other digits to, 'Reject', 'Redirect', or record a real time greeting that plays immediately to that caller.

Follow Me (Off Premises Transfer) Each subscriber may have their calls automatically forwarded to a designated location. We call that location, the subscriber's Designated Location. A Designated Location can be an internal extension or an external telephone number. It can be entered digit-by-digit or the subscriber can enter a Stored Telephone Number Index Digit representing the location of the appropriate number.

Whenever a subscriber sets his designated location to a number other than his extension number, SVMi-20E prompts, "How long do you want this number to be your designated location?" This feature can be activated for a number of hours, 1 to 9, for the end of the current business day, for the beginning of the next business day, for a day of the coming week, for Monday through Sunday, for a specific date, hour and minute, or until further notice.

Calls transferred to a designated location are automatically a confirmed transfer. The subscriber must press a digit to accept the transfer or they can press other digits to, 'Reject', 'Redirect', or record a real time greeting that plays immediately to that caller.

Hold for Busy Station The SVMi-20E may be enabled to allow callers to hold for a busy station. When a caller elects to hold, the SVMi-20E places the caller in a Hold Queue. If additional callers attempt to reach the busy extension and they choose to hold, they can be informed of their position in the queue and the estimated hold time before being connected. Callers given the option to hold may be limited to insure that system ports are not monopolized. When the limit is reached, callers can be routed to other extensions or applications that have been configured to deal with this condition.

Multiple Personal Greetings (9) When a subscriber does not answer and accept a call, the SVMi-20E will answer. The SVMi-20E recognizes five different reasons why a subscriber does not answer a call. We refer to these reasons as 'Call Coverage Conditions'. SVMi-20E allows a subscriber to assign a different personal greeting to each Call Coverage Condition. A condition should be considered a "socket" into which a personal greeting is plugged. The greeting that gets plugged into each "socket" should offer caller options appropriate for that condition.

SVMi-20E provides each subscriber nine (9) personal greetings, labeled 1 through 9. A subscriber can assign (plug in) any greeting to any Call Coverage Condition. However, when a subscriber first logs on to the SVMi-20E, personal greetings numbered 1, 2, 3, 4, and 5, are assigned to their respective Call Coverage Conditions (No Answer, Busy, Fwd All/DND, Night and Call Screening). The remaining four personal greetings, labeled 6 through 9 are normally used as alternatives to the greetings assigned to these conditions.

Night Intercept This feature is used in conjunction with the subscriber's availability schedule. When enabled and the Subscriber is scheduled as unavailable, callers are NOT transferred to the subscriber's extension. Instead, the SVMi-20E immediately plays the subscriber's Night Greeting if recorded.

Night Personal Greeting This greeting plays to the caller anytime the subscriber is scheduled as unavailable based on the availability schedule. If the subscriber is scheduled unavailable the caller will here the Night Greeting during a No-Answer Call condition or if Night Intercept is enabled.

Park and Overhead Page For those users who are frequently away from their desk, the SVMi-20E provides a Park and Page capability. When a subscriber does not answer a call, the subscriber's personal greeting can contain an option to be paged. When the caller elects to have the subscriber paged, the SVMi-20E parks the call and plays a prompt through the overhead paging facility that contains the subscriber's name and a pick-up code. The SVMi-20E waits a programmable period of time for the subscriber to pick-up the call. When the call is not picked up, the

SVMi-20E notifies the caller that the page was not answered and plays the subscriber's Primary or No-Answer greeting.

Personal Customized Options Each subscriber may have different personal options played to the caller. For example, the caller may wait while the subscriber is paged or the caller may hold until the subscriber is available to take the call. These options must be enabled by the system administrator.

Retrieve Public Caller From Hold When a subscriber logs on they are notified if a caller is holding, and the SVMi-20E offers to transfer the caller to the subscriber's designated location. If the caller is identified SVMi-20E will speak the caller's name. When the subscriber elects to speak with the caller, he simply presses 1 and hangs up. If the subscriber elects not to speak with the caller, SVMi-20E immediately plays the subscriber's mailbox greeting.

Screened Rejected Personal Greeting This greeting plays to the caller anytime a subscriber rejects a screened transferred call from the SVMi-20E. The system administrator can authorize the Call Screening feature per subscriber. Call Screening must be authorized to have a Call Screening Greeting.

Stored Telephone Numbers A subscriber can store up to five telephone numbers where they can usually be reached, this simplifies the follow me feature as it allows the subscriber to quickly activate commonly used settings.

Weekly Availability Schedule The Weekly Availability Schedule tells SVMi-20E the days of the week, and the hours of the day, that a subscriber is normally available to take calls. When the subscriber does not answer a call during those time periods, the appropriate Day or Night greeting is played. This schedule may be set by the Administrator or the Subscriber.

VOICE MAIL FEATURES

Answer Machine Emulation This feature allows you to monitor calls being left in your voice mail box through the speaker of your keyset. In function it is very much like screening a call on your home answer machine.

Auto Forward The Message Auto Forward allows messages left in one mailbox to be automatically forwarded to another mailbox if the message is not listened to. The delay time before the message is forwarded is programmable between 00:00 (immediately) and 23:59 (1 day). After the message is forwarded it may be deleted or saved in the original mailbox. The forwarded message, when accessed by the receiving subscriber, will play "this message was forwarded from 'subscriber recorded name'".

Auto Log In When calling Voice Mail, the system can correctly identify you as the caller and ask for your password (optional). The benefit of this is that you do not have to identify yourself to the SVMi-20E, it knows who is calling and what mailbox you want to access.

Auto Message Play Each subscriber may choose to select messages to play (new or old) or may configure their mailbox to automatically play new messages. This is useful if you are in a situation where keystrokes must be kept to a minimum.

Broadcast If authorized a Subscriber can broadcast a message to everyone in the system. Any or all of the subscribers can be given this option. By default, no subscribers are authorized.

Call Back When listening to your voice mail messages you may press one key to automatically call back the person who left you the message, this call back feature may be allowed for internal calls and / or external calls. Long distance may be either allowed or denied and specific area codes may be allowed or denied. For external calls, Caller ID is used and therefore must be received from the phone company.

Call Forward to Voice Mail Any station on the phone system may be forwarded to the SVMi-20E voice mail. Forwarding types are Forward All Calls, Forward Only When Busy, Forward Only When No Answer, or Forward When either Busy or No Answer.

Call Record See Conversation Record.

Call Back Request Messages Messages left by and for subscribers may be flagged as Call Back Requested. The caller can enter a specific number that will allow the subscriber to return the call by pressing one key.

Conversation Record With the SVMi-20E card installed in your phone system, you may record the phone conversations for specific extensions. An optional tone with a programmable delay may be played to alert callers and employees during the recording process. When calls are recorded using this functionality, any mailbox settings that would normally effect maximum message duration are ignored.

There are two methods available to invoke this functionality.

1. Use the Auto Record feature of the switch (MMC 743), which allows you assign a station to Auto Record all or selected Conversations. In MMC 743 you can assign the Mailbox that will store the recording, dedicate and assign a SVMi Port to be available to make the recording, and select whether the station will Auto Record (I)ncoming, (O)utgoing, or (B)oth conversation types
2. Assign a CR Key to the Station or Stations that want to be able to Record a Conversation. At any point after connection is established with a Trunk Call (In and/or Out) the user can press the CR key and the Conversation will be recorded into the assigned Mailbox.

Method 1 dedicates a port on the SVMi to a single user. This guarantee's the port will be available every time the station needs to record the selected Conversation Type. This then also means that for every Auto Record feature ASSIGNED that will be one less port available to be used for Auto-Attendant and/or Voice Mail functions. The maximum number of assignable Auto Record Stations will be limited to the number of ports installed on the SVMi minus the number of required SVMi AA/VM ports.

With method 2 the Conversation Record is controlled by the individual users as they must press the CR Key. With this method there is no guarantee that a SVMi Port will be available to perform the CR function.

NOTE: Call Record utilizes the conference feature. The number of people, who can use the CR feature simultaneously, is limited to the number of available conference circuits in the system.

WARNING: Before using this feature, make sure that you are not violating any state or federal laws. Some states require that the recorded party be notified. STA is not responsible for any illegal use of this feature.

Date and Time Stamp Each message you receive will be stamped with the time and date of its arrival. This information may be played to the subscriber before each message or may be played only on demand. Each individual subscriber may set this option.

Delivery Imperative When a message is designated as Delivery Imperative, the SVMi-20E will take extra steps to deliver it. The recipient's pager will be called and then each of his stored telephone numbers will be tried.

Direct Messaging / Quick Memo This feature makes it easier to leave messages for others in the office. It allows the user to access mailboxes without dialing the extension number first. Easily leave a message for anyone that has a mailbox.

Distribution Lists Lists of mailboxes may be set up and given a simple numeric identity. Subscribers may use these lists to easily leave or transfer messages into multiple mailboxes simultaneously. This list can include any number of subscriber mailboxes and other lists. SVMi-20E does not limit the number of lists that a subscriber can access. When a message is sent to a list, each mailbox on the list receives a copy. SVMi-20E's unique message management facilities make the process of distributing a copy to each mailbox on the list immediate, even for very large lists.

Extended Prompting With Extended Prompting set active, SVMi-20E offers all prompts for the menu the subscriber has accessed. When Extended Prompting is not set active, SVMi-20E offers only the name of the menu the subscriber is accessing and the prompt... "For additional options, press 0".

External Number Notification When you have messages in your mailbox, you may be alerted at your cell phone, home phone or any other phone. The SVMi-20E will make 3 attempts to contact you. If it encounters a busy signal it will try again in 5 minutes, if it encounters a no answer it will try again in 15 minutes.

External Pager Notification When you have messages in your mailbox you may be notified via your pager. The display on your pager will show your mailbox number. By default the SVMi-20E will make 3 attempts to contact you. If it encounters a busy signal it will try again in 5 minutes, if it encounters a no answer it will try again in 15 minutes.

FaxMail This feature and functionality requires at least one VPMF-E installed on the SVMi-20E PCB. FaxMail subscribers may offer their callers "one-number" voice and fax. Voice calls are delivered to a subscriber's extension and/or mailbox. FaxCalls are automatically delivered to a subscriber's mailbox. Callers can also attach a voice message to a fax document when calling from a voice-enabled fax device.

NOTE: This feature requires that at least one VPMF-E be installed on the system.

Future Delivery When a subscriber leaves a Self Memo (Reminder), Direct Message (Quick Memo) or any other message for another subscriber, a future delivery date may be specified. This is particularly useful if you use the 'reminder' feature as a virtual 'to do' list. Delivery Scheduling options are: for a number of hours, 1 to 9, for the end of the current business day, based on the subscriber's current availability schedule, for the beginning of the next business day, also based on the subscriber's current availability schedule, for a day of the coming week, for Monday through Sunday or for a specific date, for hour and minute. Also for any message not yet delivered, a subscriber can review, modify and discard future delivery messages sent, but not yet delivered.

Group and Sort Messages Prior to Play A subscriber can group for playback either new or saved messages. Grouping categories are, Urgent, Callback Request, Reminders, Fax Messages, Messages from a Specific Sender, or Private Messages.

Individual Mailbox Greeting Each mailbox has its own associated individual greeting recorded in the subscriber's (mailbox owner's) voice. This may be changed as frequently as you desire. This only gets played if another subscriber transfers a caller using the VT key or you do not have one of your call condition greetings recorded.

Individual Mailbox Name Each mailbox has its own associated individual name recorded in the mailbox owner's voice.

Individual Mailbox Password Each mailbox has its own associated individual password selected by the user or system administrator. This provides some security and prevents unauthorized access. The password may be up to 8 digits long.

Maximum Number of Messages The maximum number of messages a mailbox will hold is 9,999. The maximum number of messages can be set for each mailbox.

NOTE: This is a software setting. Maximum number of messages is also influenced by the size of the storage media; either Compact Flash or Hard Drive size, number of subscribers, maximum message length settings, and the length of the actual messages recorded and left on the system.

Message Address Verification After entering the mailbox number to which a message is being sent, the SVMi-20E echoes the name of the recipient, confirming the message is going to the intended subscriber. The address verification is also played when the subscriber forwards an existing message.

Message Alert Notification Schedule The Weekly Notification Schedule tells the SVMi-20E the days of the week, and the hours of the day, that a subscriber wants to be notified of new messages at an alternate phone number. This Schedule may be set by the Administrator or the Subscriber. This schedule is independent from the Pager Notification Schedule.

Message Counter Whenever you access your mailbox, you are told the number of new and old messages. You may selectively listen to the new or the old messages.

Message Delete When a message has been heard, you may delete it.

Message Delivery Options At anytime prior to sending a message, a subscriber can assign any or all of the following delivery options to a message, Urgent Priority, Return Receipt / Certified, Callback Request, Private or Reply Required.

Message Fast Forward When listening to a message you may fast-forward 5 seconds. This is useful if you are looking for a specific piece of information like a phone number.

Message Forward With Append Messages received in your mailbox may be forwarded to other mailboxes or lists on the system. A message may be forwarded to another subscriber, or distribution list by entering a destination mailbox. The subscriber may record an introductory comment if desired. The message header is modified to reflect the forwarding party and time. Forwarding multiple copies allows the subscriber to record introductions for each destination mailbox. Forwarded messages may be re-forwarded, with additional introductions, using the same procedure.

Message Length Controls Maximum message length can be set for each mailbox. The maximum message length is 166 minutes; however, the SVMi-20E ships with the maximum message length set at 10 minutes.

Message Pause At any time while listening to your voice mail messages, you can pause the playback.

Message Play Order Each mailbox may be set up to play messages in order of oldest first (First In First Out-FIFO) or newest first (Last In First Out-LIFO).

Message Replay Messages may be replayed as many times as you like.

Message Reply When listening to your voice mail messages you may press one key to automatically leave a message for the person who left you a message, this call return feature may always be used for internal calls, and also outside calls if Caller ID is received, and the feature is allowed by the system administrator. A subscriber may reply to a message sent by a public caller. If the public caller requested a return call, the SVMi-20E will play the message envelope and announce, "Callback Requested". This means the public caller entered his telephone number into the mailbox with touch-tone at the time he left the message.

Message Retention Time by Subscriber The length of time messages are stored prior to automatic purging may be set for each mailbox. Retention Time can be set from 1 to 9,999 days. Retention Time applies to both new and saved messages. Each time a message is saved, the Retention Time is reset. Only messages that have not been accessed are automatically deleted.

Message Retrieve Any sent message may be canceled before the recipient has received it. Any message that has been sent but not listened to by the recipient may be retrieved ("pulled back") into the sender's mailbox. If the message was independently sent to several subscribers, each copy may be retrieved separately.

A message sent to a distribution list may be retrieved up to the time it is first played by any member of the list. Retrieving a message from a distribution list pulls it back from all list members. It may then be edited, updated, rerecorded, deleted, or sent to a different destination. This capability is particularly useful if the sender incorrectly addresses one copy of a message to several subscribers or if a change in events makes the message no longer relevant.

Message Rewind When listening to a message you may rewind 5 seconds. This is useful if you are looking for a specific piece of information like a phone number.

Message Save You may save any message. Once saved, it will remain as a 'saved' message until it is manually deleted or until the message retention timer expires for unheard messages.

Message Send From within your mailbox you may send a message to any other mailbox owner on the system. This makes it easy for any employee who is out of the office to send a message to another internal user.

Message Scan Message Scan allows a user who is retrieving their messages to 'scan' through them. The first few seconds of each message will be played. This makes it easy to find a specific message.

Message Skip When listening to new messages, if you are searching for a specific one you can skip over new messages. This saves the message as a new message. It is like picking one thing out of your in-basket without disturbing all the others.

Message Undelete At some time, everyone discards a message, and immediately wishes they had kept it. The undelete feature of the SVMi-20E will allow you to retrieve messages that have been deleted. The subscriber is allowed to "Undelete" a message any time before the next Daily Maintenance is performed. By default the system performs Daily Maintenance everyday at 3:00 am. Deleted messages are PERMANENTLY deleted after Daily Maintenance is finished.

Message Waiting Light Indication An indication on your keyset tells you when you have new messages. Pressing this one button will connect with your voice mail. Additionally, if you have a display keyset, the display will show you the current new message status.

Minimum Password Length This option is set by the System Administrator. The setting range is from 0 (No Minimum) to 8 Digits. This requires the subscriber to set their password to less than the digit length specified. This is useful for heightening mailbox access security.

Multiple Subscriber Mailboxes Login Multiple subscribers may simultaneously logon to the same mailbox and access messages. All mailbox functions are available to each subscriber. Message playback is distributed. The first subscriber logged on will hear the first message. The second subscriber will first hear the second message, and can access the first message after subscriber 1 is finished. The mailbox continues to be available to receive new messages, regardless of the number of subscribers logged on. This is useful if you wish to use a mailbox for transcription storage or order taking applications.

Multiple Subscriber Mailboxes Since Extensions and Mailboxes are separate and independent system resources, a mailbox does not have to be defined in terms of an extension, or an extension in terms of a mailbox, in order for the SVMi-20E to associate them. A subscriber's mailbox number need not match the subscriber's extension number (though it typically does).

A Subscriber could have multiple mailboxes. These mailboxes can be independent of extensions and be useful for isolation different types of messages such as in a departmental mailbox.

A subscriber can have multiple extensions within the system. Each extension can be directed to one specific mailbox for taking messages. This is also the case of departmental messaging where many subscribers share a common mailbox. An extension may also be directed to a different mailbox at different times of the day or days of the week, as in departments with rotating staffs.

Name Addressing This feature allows a subscriber to address messages to other subscribers by name instead of by mailbox number, eliminating the need to look up numbers or carry personal directories while traveling.

Net Mailbox (AMIS) Receives, records and, sends voice messages to mailboxes at off-premise locations. The SVMi-20E can send a message to an individual mailbox/telephone number, or to a Distribution List. The SVMi-20E can send/receive messages to or from any voicemail system that is AMIS (Audio Messaging Interchange Specification) Network compliant.

New / Old Selection When you access your mailbox you may choose to listen to either new or old messages. This makes it easier to find specific information contained in an old message without having to listen to all the new messages first.

One Touch Access The SVMi-20E Voice Mail can be accessed to check messages or perform administration simply by pressing one button on your keyset.

Pager Notification Schedule The Weekly Notification Schedule tells SVMi-20E the days of the week, and the hours of the day, that a subscriber wants to be notified of new messages via his pager. This Schedule may be set by the Administrator or the Subscriber. This schedule is independent from the Message Alert Notification Schedule.

Personal Mailbox Administration You may change settings for your mailbox any time you like. Personalize the greeting that callers will hear your name, password and notification options.

Private (Confidential) Messages A message can be marked Private. A private message can not be forwarded to another subscriber. If the recipient of the private message attempts to forward the message he is informed that the message is private and may not be forwarded.

Quick Memo See Direct Messaging

Reminder See Self Memo

Reply Required A message marked for delivery as Reply Required cannot be saved or deleted until the recipient performs a voice reply to the message.

Retrieve Public Caller From Mailbox When a subscriber logs on they are notified if a caller is in their mailbox, and the SVMi-20E offers to transfer the caller to the subscriber's designated location. If the caller is identified SVMi-20E will speak the caller's name. If the subscriber elects to speak with the caller, the caller is told that the subscriber is now available and transfers them to the subscriber's designated location. If the subscriber elects not to retrieve the caller, the subscriber can go about listening to other messages while that caller finished leaving them a message.

Return Receipt (Certified Messages) A subscriber may request to be notified when the recipient listens to a message. After the message has been delivered and played back by the recipient, a confirmation receipt is placed in the new message queue of the sender's mailbox, it contains the date and time that the message was played.

Self Memo / Reminder Easily and quickly leave a reminder in your own mailbox. This virtual notepad is available wherever there is a phone, and can be set for immediate or future delivery. This makes them useful for keeping track of your entire workload to schedule or serve as reminders for meetings.

Self Memo / Reminder Categories If allowed by the system administrator a subscriber may designate the reminders they create as a Commitment, Follow Up or Task. The individual meaning of these labels may vary from person to person. Their intent is to provide a way of separating reminders into different categories. These categories can be reviewed in the subscriber Workload Manager

Speed Control The SVMi-20E supports two message playback speeds. This allows you to hear the message in a convenient manner. You can press '99' during message playback to toggle between two speeds.

Subscriber Workload Manager This allows a subscriber to group reminders by a Commitment, Follow Up or Task in order to better organize the workload. Their entire workload can be reviewed or a specific group.

"Until..." Scheduling The "Until..." Scheduling method is an easy way to schedule the termination of an SVMi-20E service relative to the time the service is set active. Most of the services in the SVMi-20E give subscribers greater control over their communications by providing Until... Scheduling. The subscriber just sets a time for the service to terminate, concurrent with activating it, and does not have to worry about remembering to deactivate the service in the future. The Until... Scheduling options are, a number of hours, 1 to 9, the end of the current business day, based on the subscriber's current availability schedule, for the beginning of the next business day, also based on the sub-scriber's current availability schedule, a day of the coming week, Monday through Sunday, a specific date, hour and minute, or until further notice.

Urgent Messages Messages left by and for subscribers may be flagged as Urgent. Urgent messages are played first and notification may be configured to only alert you for these urgent messages.

Volume Control The SVMi-20E supports two message playback volumes. This allows you to hear the message in a convenient manner. You can press '77' during message playback to toggle between two volume levels.

ADMINISTRATION FEATURES

Activity Display While the SVMi-20E system is running, a connected administration terminal will show useful statistics about the system. Number of calls, average calls per week, number of times all ports were busy, total messages and space available.

Administrators Mailbox A subscriber designated as a Mailbox Administrator is given the added functionality when they log in to be able to record and send a broadcast message.

Auto Delete Subscribers Unused subscribers are automatically deleted after a programmable period of disuse. This prevents unauthorized users from 'High-Jacking' unused mailboxes.

Automatic Setup When the SVMi-20E is first installed, a range of mailboxes matching the system's database is created. This reduces set up time.

Back Up And Restore The customer database can be saved and restored at a later date. This is useful in a number of maintenance scenarios. Additional hardware is necessary to accomplish this.

Default Operation The SVMi-20E is designed to be in operation as soon as it is installed.

Password Security All administration is under password control to prevent unauthorized access.

Programming - On Site Or Remote By logging in from a touch tone telephone, the designated system administrator can perform routine activities by using the System Administration Special Menu. These activities include recording custom system prompts, Adding/Deleting/Modifying subscribers, and switching scheduled modes of operation. This makes routine administration easy and convenient.

If set up on a customer's LAN with remote access permissions, the terminal administration can be accessed from anywhere through an internet connection.

The SVMi-20E also has an optional modem daughter card[†] that can be installed. This modem can be used from any port and is accessed through a unspoken option in DTMF System Administration. The modem also allows terminal administration from outside of the installed location.

[†]The optional Modem Daughter Card is sold separately and not included in the base price of the SVMi-20E.

If an external Modem is installed and connected to the SIO of any of the SVMi-20E units, full access to system programming can be performed from any remote location.

Subscriber Administration When logging into the System Administrator Menu the System Administrator can access Subscriber Administration. While with in Subscriber Administration you can Add/Delete/Modify Subscribers with in the SVM system. If you select to modify a subscriber, you can default their password, record their name, enter their directory name, enable/disable extended prompting, and record their Mailbox Greeting.

Subscriber Database A database of subscribers can be viewed at the administration terminal.

System Reports Many useful system reports are available from the administration terminal. These may aid in traffic studies, or detecting misuse.

Voice Prompted Programming From any touch-tone phone in the world an administrator can record custom prompts, add, delete, or modify mailboxes, and change scheduled modes.

Voice Studio An included voice studio lets you re-record any prompt in the system and even edit it for better sound.

AUDIOTEX FEATURES

Audiotex You may use the SVMi-20E to supply recorded announcements to callers. Audiotex allows you to provide information only without giving the option to record a message. An example of this might be directions or movie times. This full featured system allows multiple announcements to be played in sequence with variable options depending on the caller or time of day.

Audiotex Librarian An Audiotex Librarian manages the announcements that together form its library. Its purpose is to make sure that the announcements are not outdated and that the caller receives the appropriate announcement.

Automatic Announcement Delete Time sensitive Announcements can be automatically deleted from an audiotex library. An Announcement retention time may be set from 1 to 999 days or 1 to 9999 plays. The days automatic delete counter is reset to "0" days each time the Announcement plays. The plays automatic delete counter is not reset; for example, if set to 225 plays, the SVMi-20E will delete the Announcement after the 225th play, regardless of the days counter.

Announcement Replay Each Announcement can be configured with an easy replay digit. A caller may be offered the option to replay an Announcement by pressing the replay digit. Replaying an Announcement does not affect the automatic delete counters process.

E-MAIL GATEWAY FEATURES

The E-Mail Gateway provides functionality to authorized subscribers on the SVMi-20E.

Adjustable Message Retention per Subscriber or Group of Subscribers When setting up the system or at any time the Administrator can adjust the message retention of the original Voice Mail Message. For Subscribers with E-Mail Gateway Enabled, message retention is calculated from the time the Mail Server accepts receipt of the e-mailed voice message.

The Choices are:

1. Do Not Adjust Message Retention and follow standard MCLASS Message Retention (Default is 9999 days).
2. 0 Days — Which deletes the Voice Mail Message as soon as the e-mail is sent.
3. 1 — 999 days.

Benefits

1. Store and archive Voice and Fax Mail messages in visible folders.
 - Voice and Fax Mail Messages can now easily be dragged and dropped into folders the same way e-mail messages are organized and saved.
 - Voice and Fax Mail Messages are now essentially the same as any other e-mail message.
 - Backups and Message Archives can be made when they are made for all other types of e-mail messages

2. Add text Notes and Comments to use for reference later.
 - Some (if not all) e-mail clients will allow you to edit the body of the e-mail to add comments
 - Some will allow you to edit the subject field to help you find a particular message quickly in a large archive of messages.
3. Call Back Numbers and Date & Time Stamp are easily displayed in the Subject field.
4. Easily forward Voice messages received, to others even if they are not a Voice Mail Subscriber on your system.

There are two parts to the E-Mail Gateway:

1. **E-Message Delivery:** Voice (.wav) and/or Fax (.tiff) Mail Messages are "delivered" to your Inbox with the appropriate attached file.
2. **E-Message Notification:** You will receive an e-mail, with NO attachments, notifying you that you have a Voice and/or Fax Mail Message in your Voice Mail Box.

Licenses The SVMi-20E comes with 5 assignable E-Mail Gateway users. Unlimited User Licenses can be purchased.

Licenses will be obtained through a License Server. The License Server will issue a License key based on the SVMi LAN Port's MAC Address.

Multiple E-Mail Addresses Each Subscriber can have 5 E-mail addresses for E-Message Deliver and/or different 5 E-Mail Addresses for E-Message Notification. This is useful if the subscriber gets their e-mail at many different locations or if the Mailbox is providing some type of service.

FAX-ON-DEMAND FEATURES [Requires the purchase and installation of at least one VPMF-E]

Caller Selected Delivery The caller may select same-call or callback delivery to any telephone number. You may also restrict delivery according to local/long-distance numbers and area codes.

Compound or Multiple Document Delivery Any number of fax documents may be linked to form a compound document, selected as a single fax.

Document Librarian A Fax Document Librarian ensures that a particular fax library is not out-dated; and that callers have access to copies of the fax documents they are authorized to receive - when and where they want them.

Guaranteed Fax Incoming fax documents will always be received with this option active - even when the company or department fax machine(s) is busy, out of paper, or otherwise out of service. When all fax machines are busy, even those connected to DID lines, the incoming FaxCall can be routed to a mailbox capable of accepting and storing the fax document for delivery to the machine it was originally sent to, or any other available fax machine.

NOTE: This requires that a FAX DSP is available at the time of the call. There can be up to two fax DSPs on the SVMi-20E, as long as two VPMF-E VPMs are installed on the SVMi-20E PCB.

Voice Labels Each document has a voice recording attached to it, which may be used to speak the title, contents, or other descriptive information about the document to the caller.

VOICEFORM QUESTIONNAIRE (Q&A) FEATURES

This feature allows the SVMi-20E to be used to conduct surveys or collect a response to a pre-programmed questionnaire. Answers are collated and stored in a specific mailbox(es), or the answers may be split into many different mailboxes. These mailboxes and messages are administered by subscribers just like any other mailbox and message. The subscriber simply logs in and listens to the message. This is a useful tool any time you need to collect specific information from a caller and do not have an available staff member to take the call directly. The answers are then listened to so that a paper or electronic form could be filled out by the subscriber listening to the message.

Multiple Response Destinations Caller responses during a VoiceForm session can be routed to multiple mailboxes. Any part of a caller's response may be distributed among several mailboxes. For example, a VoiceForm session might be designed to process customer orders. Portions of the caller's responses could be sent to an accounting mailbox for credit approval while the rest of the responses are routed to a shipping department mailbox to expedite the order.

Playback Header Prompt Each response recorded by a caller in a VoiceForm session can be prefaced by a playback header prompt which links the response to the question. This feature helps in transcription of caller responses by providing reference markers within the caller's total response. With playback headers, when a caller skips a question, the transcriber does not lose his place within the composite VoiceForm message.

Team Transcription SVMi-20E allows simultaneous multiple user access to VoiceForm messages in a Transcription Mailbox. When multiple accesses occur, the SVMi-20E assigns the user the next new message so that there is no duplication of transcription.

Unlimited Questions The maximum number of questions - Voice Queries - possible in a single VoiceForm session is not bound by architectural constraints. Voice Queries can be linked to form extended VoiceForm transactions.

VoiceForm VoiceForm is an information collection and distribution facility, which allows an organization to gather specific information efficiently. An organization creates a series of questions, called a script, designed to elicit specific responses from a caller. One question with its response constitutes a Voice Query, and a complete set of questions is a VoiceForm. The responses generated during a dialogue are collected into one or more messages and delivered to designated transcription mailbox(es). The SVMi-20E manages these messages in the same manner as any other voice message. Designated recipients of these messages may review, save, and forward them with comments using the complete range of voicemail features. Because VoiceForm Questionnaire is an integral part of the SVMi-20E's software, callers engaged in a VoiceForm dialogue may be routed to any and all system resources.