Programming Overview

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Auto Configuration

The SVMi-20E has been designed to simplify the installation procedure and minimize set up time. The following have been automated.

An extension is created for every extension on the system. This means that the automated attendant will immediately recognize all extensions and groups in the equipment.

A mailbox is created for every extension on the system. Note that mailboxes may be created for unused extensions. You should delete these to prevent unauthorized use.

The Day / Night service of the SVMi-20E system will change automatically when the phone system’s service changes.

Menus have been created to answer calls in the Day and Night mode. There are also default menus for answering in the Holiday or Bad Weather mode.

Quick Setup

Although the set up process has been automated as much as possible, the following functions must be manually completed.

Record a greeting for the Day Mode operation (prompt number 1001). The Night Mode operation (prompt number 1002) and optionally the Holiday and Bad Weather Modes (prompt numbers 1003 and 1004 respectively).

Give everyone the user instructions and have them enter a new personal password [#][7][1], record their name [#][7][2], enter their directory name (Last and First names) [#][7][3], and record both a Primary (No-Answer Greeting) [5][1] and Mailbox Greeting [5][7].

System Administrations

There are two levels of administration. There are individual or personal administrations that can be performed by the Subscribers themselves and administrations preformed at a higher lever for both subscribers and the system by a System Administrator. System Administration can also be broken up into several levels. These levels are as follows:

The Subscriber

A subscriber is someone who has an extension and/or mailbox on the SVMi-20E system. Each subscriber has control over individual options associated with their mailbox and extension settings.
Each subscriber (mailbox owner) will have the option of setting or changing certain mailbox options. These are listed in the user guide.

The mailbox owner will use DTMF subscriber administration to change and set these options.

For a full description of this process refer to the SVMi E-Series user guide.

The System Administrator

The installing Technician or System Administrator has ultimate authority over the operation of the SVMi-20E system and can set or change all the options that require specialized knowledge. This is the highest level Administration.

It is the responsibility of the installing Technician to install and program the SVMi-20E to suit the customer's requirements. This includes initial set up and creation of the customer database. The Technician will use the Screen Interface to program and set up the SVMi-20E.

All System Administration will be performed using an attached PC terminal. For a full description of how to connect a terminal device to the SVMi-20E refer to the Installation Guide.

Some limited System Administration can be performed via DTMF. This is limited to Recording System Prompts, Entering Subscriber Administration, Changing the operating mode (Day, Night, Holiday, and Weather) of the System, Shutting Down the System, and accessing the internal Modem.

The Applications Administrator

The Applications Administrator has limited authority, to make changes within the SVMi-20E system, that pertain to the day to day operation of the system.

Following the installation of the SVMi-20E the Application Administrator can make any ongoing changes, including the creation and deletion of mailboxes, recording or changing system greetings, activating holiday and emergency greetings, and changes to the menu routing.

Application Administrators do not have access to shutting down the system. Their access is through an attached PC Terminal only.

The Subscriber Administrator

There are two categories of this administration. One is done through an attached PC Terminal and the other is via DTMF.

From the PC Terminal a person authorized as a Subscriber Administrator has very limited authority, to make changes within the SVMi-20E systems using the PC terminal interface. Their changes are limited to the creation, deletion, and modification of subscribers only.

From the telephone a System Administrator can login and access Subscriber Administration. From there, the System Administrator can Create, Delete, and Edit a Subscriber. If they choose to edit, they can reset (default) the password, record the subscriber's name, enter the subscriber's directory name (last and first), and record the subscriber's Mailbox Greeting.
Programming Methods

Data may be entered and changed in the SVMi-20E by three methods. These are, the Screen Interface, DTMF System Administration, and DTMF Subscriber Administration.

The Screen Interface

Most of the programming is achieved using a PC attached to the SVMi-20E serial (SIO) or LAN ports. This makes use of a graphical user interface (GUI), and is considered necessary for initial set up.

Knowledge Requirements

A general knowledge of PC’s and Windows is required. Some understanding of serial port and/or LAN (networking) communications is advised.

Equipment Requirements

A Windows PC running HyperTerminal (or equivalent) is needed. To connect via the Serial port you will also require a serial cable with straight through wiring (If you already have a cable for programming the Samsung CADENCE card, you can use this.). To connect via the LAN connection you will need a RJ45 Cat5 Crossover Network Cable to connect directly, or a RJ45 Cat5 Straight through Network cable to connect to the customer’s local area network.
Using the Screen Interface

After connecting the terminal equipment press 'Ctrl+L' to clear and refresh the screen. You will see a status of the current operating condition including the status of each port and some general system data.

The main screen of the SVMi-20E looks like this and shows port activity and general statistics.

Logging In

To log into the system press the ESCAPE key and enter the password, the default password is 0000. You will now be at the System Administration Main Menu, and are ready to begin programming.

NOTE: From time to time 'electronic noise' on the serial or network cable may cause some erroneous characters to print on the terminal, or some items not to be displayed correctly. If this happens you should press 'Ctrl + L'. This will refresh the screen.
Getting Help

The key-strokes available to you during editing can be viewed by pressing F1, and are as follows:

Facility and Screen Movement Keys

```
<table>
<thead>
<tr>
<th>Facility Keys</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Navigation Keys Help</td>
</tr>
<tr>
<td>Ctrl + E</td>
<td>Save and RETURN TO Starting Facility</td>
</tr>
<tr>
<td>Ctrl + R</td>
<td>Save Block As</td>
</tr>
<tr>
<td>Ctrl + O</td>
<td>Save and OPEN Block or Prompt text under Cursor</td>
</tr>
<tr>
<td>Ctrl + H</td>
<td>Save and RETURN TO LAST Block in Control Path</td>
</tr>
<tr>
<td>Ctrl + N</td>
<td>Save and OPEN Next Block of Same type or Template Blocks</td>
</tr>
<tr>
<td>Ctrl + V</td>
<td>Save and OPEN Previous Block of Same type or templates</td>
</tr>
<tr>
<td>Ctrl + F</td>
<td>Find blocks that refer to the current block</td>
</tr>
<tr>
<td>Ctrl + Q</td>
<td>Sort in Current Object or Facility</td>
</tr>
</tbody>
</table>

Press Ctrl+D for next screen or ESC to exit
```

Editing and Moving within a Field

```
<table>
<thead>
<tr>
<th>Screen Movement Keys</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tab</td>
<td>Moves Cursor to NEXT Field or Line (Wraps around)</td>
</tr>
<tr>
<td>Shift + Tab</td>
<td>Moves Cursor to BACK to Previous Field or Line</td>
</tr>
<tr>
<td>Arrow Keys</td>
<td>Move Cursor Between Fields or Lines in Arrow Direction</td>
</tr>
<tr>
<td>Ctrl + I</td>
<td>Moves Cursor to TOP Field on Screen</td>
</tr>
<tr>
<td>Ctrl + B</td>
<td>Moves Cursor to BOTTOM Field on Screen</td>
</tr>
<tr>
<td>Ctrl + U</td>
<td>Page Up, Displays previous Page/Screen</td>
</tr>
<tr>
<td>Ctrl + D</td>
<td>Page Down, Displays Next Page/Screen</td>
</tr>
</tbody>
</table>

Press Ctrl+D for previous screen or ESC to exit
```
### Navigation

As you move the cursor around in each screen, you will notice that some fields cannot be accessed. This is normal and is intended to simplify the installation.

As the cursor is placed on different fields the data will be shown in different colors.

- **YELLOW** You may type new data in the selected field.
- **GREEN** This typically indicates that the data represents a Block. If it is a block you may press the ENTER key to select a different block or you may press 'Ctrl + O' to Open the block beneath the cursor. This non-linear method of navigation is extremely flexible as you can easily follow the path of any call. To return to the previous block in this path press 'Ctrl + R'. If a GREEN cursor is not referring to a Block then it is giving you access to a list of options that you can select from in a drop down window. In this case when you press the ENTER key a window will open up offering you a list to select from. Select the option you want and hit ENTER.

### DTMF System Administration

Some System Administration functions can be accessed by calling the SVMi-20E from a touch tone phone. These administrative functions allow the System Administrator to:

1. Edit System Prompts
2. Edit (create, Delete, and modify) Subscribers
3. Change the Operating Mode (Day, Night, etc.)
4. Shut the SVMi-20 down
5. Access the internal Modem

#### Accessing DTMF System Administration

To access the DTMF System Administration mode:

1. Call the SVMi-20E and from the Main Menu press the '#' key followed by 3 zeros. If you are answered by a prompt to enter your password you are in a mailbox and must first press '4' to reach the Main Menu.
2. When prompted, enter the administration password specified in the System Wide Parameters. You will be presented with the System Administration Menu.

#### Edit System Prompts

This allows you to create or edit system prompts.

- Call the SVMi-20E and access the System Administration Menu.
- Press 1 to edit system prompts.
- Follow the spoken instructions to edit system prompts.

At the very least you will probably need to create the following:

- **Day Greeting** = Prompt 1001
- **Night Greeting** = Prompt 1002
Holiday Greeting = Prompt 1003
Emergency (Bad Weather) Greeting = Prompt 1004

Only prompts above prompt # 1000 may be recorded using the DTMF System Administration. To record prompts lower than # 1000 (system prompts) you must use the Voice Studio Administration Tool.

NOTE: When a prompt has been recorded, sometimes there is some ambient noise (big breath) at the front or back that needs to be trimmed. Press [4] and select trim mode. You may now trim small amounts of 'noise' from the front or back of the voice prompt. Repeatedly press [1] (or [2]) to trim small amounts from the front (or back) until the prompt sounds clean. You must press [#] when you are done.

Subscriber Administration
This allows you to add and delete subscribers.

- Call the SVMi-20E and access the System Administration Menu.
- Press 2 for subscriber information.
- Follow the spoken instructions to create or delete subscribers.

Manual Mode Selection
This allows you to change the operating mode of the SVMi-20E. You may select a specific mode (as long as it has been defined as a mode block) or you may select automatic scheduling. The change to a specific mode will remain in effect until you manually change it back to automatic scheduling.

You may select a mode for each port in the system.

- Call the SVMi-20E and access the System Administration Menu.
- Press 3 to manually set the mode.
- Follow the spoken instructions to change the port number
- Follow the spoken instructions to change the operating mode. According to the following list of options:

1. Day Mode
2. Night Mode
3. Holiday Mode
4. Emergency (Bad Weather) Mode
5-99 To select any additional modes that may have been created
0. Automatic Scheduling - automatically follow the system Schedule Table

DTMF System Shut Down
This allows you to do a proper shut down of the SVMi-20E when you do not have access via a PC Terminal and you need to reboot the switch.

- Call the SVMi-20E and access the System Administration Menu.
- Press 4, this will NOT be a spoken option.
- You will then be prompted to again enter the System Administration Password.
- Enter the System Administration Password (default password is: 0000)
Modem Login

This allows you to log in remotely from another location with a PC Terminal and access System Administration.

- Call a phone number that has been programmed to ring directly into and be answered by the SVMi-20E, and access the System Administration Menu.
- Press 9 this will NOT be a spoken option.

Note: The phone number and System Administration Access can all be stored in the dial string of HyperTerminal so a telephone does not have to be attached to your remote PC terminal.

Here is an example of what that dialing string might look like: 5555555555,,,,,#000,0000,9

5555555555 represents the phone number into the SVMi-20E
,,,, represents pauses waiting for the SVMi-20E to answer
#000, is the System Administration Login Code followed by a single pause
0000, is the default System Administration Password followed by a pause
9 is the Modem access option from the System Administration Menu

Important Note: The connection of the Internal SVMi-20E Modem is hard coded at 9600 Baud. You must set up your HyperTerminal connection to use the following settings:

1. Set 'Bits per second' to 9,600
2. Set "Data Bits" to 8
3. Set "Parity" to None
4. Set "Stop Bits" to 1
5. Set "Flow Control" to None

After a connection is established you may need to hit [Ctl]+[L] to refresh the screen.
SVMi-20 Programming Categories

When programming the SVMi-20E there are three types of data: Subscriber Options, SVMi-20E Administration Options, and Phone System Options.

Subscriber Options
These are the options entered by a subscriber, that control the individual behavior of their mailbox. The instructions for this can be found in the SVMi E-Series User Guide.

Administration Options
This is all the programming options for the SVMi-20E, that are unique to the particular installation.

Phone System Options
This is a collection of the programming options to make SVMi-20E operate correctly. When the SVMi-20E is initialized, much of the set up is completed, but there is still some phone system programming that must be entered.

Note that if the SVMi-20E card is being installed in an existing system (a system that did not previously have an SVMi-20E), you will have to use MMC 806 to pre install the card and MMC 724 to assign extension numbers to each SVMi-20E port. Use any available sequential numbers.

In addition to the MMCs listed below you must set call forwarding to the SVMi-20E at every phone that wants to use the SVMi-20E Access manager and/or voicemail functionality.
## MMC Reference Chart

The following is a chart listing system MMCs relating to the SVMi-20E.

<table>
<thead>
<tr>
<th>MMC</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Call Forward</td>
</tr>
<tr>
<td>110</td>
<td>Station On/Off</td>
</tr>
<tr>
<td>207</td>
<td>Assign VM/AA Port</td>
</tr>
<tr>
<td>308</td>
<td>Assign Background Music On Hold</td>
</tr>
<tr>
<td>309</td>
<td>Assign Station Music On Hold</td>
</tr>
<tr>
<td>316</td>
<td>Preset Forward No Answer</td>
</tr>
<tr>
<td>406</td>
<td>Trunk Ring Assignment</td>
</tr>
<tr>
<td>408</td>
<td>Assign Trunk MOH Source</td>
</tr>
<tr>
<td>414</td>
<td>Assign Caller ID/ANI Trunks</td>
</tr>
<tr>
<td>501</td>
<td>System Timers</td>
</tr>
<tr>
<td>502</td>
<td>Station-Wide Timers</td>
</tr>
<tr>
<td>601</td>
<td>Assign Station Group</td>
</tr>
<tr>
<td>607</td>
<td>UCD Options</td>
</tr>
<tr>
<td>701</td>
<td>Assign COS Contents</td>
</tr>
<tr>
<td>722</td>
<td>Station Key Programming</td>
</tr>
<tr>
<td>723</td>
<td>System Key Programming</td>
</tr>
<tr>
<td>724</td>
<td>Dial Numbering Plan</td>
</tr>
<tr>
<td>727</td>
<td>System Version Display</td>
</tr>
<tr>
<td>740</td>
<td>VM Card Restart</td>
</tr>
<tr>
<td>741</td>
<td>Assign Mailbox</td>
</tr>
<tr>
<td>743</td>
<td>Auto Record</td>
</tr>
<tr>
<td>744</td>
<td>VM Record</td>
</tr>
<tr>
<td>745</td>
<td>Warning Destination</td>
</tr>
<tr>
<td>746</td>
<td>VM Halt</td>
</tr>
<tr>
<td>747</td>
<td>VM Alarm</td>
</tr>
<tr>
<td>748</td>
<td>Assign VM MOH</td>
</tr>
<tr>
<td>749</td>
<td>VM In/Out</td>
</tr>
<tr>
<td>806</td>
<td>Card Install</td>
</tr>
<tr>
<td>824</td>
<td>Network Dial Plan</td>
</tr>
<tr>
<td>825</td>
<td>Networking Options</td>
</tr>
<tr>
<td>890</td>
<td>Port Clear</td>
</tr>
</tbody>
</table>
MMC Listing

The following is a listing of all the system MMCs that relate to the SVMi-20E.

### OfficeServ 7200

| MMC 102 | MMC 110 | MMC 207 | MMC 308 |
| MMC 309 | MMC 316 | MMC 406 | MMC 408 |
| MMC 414 | MMC 501 | MMC 502 | MMC 601 |
| MMC 607 | MMC 701 | MMC 722 | MMC 723 |
| MMC 724 | MMC 727 | MMC 740 | MMC 741 |
| MMC 743 | MMC 744 | MMC 745 | MMC 746 |
| MMC 747 | MMC 748 | MMC 749 | MMC 806 |
| MMC 824 | MMC 825 | MMC 890 |
SVMi-20E Directory Structure

DTA Directory

All customer configuration is located in the \Dta\ *.tbl files.

The TABLE Files (*.TBL)

- Block.TBL: All block parameter data. Commonly referred to as application data.
- Schedule.TBL: The schedule table is not a block, so its data is stored separately in this file.
- SitInfo.TBL: Useful customer data entered in "Site Information" off of the Main Menu.
- Message.TBL: Automatically gets updated every time a new message is recorded, saved, forwarded, or deleted. This is sometimes referred to as the Message Index.
- Trunks.TBL: When the SVMi-20E is properly initialized with the switch it is installed in, this file will contain all the Trunk ID numbers of the trucks installed on the switch. This file is required for SVMi-20E OverHead paging functionality to work.

Note: The Trunks.TBL file when viewed from port activity may appear to be empty on the very first time the unit boots up. However the file is loaded into memory and is working properly. If you do a proper shut down or run maintenance the SVMi-20E will save the Trunk.TBL resident in memory to the hard drive and you can then view it's contents.

DTA also contains all the screens (*.ANS files) that are used during application programming and *.log files that keep a temporary record of events that occur on the system. The three log files are; Activity.Log, Error.log, and User.log.

PMT Directory (Prompts)

All prompt directories are located in the \PMT directory. There will be a separate prompt directory for each language installed. The different language prompts are stored in a uniquely named language subdirectory located in the PMT directory; \PMT\EN_US for the English(United States) prompt set, \PMT\SP_CA for the Spanish(Castilian) prompt set, and \PMT\FR_CA for the French(Canadian) prompt set. The reference to speak the prompt in a particular block is stored in the "Block.TBL" file, but the recorded prompt itself and its associated text are stored in the PMT \xx_xx directory. The file format is '{4 digits}.PMT'.

Prompts below 1000 are system prompts and should only be edited using great care.
MSG Directory (Messages)

All Voice Message data is located in the \Msg\ *. files. In the SVMi-20E FaxMail messages are also stored here. On the SVMi-20E, all Announcements and Fax Document data are stored in the MSG directory as well. Announcement recordings and associated text are using in Audiotex applications, where as Fax Documents are used in Fax-On-Demand applications.

MBX Directory (Mailboxes)

All Personal Subscriber Extension and Mailbox data is located in the \Mbx\ *. files.

This includes (but is not limited to) Recorded Names, all 10 personal Greetings (if recorded), personal password, notification, and availability information.

TEMP Directory

The TEMP directory is used by the application software for storing data during Call Session. An example of this data would be the Caller’s spoken name if a subscriber has Call Screening enabled. Another example would be answers to a secession of Query Block questions. These recorded answers would be stored in the TEMP directory until the Last question and then compiled together as one message and sent to the designated recipient.

SOCKETS Directory

This directory contains files that control communications over the LAN connector. Socket.cfg is located in the Sockets directory. This file is where you control the IP address of the SVMi-20E. The Default IP address is: 10.10.108.6

BICOM Directory

The Bicom directory contains all the Drivers required to operate the Physical SVMi-20E board and it’s components.

DOS Directory

This directory contains all the files required by the operating System.

Defaulting the Configuration

To default the configuration quit the application as described in System Shutdown and change directory to DTA, when you get to the c:\DTA> prompt type the following:

- type: ‘default’
- This will restore default block configurations back to the factory preset settings and delete any existing mailboxes and messages.

Note: Any custom prompts or re-recorded prompts will not be removed! However all Administrator passwords will be returned to default values.