# MENU BLOCK

## **Description**

The Menu is used to speak something to the caller, collect a caller's DTMF entry, and pass control to another Block. A menu can accept entries from 1 to 16 digits in length.

The Menu performs a search operation to match the caller ENTRY. For example, a Menu prompt may be, "You may dial an extension directly or for sales press 1, for service press 2". If the caller presses 1, a pointer with an Input value of <1> directs the caller to an extension group within the phone system called "SALES." If the caller entered 223, the MENU may be configured to search for an extension or mailbox.

When a match is found, the SVMi-20E looks to see if it should translate the input into a new value before performing the search. The SVMi-20E then transfers control to a Block defined in the target name field. This is all done in the in the Menu Input Processor.



**MENU** The name of this block. A Block name can be any alphanumeric string up to 16 characters long (including spaces). A Block name may not be the same as another Block name.

#### **Input Processor Operating Parameters**

**TAKE INPUT FROM (ENTRY, KEY ,CID, FWDID, TRUNK)** The value which the SVMi-20E uses to search INPUT values in the input processor on Page 2 of 4. To change this value, press ENTER at this field for a pick list of values. Tab or Arrow to the desired entry and press ENTER.

**ENTRY** If a MENU is expecting DTMF digits from the caller, this should be set to ENTRY.

**CID, FWDID, TRUNK** These are used in the menu blocks that handle system integration (Direct Station and Trunk and Forward Station and Trunk). These should not be changed. For specialized applications you can create other Menu Blocks that can take input from these registers to use with in the application.

**KEY** The search is based on input that has been stored in the KEY register that existed upon entry to the current MENU Block. After all <TRANSLATION> operations have been performed and a match has been found, the new search value is stored in KEY register for later use.

**STORE INPUT** In Store the input to this menu in the CID, FwdID, TRUNK call session memory register for use as input to subsequent MENU search This is used for basic system integration with the phone system. To change this value, highlight this field an press ENTER to bring up a pick list of appropriate values. Highlight the desired value and press ENTER. The LANG Register is used to store the language option selected by the caller

### **Digit Assignment**

**ADMINISTRATION** Normally the "#" key is used as a prefix for signaling administrative functions. When it is the first digit pressed, it does not count as one of the digits pressed, when compared to Maximum Caller Entry Digits. In other words, if a caller enters #123, it will count as a total of 3 digits. Some applications may require restriction of administrative capabilities on specific ports or MENUs. This can be accomplished by setting Administration digit value to blank in the MENU Blocks where administration is not allowed. Allowable inputs are 0 - 9, '#', 'Q', 'a', 'b', 'c', 'd'. <u>Note:</u> Administration and Escape digits should never be set to the same value.

**ESCAPE** The Escape digit (normally the 'Q' key) causes an immediate exit from a request for digit entry. When the Escape digit is pressed the SVMi-20E will not wait for any subsequent digits to be pressed. The INPUT value will include any digits entered before the Escape digit as well as the Escape digit itself. Note: Administration and Escape digits should never be set to the same value.

## **Caller ENTRY Options**

**PROMPTS 1 THROUGH 6** These are the voice prompts that the SVMi-20E speaks when the Menu Block is entered. Menu prompts 1- 6 are spoken in succession and are normally used to prompt the caller for an entry. Allowable inputs include any four digit prompt number (1000 - 9999). A blank entry means "say nothing". To use a different, or custom prompt, highlight the field to be changed and enter the desired prompt number. To review or edit the prompt text, press 'Ctrl + O' (O is for Open).

**INVALID CONDITION PMT** The prompt spoken when no match is found during a MENU search. It normally advises the caller that their entry is invalid, try again. Press 'Ctrl + O' (O is to Open), to review the prompt text, number, recorded length and date recorded.

**REQUEST PASSWORD PMT** The prompt which asks the caller to enter a password (when appropriate). The prompt is used when a caller has made an entry that requires a password for access to another Block or perform an administrative function.

**MAXIMUM CALLER ENTRY DIGITS** Indicates the maximum number of digits the caller may enter in response to the Menu prompts. The allowable values are 1-16. This should be set to the length of the maximum valid entry in this Menu. If set greater, the SVMi-20E will wait unnecessarily for additional digits to be entered. If the caller enters more than the specified number of digits, the excess will be carried forward to the next Block.

**WAIT FOR FIRST ENTRY DIGIT** This is the time, in seconds (from 0 to 99), that the SVMi-20E will wait for the caller to make an entry. This timer begins after the last menu prompt has been spoken.

**WAIT FOR SUBSEQUENT DIGITS** This is the time, in seconds (from 0 to 99), that the SVMi-20E will wait for the caller to make a subsequent entry. This timer begins after the first caller entry digit has been received and resets after each digit pressed by the caller, up to the Max Caller Entry value.

**REPEAT PROMPTS IF NO ENTRY** Indicates the number of times, from 0 to 9, the menu prompts are repeated, if no entry is made by the caller.

**RETRY IF INVALID CONDITION** The number of additional attempts that this MENU allows if the caller makes an invalid entry. The allowable inputs are 0 - 9. When retries are exhausted, the SVMi-20E will exit the MENU using the <INVALID> condition.

#### **Key Value**

**APPEND TO KEY REGISTER** A 'Y' in this parameter instructs the SVMi-20E to add the resulting KEY value to the previous KEY value stored in the KEY register. The new KEY will only be appended if the search in the current MENU was successful. This is useful in applications where the caller is asked to enter DTMF (usually one or two digits) in response to a series of prompts (MENUs). Each response is first validated (by matching an INPUT value) and then added (appended) to the previous response. After the final response, the combined KEY value may be used by another MENU to search for an Extension, Mailbox or Announcement. If 'N' is specified, the previous KEY is cleared and replaced by the new value.

**STORE KEY VALUE IN** Store the resulting KEY from the menu search in the CID ,FwdID, or TRUNK call session memory register for use as input to subsequent MENU operations. To change this value, press ENTER to bring up a pick list of appropriate values. Highlight and select one.



**OPERATING MODE** Indicates the Mode Name and Number for which the displayed Block Pointers' Targets are active. Each Operating Mode is given a unique Number by the system. Valid numbers are 01-99, and are assigned in sequence as new Modes are created. Pressing ENTER at this field opens a Mode Target Generator, from which an existing Mode Name may be selected, or a new name may be entered. Entering a new name creates a new Mode with its corresponding Number. The Mode Number and Name are associated with the Block's Pointers, not the Block itself. This allows one Block to route calls to different destinations in different Modes, using different Targets for the pointers' various Mode references. For example, the Invalid pointer might route callers to an operator's Extension during the 'Day' Mode, but after 5:00 PM, it would route them to a Night Options Menu during 'Night' Mode. Pointers set in the Default Mode stay in effect unless overridden by Pointers set in the current Operating Mode. The SVMi-20E will display Default Mode pointers in a block while viewing pointers in another mode. The Default Mode pointers will be grayed out to denote that they are not in the current mode.

**INPUT FROM** This is a display only field, referencing what Input Source this Menu is using.

**EVENT POINTER** To make changes to the No-Entry, Invalid, and Faxcall Pointers, highlight the field and press ENTER to bring up the Target Generator. Highlight and open the appropriate Block type. Select a new or existing Block from the Target Generator pick list and press ENTER. Press 'Ctrl+ O' to review or edit the selected Block. Note that the Page 3, Menu Block provides space to add Event Pointers as they may be needed.

**NO-ENTRY POINTER** The Block that the SVMi-20E will execute next if the caller makes no entry in this MENU.

**INVALID POINTER** The Block that the SVMi-20E will execute next if the caller has made too many invalid entries (determined by Retries allowed) or a search on a value other than ENTRY failed to find a match.

**FAXCALL POINTER** The Block that the SVMi-20E will execute next after hearing a FAX Tone. This applies only when the FAX machine is an extension of the telephone system.

#### **User Defined Event Pointers**

These are the event pointers the user enters to customize how that the SVMi-20E functions. They include all the entries below FAXCALL.

#### **Input Value Column**

The Input value is a defined event pointers that directs the SVMi-20E to other Blocks. The Input Processor contains Input Pointers that determine which Application Block receives control of the call next. Upon finding a match, it examines the type of action specified in that pointer and passes control to the object named in the pointer's target. These pointers may go directly to an object (with or without requiring the caller to enter a password), translate the Input Value to a new value or search a large array of objects for one matching the Input Value.

To edit User Defined Event Pointers, highlight a new or existing field and press ENTER. Enter the input value and press ENTER to bring up the Action pick list. Highlight the appropriate Action and press ENTER. Select a Block type from the Target Generator pick list and press ENTER. Choose a new or existing Block and press ENTER. Press 'Ctrl + O' to review or edit the chosen Block.

The input value can be any digits that are to be processed by the Menu. These can be digits dialed by the caller or digits passed from previous blocks. The origin for these digits are determined by the contents of the 'input FROM..." field.

A question mark, "?", may be used as the INPUT value to apply to a set of caller entries. An INPUT value of <2??> will match any 3 digit entry beginning with the digit '2'. An INPUT value of "4?57" will apply to all 4 digit entries beginning with the digits '57' and having any value in the second digit. The Wild Card is placed in the INPUT value to indicate that any digit entered in that position will qualify as a match. The "?" character may also be used in a translation to indicate that the translated value should include the character which is in the position of the corresponding "?" in the pointer INPUT value. A dot (.) is used in the translation value to indicate that the corresponding "?" in the INPUT value should be discarded.

When searching for a match to a caller entry or for a particular pointer, the SVMi-20E follows a consistent sequence. MENU Blocks require a more elaborate search than other Blocks. However, the pattern is consistent. It looks for the most specific match. A direct digit match on an INPUT value takes precedence over a wild card match. Also, a wild card pointer with a lesser number of "?" characters will precede one with a greater number. A match on a pointer in the current mode of operation takes precedence over a pointer in Default mode.

#### **Action Column**

When searching for a match to a caller entry or for a particular pointer, the SVMi-20E follows a consistent sequence. MENU Blocks require a more elaborate search than other Blocks. However, the pattern is consistent. It looks for the most specific match. A direct digit match on an INPUT value takes precedence over a wild card match. Also, a wild card pointer with a lesser number of "?" characters will precede one with a greater number. A match on a pointer in the current mode of operation takes precedence over a pointer in Default mode.

MENU Blocks search and give precedence in the following order:

- Translation pointers
- Other Pointers
- Extensions
- Mailboxes
- Announcements

#### Action Column Options

**GOTO** Specifies the next Block to execute, if the caller's entry matches the INPUT value.

**PASS (PASSWORD THEN GOTO)** Used only with MENU Blocks. A password pointer is used to restrict access to a target Block by requiring the caller to enter a password code before passing control to the target block.

**TRANSLATIONS** Translates caller entry, telephone system or network integration information to the translated value specified. The SVMi-20E then searches for a match, using the translated value.

**SEARCH** Used only with MENU blocks. This type of ACTION uses the INPUT value to search a specified range of block types to find a Block with a Number that matches and then passes control to the block. More than one Block type may be searched at one time. Valid block types to be searched are Extensions, Mailboxes and Announcements (searched in that order).

**FILE** This type of action provides for a large amount of Input values, for a specific MENU, be stored in a database which is accessed at the time the MENU is executing. It directs the SVMi-20E to search the specified data base file, located in the DTA directory of the hard disk, for a match to the INPUT value. The two types of data files are POINT-ER files and SDF files that have the filename extensions of PTR and SDF respectively. These are used in applications that would otherwise require a very large number of individual event pointers to be programmed in a MENU Block.

Pointer (PTR) files are simple text files, which may be produced on a word processor, notepad, or DOS editor. PTR Files are stored as .TXT files. Each line of a pointer file appears and acts exactly like a pointer on the SVMi-20E Menu's Input Processor screen. This operates as an extension to the input pointers on the MENU Block. Also, a single pointer file can be used for more than one MENU Block.

System Data Format (.SDF) files are a universal form of computer generated files. They are composed of individual, fixed-length records of ASCII characters, terminated by carriage return and line feed characters. When the SVMi-20E reads this type of file, it treats each record as if it was a translation pointer. The following is the record layout specification:

#### **RECORD LENGTH:** 22 characters

#### FIELD LAYOUT:

Offset 0, Width 10, Left adjusted, padded with spaces, acts as the search value. Offset 10, Width 10, Left adjusted, padded with spaces, acts as the translation value. Offset 20, Width 2 Carriage return and line feed characters.

## **Type Column**

Represents the three character pneumonic for the type of Block targeted. Below are a few examples:

MBX represents Mailbox EXT represents Extension MNU represents Menu

#### **Target Name Column**

Specifies the block to pass control to when the Input value is matched with the input from the defined input source. Select a Block type from the Target Generator, pick list and press ENTER. Choose a new or existing Block and press ENTER. Press 'Ctrl + O' to review or edit the chosen Block.



### **Additional Input Processor Entries**

This page contains additional space to enter input values and targets.

SVMi-20E	MENU - Day Main Page 4 of 4					
From date To date Abandoned Admin count Total count	8/06/04 7/12/05 0 0 1	Event NO-ENTRY INVALID FAXCALL 5000 * 6 9 0 ??? ????	Coun t 0 0 0 1 1 0 0 0 0 0	Event	Count	<b>Menu Block</b> Page 4 of 4
Press Ctrl+U for page up or Ctrl+E to exit_						

#### Activity

This page shows the activity for this mailbox from the time the statistics were last set in Main Menu / Operating Utilities / Clear report count to the present time. Statistics include:

**ABANDONED CALLS** Callers who hung up while in this menu.

**ADMIN COUNT** The number of times an administrator accessed the system from this menu.

**TOTAL COUNT** The total number of times a caller accessed this menu.

**EVENT COUNT** Counters for each option selected from this menu.