

Chapter 4

System Definition Utility



SYSTEM DEFINITION UTILITY

WHAT IS SDU?

If you attach coax devices to the control unit and do not want to use the default values, use the System Definition Utility (SDU) to:

- Select an EBCDIC host language and coax keyboard language
- Customize the interface table between the control unit and IBM host
- Select standard IBM keyboard tables
- Customize coax keyboard tables
- Archive and name keyboard definitions so they can be copied onto a system diskette and used for defining several systems.

If the control unit is equipped with Asynchronous Communications Support (ACS) and you attach coax devices that will communicate with an Asynchronous/ASCII (A/A) host or attach A/A devices that will communicate with an IBM host, use SDU to:

- Select an ASCII host language and keyboard language
- Customize the interface table between the control unit and the IBM host
- Customize the interface table between the control unit and the A/A host
- Customize A/A emulated keyboard tables (used by coax terminals during A/A Emulation mode) to generate ACS emulation sequences, ACS emulation system operations, and custom ACS sequences.
- Customize an A/A emulation style
- Archive and name keyboard definitions so they can be copied onto a system diskette and used for defining several systems.

Refer to the *1374 ACS Operations Manual* for information on operating devices in A/A Emulation mode, A/A Pass-through mode, and 3270 mode.

The system languages, custom host interface tables, standard and custom keyboard tables, custom keyboard mappings, and custom A/A emulation styles are written to the system diskette. These definitions become available to the control unit when the system operator configures the system with Local Control Point (LCP). Refer to the *1374 Configuration Guide* for information on configuring the control unit.

SYSTEM DEFINITION UTILITY

Refer to the flowcharts titled "What devices are you attaching to the controller?" and "What host connections are you establishing?" in Chapter 1, "Operations Reference," for more information.

REQUIRED DISKETTES

Three diskettes are required for the SDU process. All three diskettes must have the same release level.

- The Utility diskette contains the SDU program.
- The system diskette contains configuration files that will be modified with SDU.
- The standard Language diskette contains data files.

If you select a customized language, an RPQ (Request for Price Quote) Language diskette is also required.

If you plan to archive definitions, a blank, formatted library diskette(s) is also required.

USING TWO DISK DRIVES

If the optional second disk drive is installed in the control unit, insert the Utility diskette into either Drive A or B before system IML (Initial Microprogram Load). After selecting SDU, the system prompts you to insert the system or Utility diskette into either Drive A or Drive B.

This chapter assumes a single disk drive when describing the SDU operation.

ACCESS SDU

STEP 1: Insert the Utility diskette into the disk drive and power-on the control unit. If the control unit is already on, IML the control unit to load the Utility program.

Performing an IML overrides any other 1374 system functions and cancels all terminal sessions.

After the control unit completes the IML procedure, "4_? UTILITY" appears in the lower left corner of the operator information area of all attached terminals.

STEP 2: Press Sys Req on the terminal being used to display the Main Offline Utility menu. Access Sys Req by holding down Alt and pressing Attn. After the key is pressed, "4_■ UTILITY" appears in the lower left corner of the operator information area.

SYSTEM DEFINITION UTILITY

- STEP 3: Select SDU from the Main Offline Utilities menu and press Enter (see Figure 1-3).
- STEP 4: The system prompts you to swap the Utility and system diskettes and press Enter. Swapping diskettes allows the system to copy and/or read certain programs off each diskette at specific times.
- STEP 5: The system prompts you to swap the system and Standard Language diskette and press Enter. After language programs are read, the SDU Main menu appears as shown in Figure 4-1.

```
0          SYSTEM DEFINITION UTILITY
Define System Interface                                     Page 1

1. Define System Languages
2. Customize EBCDIC Host Interface
3. Customize ASCII Host Interface
4. Customize Coax Keyboard Translation
5. Customize ACS Device Emulation
6. Manage System Configuration Library
7. Store System Configuration
8. View System Definition Status
9. Accept

Command ==> 2

ENTER  PF1=Help          PF3=Abort
```

Figure 4-1. SDU Main Menu

DEFINE SYSTEM INTERFACE

From the SDU Main menu, you can begin to define and customize the operating system, interface tables, coax keyboards, and A/A emulation styles.

OPTIONS DEFINED

Type the number next to the desired option on the input line and press Enter.

- 1. Define System Languages** – Select languages used by the operating system. If you want to use the default language of U.S. English for both host and keyboards, you do not need to use this option.
- 2. Customize EBCDIC Host Interface** – To support nonstandard character sets, this option lets you customize the IBM host interface table, which translates EBCDIC to IBM code and IBM code to EBCDIC.

SYSTEM DEFINITION UTILITY

3. **Customize ASCII Host Interface** – To support nonstandard character sets, this options lets you customize one of four A/A host interface tables, which translates ASCII to IBM code, IBM code to ASCII, ASCII to EBCDIC, and EBCDIC to ASCII.
4. **Customize Coax Keyboard Translation** – Define the type of keyboard on a coax terminal attached to the control unit. You can modify keyboard tables by adding, copying, deleting, and exchanging key functions.
5. **Customize ACS Device Emulation** – Coax terminals emulating a particular A/A terminal can access an A/A host if the control unit has the ACS feature. This option lets you customize an emulation style by modifying ACS emulation sequences and creating emulation-independent ACS sequences.
6. **Manage System Configuration Library** – Name and write the SDU definitions on a separate library diskette. It is designed for use in conjunction with the PC-based central site customization when defining several systems. Refer to the *1374 Central Site Customization Guide* for more information.
7. **Store System Configuration** – Writes the SDU definitions to a system diskette without exiting SDU. It is designed for use in conjunction with the PC-based central site customization when defining several systems. Refer to the *1374 Central Site Customization Guide* for more information.
8. **View System Definition Status** – Lists all the definitions completed with SDU.
9. **Accept** – Writes the SDU definitions to the system diskette and exits SDU, all in one step.

ORGANIZATION

The following sections present options in the same sequence as they appear on the SDU Main menu.

OPTION 1 – DEFINE SYSTEM LANGUAGES

From the SDU Main menu, use this option to select a primary and secondary operating system language. If you want to use the default language of U.S. English for both host and keyboards, you do not need to use this option.

NOTE: The language priorities selected with this option must match the entry in the Host Language and Keyboard Language fields when the Local Control Point (LCP) Configure Options (CO) command is used to configure coax and A/A terminals attached to the control unit.

HOST AND KEYBOARD LANGUAGES

If needed, use SDU to select a primary and secondary operating system language. Then, you can use the LCP CO command to split these languages between the host and keyboard. For example, you can select French (AZERTY) as a primary language and Canadian French as a secondary language. Using the LCP CO command, you are able to select the secondary language, Canadian French, for the Host Language and the primary language, French (AZERTY), for the Keyboard Language or vice versa.

LANGUAGE SUPPORT

For more information about language support for the different keyboard types, refer to Appendix E.

OVERVIEW

The flowchart in Figure 4-2 provides a brief description of the tasks involved in defining the system languages.

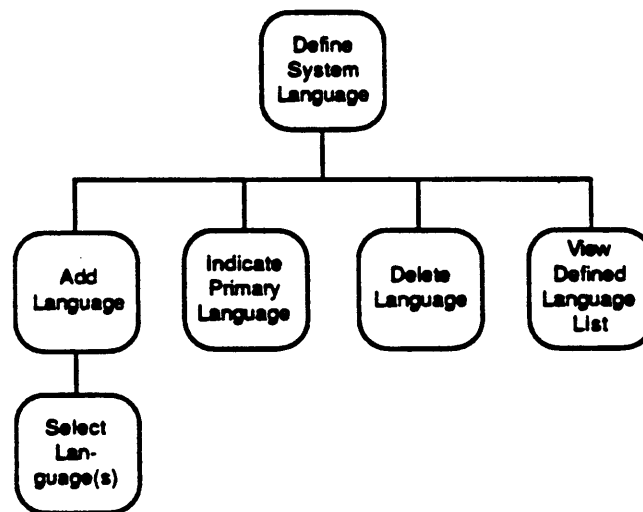


Figure 4-2. Define System Language Summary

SYSTEM LANGUAGE MENU

NOTE: This menu will appear differently the first time you use SDU (see Figure 4-3). Only after you use Add Language will "Indicate Primary Language" appear. Also, "Add Language" will not appear if the maximum number of operating system languages has been reached.

SYSTEM DEFINITION UTILITY

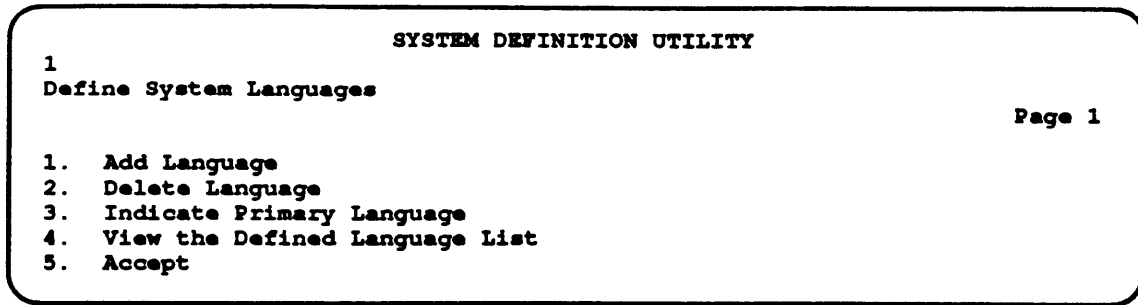


Figure 4-3. Define System Language Menu

SELECTIONS DEFINED

Type the number next to the desired option on the input line and press Enter.

1. **Add Language** – Add a language to the operating system.
2. **Delete Language** – Remove a language.
3. **Indicate Primary Language** – Prioritize the selected languages. This priority scheme is used when configuring the control unit via LCP.
4. **View the Defined Language List** – Lists the selected operating system languages.
5. **Accept** – Returns you to the SDU Main menu.

The following discussion explains the language selections available from this menu in detail.

ADD LANGUAGE

This option lets you add up to two system languages (see Figure 4-4). The selected languages can be split between the host and keyboards via LCP.

NOTE: If this is the first time you have used this utility, SDU will automatically select a list of keyboard tables based on the language(s) selected with this option. With Option 4, "Customize Coax Keyboard Translation," you can select from this list, generally, up to 10 keyboard tables that will be made available to the system.

SELECT LANGUAGE(S)

Type the number next to the desired language on the input line and press Enter. If a second language is required, repeat the selection process and press Enter again.

```

                                SYSTEM DEFINITION UTILITY
1.1
Add Language
                                Page 1

1.  English (US)
2.  Austrian/German
3.  Belgian
4.  Brazilian
5.  Canadian French
6.  Danish
7.  Danish Alt
8.  Finnish
9.  Finnish Alt
10. French (QWERTY)
11. French (AZERTY)
12. Austrian/German Alt
13. International
14. Italian
15. Japanese (English)

Command ==>
ENTER PF1=Help      PF3=Abort
                                More: + -
                                PF7=Page Up  PF8=Page Down

```

Figure 4-4. Partial List of Supported System Languages

If you select number 31, which provides a selection of custom languages, the system prompts you to insert the customized language diskette.

CUSTOM LANGUAGES

If you select a customized language, the screen in Figure 4-5 appears.

Perform one of the following two options from the insert customized language disk prompt.

- Insert the RPQ Language diskette (if available) and press Enter to display a selection of RPQ languages. Select the desired language and press Enter.
- Keep the standard Language diskette in the disk drive and press Enter to display a selection of customized languages.

Select the desired language and press Enter (see Figure 4-6).

DELETE LANGUAGE

This option lets you remove a language (see Figure 4-7).

Type the number next to the language you want removed on the input line. After pressing Enter, the screen reappears with the selected language removed from the list.

SYSTEM DEFINITION UTILITY

```

                                SYSTEM DEFINITION UTILITY
1.2
Add Language
                                Page 2

16. Japanese (Katakana)
17. Spanish
18. Spanish Alt
19. Spanish-Speaking
20. English (UK)
21. Norwegian
22. Swedish
23. EBCDIC (WT)
24. Norwegian Alt
25. Swedish Alt
26. P
27. C
28. F
29. S
30. S
31. Select Customized Language

                                Insert Customized Language disk into the drive.
                                Press the ENTER key to continue.

Command ==>
ENTER PF1=Help      PF3=Abort
                                More: + -
                                PF7=Page Up PF8=Page Down
```

Figure 4-5. System Prompt for Custom Languages

```

                                SYSTEM DEFINITION UTILITY
1.1.31
Select Customized Language
                                Page 1

1. Austrian/German C80
2. Austrian/German C81
3. English (UK) C8
4. Canadian French Alt
5. Swiss-German (EXT)
6. Swiss-French (EXT)
7. Swiss-German (PTT)
8. Swiss-French (PTT)
9. Belgian Code Pg 500
10. New Spanish

Command ==> _
ENTER PF1=Help      PF3=Abort
```

Figure 4-6. Sample List of Custom Languages

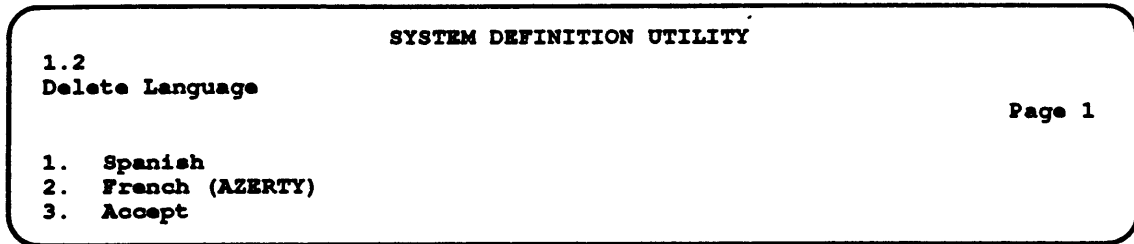


Figure 4-7. Sample List of Selected Languages

To return to the Define System Language menu after deleting a language, press Enter since the default number on the input line is the number next to "Accept."

INDICATE PRIMARY LANGUAGE

This option lets you prioritize the selected two languages. This priority scheme is used when configuring the control unit via LCP.

Type the number of the language you want to designate as the primary language on the input line. After pressing Enter the menu will be rearranged to reflect this order.

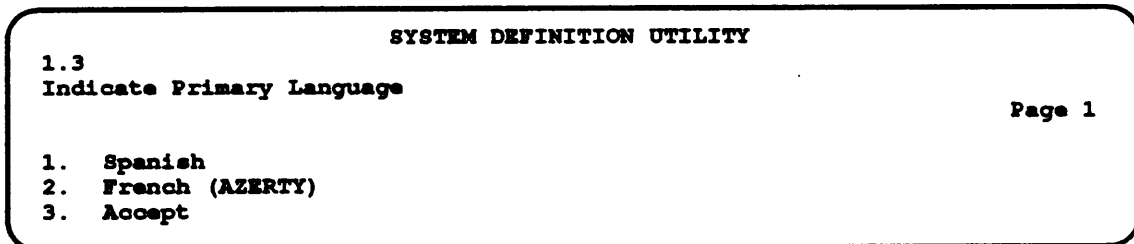


Figure 4-8. Prioritize Selected Languages

To return to the Define System Language menu after indicating language priority, press Enter since the default number on the input line is the number next to "Accept."

VIEW THE DEFINED LANGUAGE LIST

Lists the selected operating system languages.

ACCEPT

To return to the SDU Main menu, press Enter since the default number on the input line is the number next to "Accept."

SYSTEM DEFINITION UTILITY

OPTION 2 – CUSTOMIZE EBCDIC HOST INTERFACE TABLE

From the SDU Main menu, use this option to customize the EBCDIC host interface table, which translates EBCDIC to IBM code and IBM code to EBCDIC. Customizing the table allows the control unit to support nonstandard character sets.

If you want to use the standard EBCDIC Code Set associated with the system language selected with Option 1, you do not need to use this option.

You can only customize one EBCDIC host interface table per language.

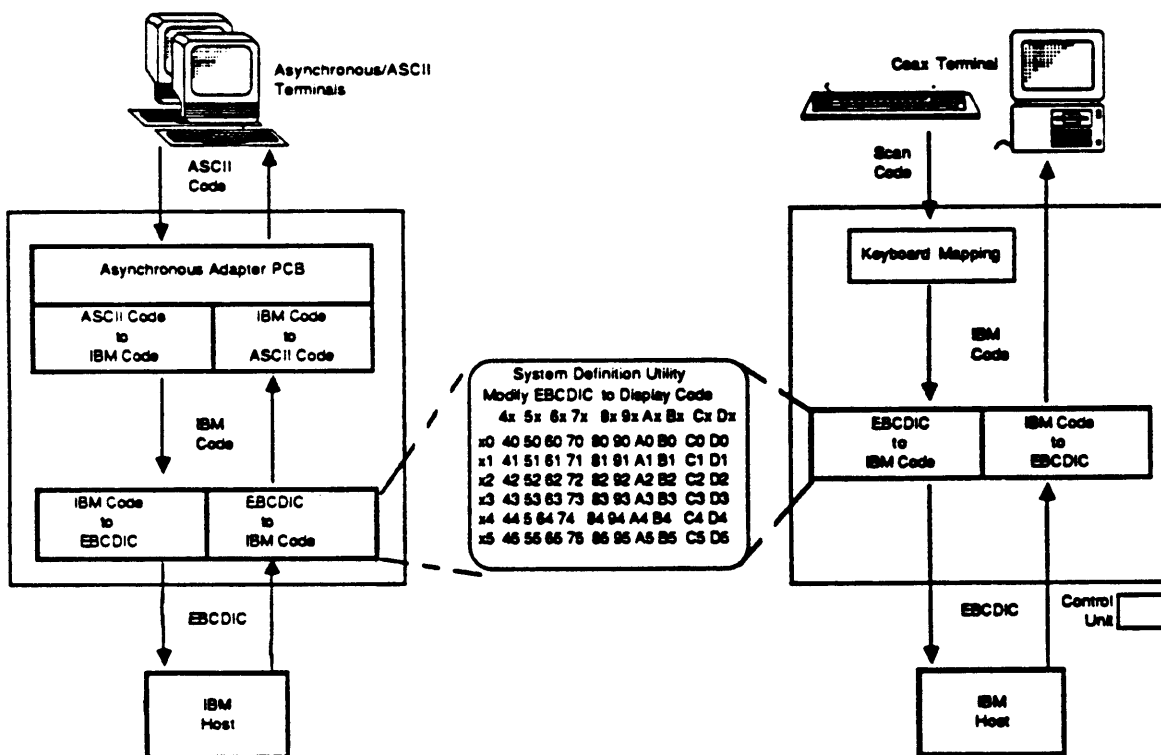


Figure 4-9. EBCDIC Host Interface

OVERVIEW

The flowchart in Figure 4-10 provides a brief description of the tasks involved in customizing the EBCDIC host interface table.

SELECT EBCDIC HOST LANGUAGE

First, select the EBCDIC host language you want to customize. Type the number next to the desired language on the input line and press Enter.

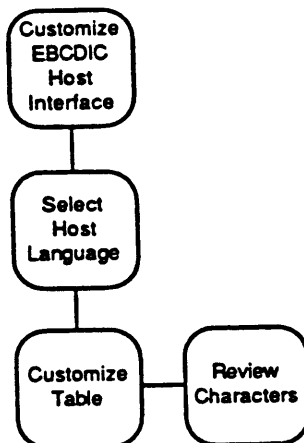


Figure 4-10. Customize EBCDIC Host Interface Summary

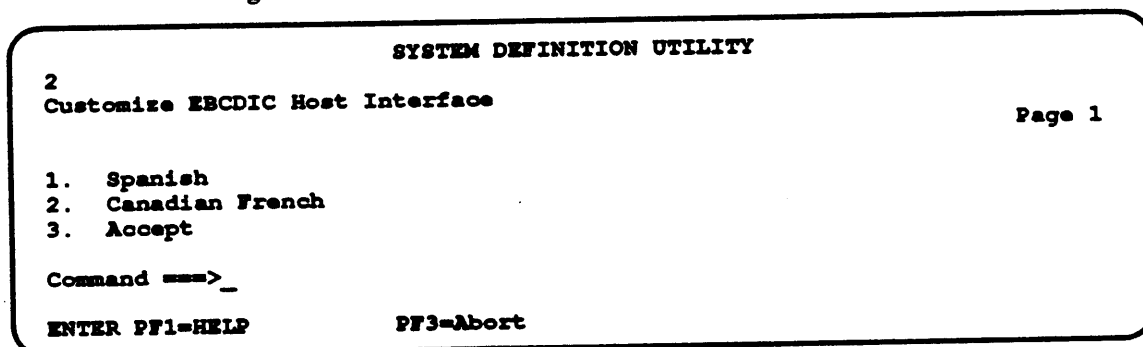


Figure 4-11. Sample List of EBCDIC Host Languages

MODIFY EBCDIC HOST INTERFACE TABLE

The hexadecimal values in the top row and left-hand column of the table are EBCDIC values (see Figure 4-12). You can customize the IBM display code values by moving the cursor to the field you want to modify and typing in the desired value. For example, instead of an ampersand (&) printing when a 30 is received, you can have an umlaut (Ü) printed if you modify the field to read 54. Press Enter when all the changes have been made.

The inverse translation table, from IBM display code to EBCDIC, is constructed from this menu.

The character range for customization is 40 to FE hexadecimal. The entries from 00 hexadecimal to 3F hexadecimal are reserved by IBM for control usage so they do not appear on the menu.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of hex numbers.

SYSTEM DEFINITION UTILITY

SYSTEM DEFINITION UTILITY

2.1
Modify EBCDIC to Display Code Host Interface Table

Page 1

	4x	5x	6x	7x	8x	9x	Ax	Bx	Cx	Dx	Ex	Fx
x0	10	30	31	49	52	59	61	68	0f	0e	15	20
x1	17	2c	14	4a	80	89	3c	69	a0	a9	9a	21
x2	19	37	41	4b	81	8a	92	6a	a1	aa	b2	22
x3	1a	38	42	4c	82	8b	93	6b	a2	ab	b3	23
x4	1b	39	43	4d	83	8c	94	6c	a3	ac	b4	24
x5	1c	3a	44	4e	84	8d	95	6d	a4	ad	b5	25
x6	1d	3b	45	4f	85	8e	96	6e	a5	ae	b6	26
x7	1f	3e	46	50	86	8f	97	6f	a6	af	b7	27
x8	2a	3f	47	51	87	90	98	70	a7	b0	b8	28
x9	2b	40	48	3d	88	91	99	71	a8	b1	b9	29
xA	0a	0b	5f	34	53	5a	62	72	78	7c	9b	ba
xB	32	1e	33	7f	54	5b	63	73	79	7d	9c	bb
xC	09	bf	2e	2d	55	5c	64	74	7a	7e	9d	bc
xD	0d	0c	2f	12	56	5d	65	75	7b	d3	d6	bd
xE	35	be	08	11	57	5e	66	76	d1	d4	d7	d9
xF	16	36	18	13	58	60	67	77	d2	d5	d8	ca

Enter a hexadecimal value in the desired field to modify the table.
Spanish
ENTER PF1=Help PF3=Abort PF6=Toggle Display

Figure 4-12. EBCDIC Host Interface Translation Table

REVIEW CHARACTERS

To see the corresponding character for each value, use PF6 to toggle between the value and character table.

Pressing Enter returns you to the EBCDIC host language menu.

If you have selected a second system language, you can begin to customize another EBCDIC host interface table. Alternately you can select "Accept."

ACCEPT

To return to the SDU Main menu, press Enter since the default number on the input line is the number next to "Accept."

OPTION 3 – CUSTOMIZE ASCII HOST INTERFACE TABLE

From the SDU Main menu, use this option to define and customize one of four A/A host interface tables, which translates ASCII to IBM code, IBM code to ASCII, ASCII to EBCDIC, and EBCDIC to ASCII. Customizing the table allows the control unit to support nonstandard character sets.

Some entries in the translation tables may be reserved; therefore, they cannot be modified.

SYSTEM DEFINITION UTILITY

You can only customize one set of A/A host interface tables per language.

OVERVIEW

The flowchart in Figure 4-13 provides a brief description of the tasks involved in customizing the ASCII host interface table.

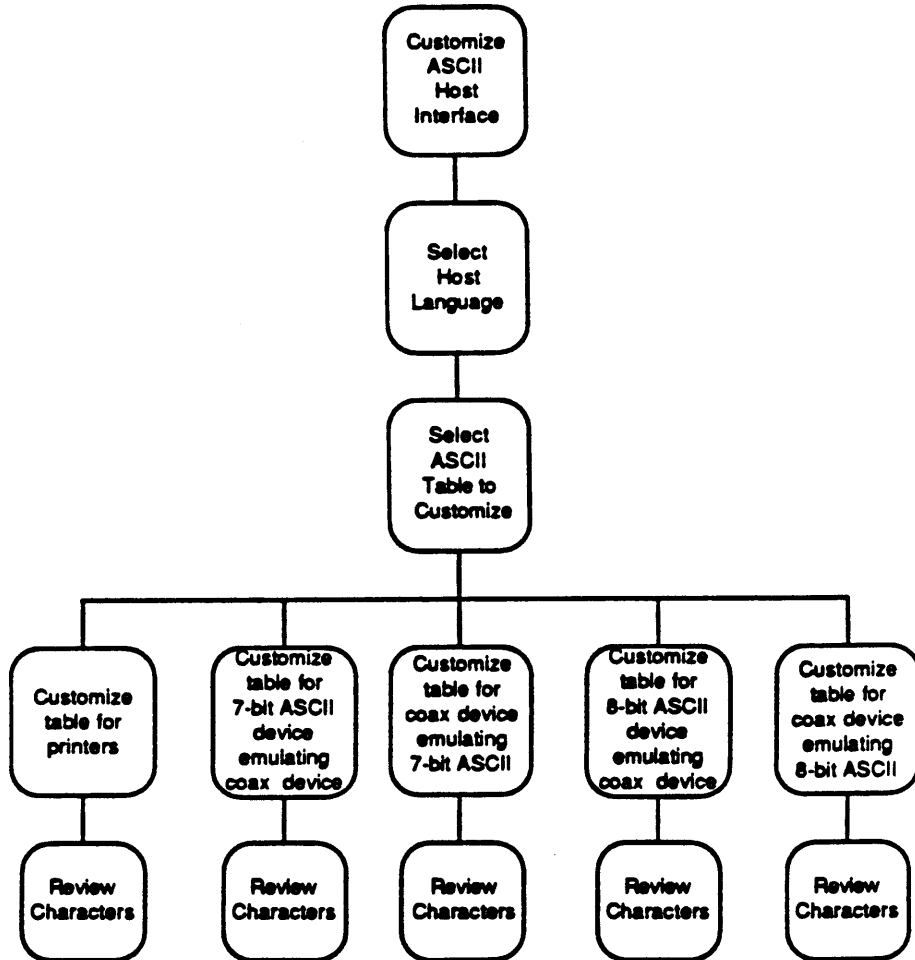


Figure 4-13. Customize ASCII Host Interface Summary

SELECT ASCII HOST LANGUAGE

First, select the A/A host language you want to customize. Type the number next to the desired language on the input line and press Enter (see Figure 4-14).

SYSTEM DEFINITION UTILITY

```

                                SYSTEM DEFINITION UTILITY
3
Customize ASCII Host Interface                                     Page 1

1.  French (AZERTY)
2.  Austrian/German
3.  Accept
```

Figure 4-14. Sample List of A/A Host Languages

SELECT ASCII HOST INTERFACE TABLE

Next, select the specific area of the A/A host interface you want to customize. Type the number next to the desired interface table on the input line and press Enter.

```

                                SYSTEM DEFINITION UTILITY
3.1
Select ASCII Host Table to be Modified                             Page 1

1.  Modify 7-Bit ASCII to EBCDIC Printer Interface Table
2.  Modify 7-Bit ASCII to Display Code Host Interface Table (ASCII devices)
3.  Modify 7-Bit ASCII to Display Code Host Interface Table (Coax devices)
4.  Modify 8-Bit ASCII to Display Code Host Interface Table (ASCII devices)
5.  Modify 8-Bit ASCII to Display Code Host Interface Table (Coax devices)
6.  Accept

Command ==> 6

ENTER PF1=HELP          PF3=Abort
```

Figure 4-15. A/A Host Interface Menu

SELECTIONS DEFINED

Type the number next to the desired table on the input line and press Enter.

1. Modify 7-Bit ASCII to EBCDIC Printer Interface Table – Allows coax LU1 printers to communicate with the A/A host and asynchronous LU1 printers to communicate with the IBM host.

2. Modify 7-Bit ASCII to Display Code Host Interface Table – Allows a 7-bit A/A device to communicate with an IBM host.

3. Modify 7-Bit ASCII to Display Code Host Interface Table – Allows a coax device emulating a 7-bit A/A device to communicate with a 7-bit A/A host.

4. Modify 8-Bit ASCII to Display Code Host Interface Table – Allows an 8-bit A/A device to communicate with an IBM host.

5. Modify 8-Bit ASCII to Display Code Host Interface Table –
 Allows a coax device emulating an 8-bit A/A device to communicate with an 8-bit A/A host.

6. Accept – Returns you to the SDU Main menu.

The following discussion explains the translation table selections available from this menu in detail.

MODIFY 7-BIT ASCII TO EBCDIC PRINTER INTERFACE TABLE

To allow coax LU1 printers to communicate with A/A hosts and asynchronous LU1 printers to communicate with IBM hosts, the control unit translates the data stream from ASCII to EBCDIC. The host interface table lets you modify character sets between those two translations.

If you want to use the standard 7-bit ASCII Graphics Character Set associated with the system language selected with Option 1, you do not need to use this option.

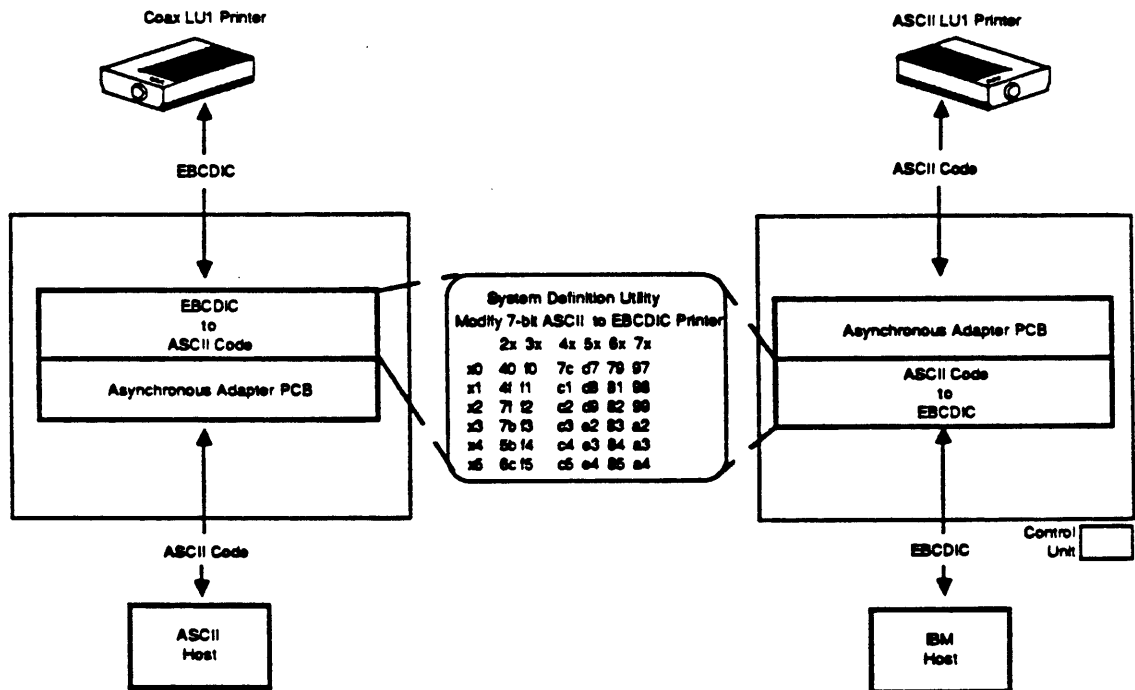


Figure 4-16. ASCII Host Interface Table for Printers

SYSTEM DEFINITION UTILITY

MODIFY TABLE

The hexadecimal values in the top row and left-hand column of the table are ASCII values. You can customize EBCDIC values by moving the cursor to the field you want to modify and typing in the desired value. For example, instead of a dollar sign (\$) printing when a 5b is received, you can have a pound character (£) printed if you modify the table to read 9C. Press Enter when all the changes have been made.

The character range for customization is 00 to 7F hexadecimal.

The inverse translation table, from EBCDIC to 7-bit ASCII code, is constructed from this menu.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of hex numbers.

SYSTEM DEFINITION UTILITY

3.1.1
Modify 7-bit ASCII to EBCDIC Printer Interface Table Page 1

	2x	3x	4x	5x	6x	7x
x0	40	f0	7c	d7	79	97
x1	4f	f1	c1	d8	81	98
x2	7f	f2	c2	d9	82	99
x3	7b	f3	c3	e2	83	a2
x4	5b	f4	c4	e3	84	a3
x5	6c	f5	c5	e4	85	a4
x6	50	f6	c6	e5	86	a5
x7	7d	f7	c7	e6	87	a6
x8	4d	f8	c8	e7	88	a7
x9	5d	f9	c9	e8	89	a8
xA	5c	7a	d1	e9	91	a9
xB	4e	5e	d2	4a	92	c0
xC	6b	4c	d3	e0	93	6a
xD	60	7e	d4	5a	94	d0
xE	4b	6e	d5	5f	95	a1
xF	61	6f	d6	6d	96	00

Enter a hexadecimal value in the desired field to modify the table.
French (AZERTY)
ENTER PF1=Help PF3=Abort PF6=Toggle Display

Figure 4-17. ASCII Host Interface Translation Table for Printers

REVIEW CHARACTERS

To see the corresponding character for each value, use PF6 to toggle between the value and character table.

**MODIFY 7-BIT ASCII TO DISPLAY CODE FOR A/A DEVICES
EMULATING COAX DEVICES**

To allow an A/A device to communicate with an IBM host, the control unit translates the data stream from ASCII to IBM internal code. Customizing the table allows the control unit to support nonstandard character sets. The character range for customization is 00 to 7E hexadecimal.

If you want to use the standard 7-bit ASCII Graphics Character Set associated with the system language selected with Option 1, you do not need to use this option.

The inverse translation table, from IBM Code to 7-bit ASCII code, is constructed from the modified table.

The procedure is the same as the previous menu for printers.

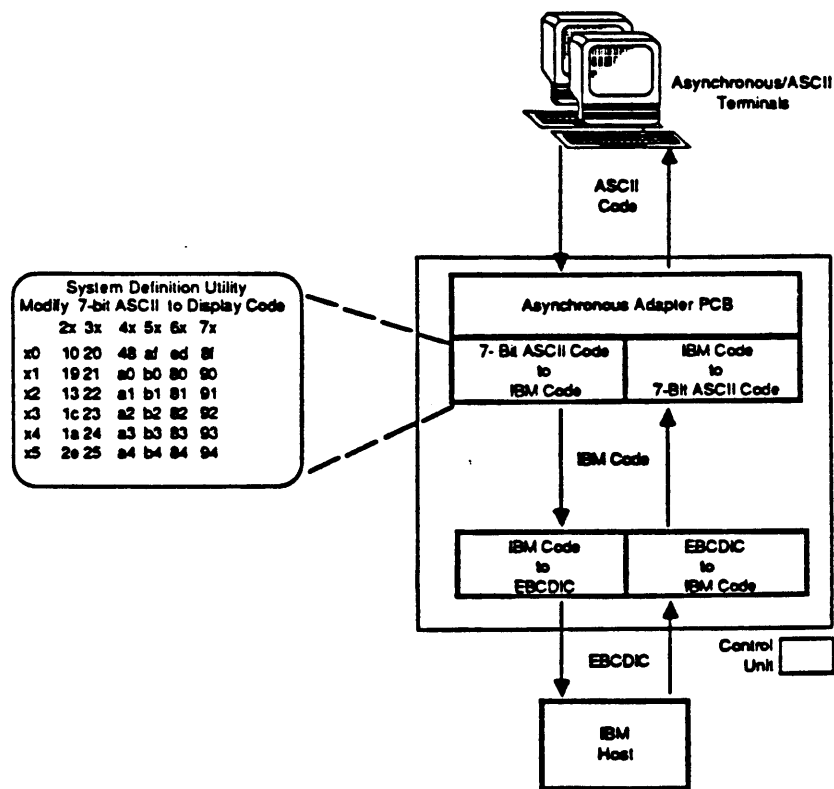


Figure 4-18. ASCII Host Interface for A/A Devices Emulating Coax Devices

SYSTEM DEFINITION UTILITY

MODIFY 7-BIT ASCII CODE TO DISPLAY CODE FOR COAX DEVICES DURING 7-BIT EMULATION

To allow a coax device to communicate with a 7-bit A/A host, the control unit translates the data stream from IBM internal code to 7-bit ASCII. Customizing the table allows the control unit to support non-standard character sets. The character range for customization is 00 to 7E hexadecimal.

If you want to use the standard 7-bit ASCII Graphics Character Set associated with the system language selected with Option 1, you do not need to use this option.

The inverse translation table, from IBM code to 7-bit ASCII code, is constructed from the modified table.

The procedure is the same as the previous menu for printers.

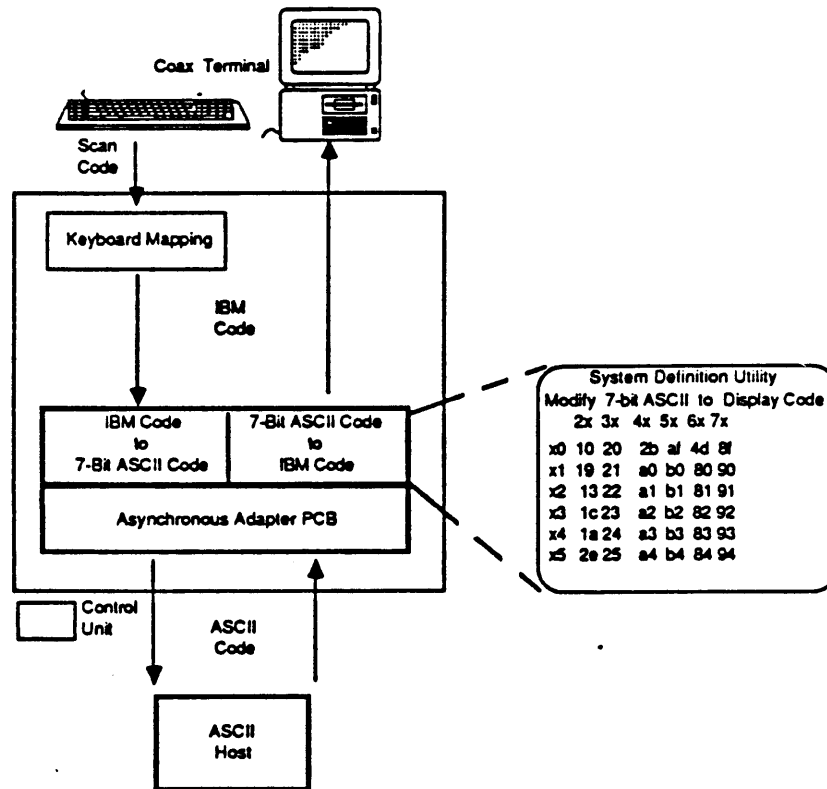


Figure 4-19. ASCII Host Interface for Coax Devices Emulating A/A Devices

MODIFY 8-BIT ASCII CODE TO DISPLAY CODE FOR A/A DEVICES EMULATING COAX DEVICES

To allow an 8-bit A/A device to communicate with an IBM host, the control unit translates the data stream from 8-bit ASCII to IBM internal code. Customizing the table allows the control unit to support nonstandard character sets. The character range for customization is 00 to FF hexadecimal.

If you want to use the standard 8-bit DEC National Replacement ASCII Character Set associated with the system language selected with Option 1, you do not need to use this option.

The inverse translation table, from IBM code to 8-bit ASCII code, is constructed from this menu.

The procedure is the same as the previous menu for printers.

MODIFY 8-BIT ASCII CODE TO DISPLAY CODE FOR COAX DEVICES DURING 8-BIT EMULATION

To allow a coax device to communicate with an 8-bit A/A host, the control unit translates the data stream from IBM internal code to 8-bit ASCII (see Figure 4-20). Customizing the table allows the control unit to support nonstandard character sets. The character range for customization is 20 to FD hexadecimal.

If you want to use the standard 8-bit DEC Multinational Graphics Character Set associated with the system language selected with Option 1, you do not need to use this option.

The hexadecimal values in the top row and left-hand column of the table are ASCII values. You can customize the IBM display code values by moving the cursor to the field you want to modify and typing in the desired value. For example, instead of a curly brace (}) printing when a 0e is received, you can have a vertical line (|) printed if you modify the field to read 16. Press Enter when all the changes have been made.

The inverse translation table, from IBM code to 8-bit ASCII code, is constructed from this menu.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of hex numbers.

SYSTEM DEFINITION UTILITY

SYSTEM DEFINITION UTILITY														
3.2.5 Modify 8-Bit ASCII to Display Code Host Interface Table (Coax)														
Page 1														
	2x	3x	4x	5x	6x	7x	8x	9x	Ax	Bx	Cx	Dx	Ex	Fx
x0	10	20	2d	af	3d	8f				38	60	Dx	40	
x1	19	21	a0	b0	80	90					7a	7f	5a	5f
x2	13	22	a1	b1	81	91					75	63	55	43
x3	2c	23	a2	b2	82	92			1c		65	7d	45	5d
x4	1a	24	a3	b3	83	93					70	78	50	58
x5	2e	25	a4	b4	84	94			1d		bc	66	9c	46
x6	30	26	a5	b5	85	95					ba	73	9a	53
x7	12	27	a6	b6	86	96			2b	32	bd		4f	
x8	0d	28	a7	b7	87	97					61	bb	49	9b
x9	0c	29	a8	b8	88	98					76	64	4a	44
xA	bf	34	a9	b9	89	99					76	7e	56	5e
xB	35	be	aa	0a	8a	0f					71	79	51	59
xC	33	09	ab	15	8b	17					62	74	4b	4e
xD	31	11	ac	0b	8c	0e					7c		5c	47
xE	32	08	ad	3a	8d	3b					77		57	
xF	14	18	ae	2f	8e						72	2a	52	

Enter a hexadecimal value in the desired field to modify the table.
Austrian/German
ENTER PF1=Help PF3=Abort PF6=Toggle Display

Figure 4-20. ASCII Host Interface Translation Table for Coax Devices

REVIEW CHARACTERS

To see the corresponding character for each value, use PF6 to toggle between the value and character table.

ACCEPT

To return to the ASCII host language menu, press Enter since the default number on the input line is the number next to "Accept."

If you have selected a second system language, you can begin to customize another A/A host interface table.

Alternately, to return to the SDU Main menu after the ASCII host interface table modifications have been completed, press Enter since the default number on the input line is the number next to "Accept."

OPTION 4 - CUSTOMIZE COAX KEYBOARD TRANSLATION

From the SDU Main menu, use this option to define the type of keyboard on a coax terminal attached to the control unit. On keyboards you have identified for modification, you can add, copy, delete, and exchange key functions.

The supported coax keyboards that can be defined depend on the operating system language(s) selected with Option 1, "Define System Languages."

OVERVIEW

The flowchart in Figure 4-21 provides a brief description of the tasks involved in customizing the coax keyboard tables.

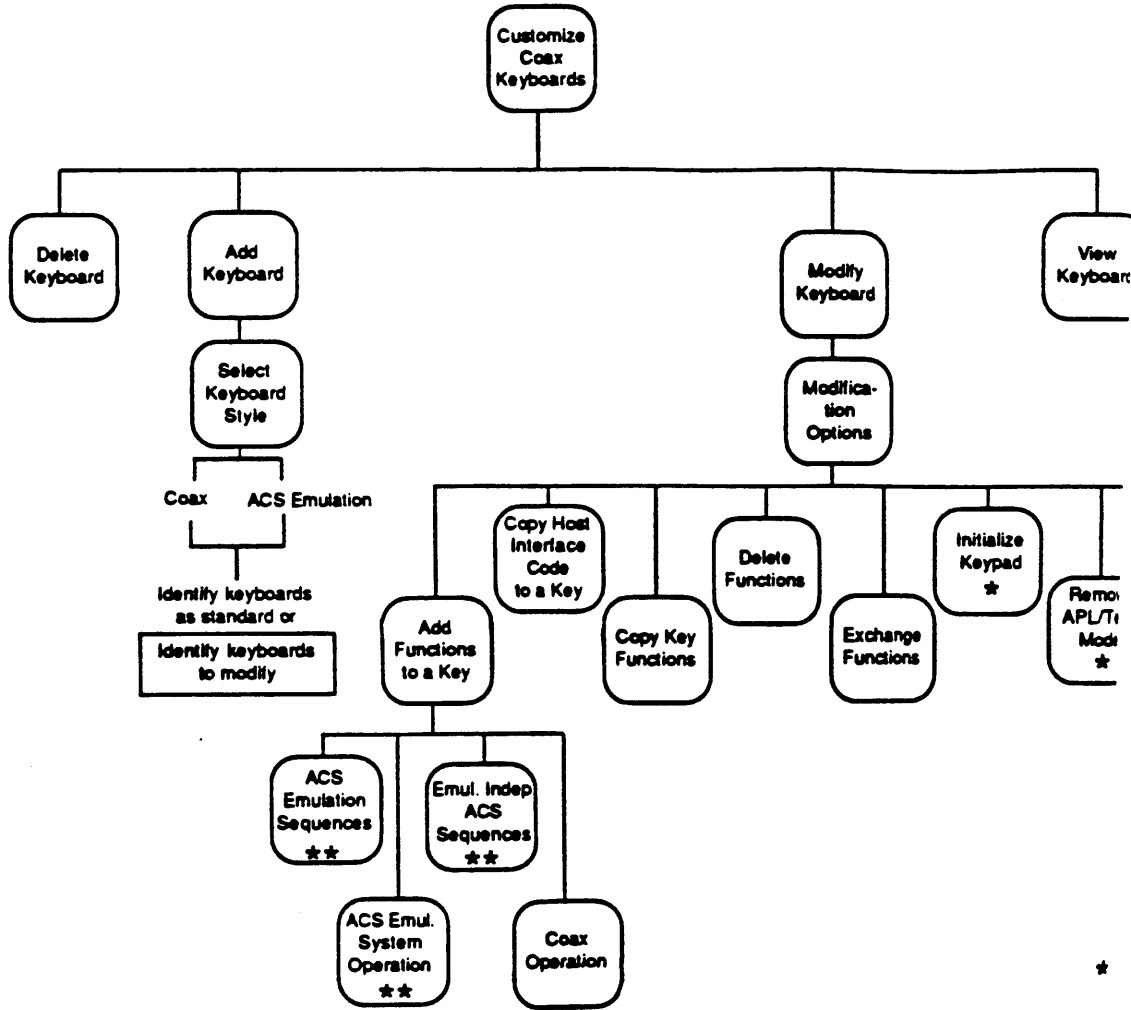


Figure 4-21. Customize Coax Keyboard Table Summary

SYSTEM DEFINITION UTILITY

KEYBOARD TRANSLATION MENU

First, identify the desired keyboard tables to the control unit using the menu shown in Figure 4-22.

NOTE: The first time you use SDU "Add a Keyboard" and "Modify a Keyboard" will not appear. "Add a Keyboard" does not appear until you have first used "Delete a Keyboard." "Modify a Keyboard" does not appear until you have identified a keyboard table for modification with "Add a Keyboard."

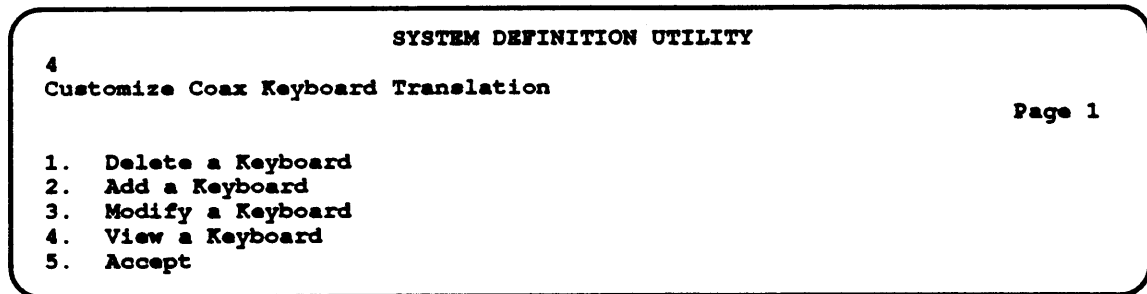


Figure 4-22. Coax Keyboard Translation Menu

SELECTIONS DEFINED

Type the number next to the desired keyboard selection on the input line and press Enter.

1. **Delete a Keyboard** – Remove a keyboard table from the list available to the system.
2. **Add a Keyboard** – Select keyboard tables and identify a table as either standard or modifiable.
3. **Modify a Keyboard** – Exchange, copy, add, and delete functions on keys.
4. **View a Keyboard** – Lists all the selected keyboard tables available to the system.
5. **Accept** – Returns you to the SDU Main menu.

The following discussion explains the keyboard selections available from this menu in detail.

DELETE A KEYBOARD

This option lets you remove a keyboard table from the list available to the system.

NOTE: If this is the first time you have used this utility, SDU has automatically selected a list of keyboard tables based on the language(s) selected with Option 1, "Define System Languages." If you want different keyboard tables made available to the system, first, use "Delete a Keyboard" before selecting the desired keyboard from the "Add a Keyboard" selection.

You are limited in the number of keyboard tables available to the system. Refer to the discussion "Keyboard Tables Available to System" for more information.

To remove a keyboard, type in the number next to the keyboard. After pressing Enter, the screen reappears with the corrected list of keyboards.

SYSTEM DEFINITION UTILITY						
4.1						Page 1
Delete a Keyboard						
ID	Language	Key	Keyboard	Modes	Keypad	
1.	STD	French (AZERTY)	87	Typewriter	APL	Default
2.	STD	French (AZERTY)	122	Typewriter	APL	Default
3.	STD	French (AZERTY)	103	Typewriter	None	Default
4.	STD	Spanish	87	Typewriter	APL	Default
5.	STD	Spanish	122	Typewriter	APL	Default
6.	STD	Spanish	103	Typewriter	None	Default
7.	Accept					
Command ==> 7						
ENTER PF1=Help			PF3=Abort			

Figure 4-23. Sample List of Supported Coax Keyboard Styles

RETURN TO CUSTOMIZE COAX KEYBOARD TRANSLATION MENU

To return to the Customize Coax Keyboard Translation menu, press Enter since the default number on the input line is the number next to "Accept."

ADD A KEYBOARD

This option lets you select a keyboard table and identify a table as either standard (STD) or modifiable. A keyboard table, after being identified as modifiable, serves as a foundation that you can customize with the Modify a Keyboard menu.

SYSTEM DEFINITION UTILITY

If you have previously used this utility and have identified a keyboard table as standard or modifiable, that identified keyboard also appears on this screen.

NOTE: If this is the first time you have used this utility, SDU has automatically selected a list of keyboard tables based on the language(s) selected with Option 1, "Define System Languages." If you want different keyboard tables made available to the system, first, use "Delete a Keyboard" before selecting the desired keyboard from the "Add a Keyboard" selection.

You are limited in the number of keyboard tables available to the system. Refer to the discussion "Keyboard Tables Available to System" for more information.

KEYBOARD TABLES AVAILABLE TO SYSTEM

Generally, you can have up to 10 unique keyboard tables, a combination of coax and ACS Emulation (A/A emulated), available to the system. However, since some keyboard styles require more memory space, your choice may be limited to less than 10 keyboard tables. Refer to Table 4-1 to determine the number of keyboard tables required in SDU memory for each keyboard style. Table 4-1 also shows the order the keyboards will appear on the screen.

Prioritized List of Keyboard Styles	Number of Keyboard Tables Required in SDU Memory for All Languages*
1. 87-key Typewriter/APL (3278)	2
2. 122-key Typewriter/APL (3179/3180)	2
3. 102-key Typewriter (3191 enhanced)	1
4. 87-key Data Entry	1
5. 122-key Data Entry	1
6. 87-key Data Entry Key punch	1
7. 87-key RPQ	1
8. 87-key Nontext/Text	1
9. 87-key ACS Emulation	1
10. 122-key ACS Emulation	1
11. 102-key ACS Emulation	1

*For the Katakana language, the number of keyboard tables required in SDU memory increases by one.

Table 4-1. Keyboard Priority and Required Tables

SELECT KEYBOARD STYLE

Select either a coax keyboard or an ACS emulation keyboard style and press Enter.

SYSTEM DEFINITION UTILITY

4.1
Add a Keyboard Page 1

ID	Language	Key	Keyboard	Modes	Keypad
1.	STD French (AZERTY)	87	Typewriter	APL	Default
2.	STD French (AZERTY)	87	Data Entry	None	Default
3.	STD French (AZERTY)	87	Keypunch (DE)	None	Default
4.	STD French (AZERTY)	87	ACS Emulation	None	Default
5.	STD French (AZERTY)	122	Typewriter	APL	Default
6.	STD French (AZERTY)	122	ACS Emulation	None	Default
7.	STD French (AZERTY)	103	ACS Emulation	None	Default
8.	STD Spanish	87	Data Entry	None	Default
9.	STD Spanish	87	Keypunch (DE)	None	Default
10.	STD Spanish	87	ACS Emulation	None	Default
11.	STD Spanish	122	ACS Emulation	None	Default
12.	STD Spanish	103	ACS Emulation	None	Default
13.	STD French (AZERTY)	103	Typewriter	None	Default
14.	STD Spanish	87	Typewriter	APL	Default
15.	STD Spanish	122	Typewriter	APL	Default

More: + -

ENTER PF1=Help PF3=Abort PF7=Page up PF8=Page down

Figure 4-24. Sample List of Supported Keyboard Styles

For IBM devices, refer to the *IBM 3270 Information Display System Character Set Reference (GA27-2837)* for the keyboard and keypad mappings of different keyboard styles for each standard language.

SELECT IDENTIFIER

After selecting a keyboard table, identify the keyboard as either STD (standard) or modifiable.

After pressing Enter, the Add a Keyboard menu reappears with the keyboard, identified as either STD or modifiable, at the bottom of the list on the screen.

SYSTEM DEFINITION UTILITY

SYSTEM DEFINITION UTILITY				
4.1.1	Select an Identifier for the Keyboard			
			Page 1	
1.	STD			
2.	K			
3.	L			
4.	M			
5.	N			
6.	O			
7.	P			
8.	Q			
9.	R			
10.	S			
11.	T			
Command ==>				
STD	French (AZERTY)	87 Data Entry	None	Default
ENTER	PF1=Help	PF3=Abort		

Figure 4-25. Sample List of Keyboard Identifiers

IDENTIFIED AS STANDARD

If you designate the keyboard as standard, it cannot be modified.

NOTE: The standard keyboards defined here must match the selection you enter in the IBM Keyboard and Asynchronous Emulated Keyboard fields with the LCP CO command.

The LCP entries for STD keyboards are:

- 3X78 Typewriter/APL = 1
- 3X78 Data Entry 1 = 2
- 3X78 Data Entry 2/Keypunch = 3
- 3X78 Typewriter/Text = 4
- 3X78 RPQ = 5
- 3179/80 Typewriter/APL = 6
- 3179/80 Data Entry = 7
- 3191 Enhanced Typewriter = 8

IDENTIFIED AS MODIFIED

A keyboard style, after being identified as modifiable, serves as a foundation that you can customize. The foundation contains default key sequences, functions, and key positions. You can modify these default positions with the Modify a Keyboard selection.

SYSTEM DEFINITION UTILITY

NOTE: The modified keyboards defined here must match the selection you enter in the IBM Keyboard and Asynchronous Emulated Keyboard fields with the LCP CO command.

The LCP entries for modified keyboards range from A through Z and AA through DD.

RETURN TO CUSTOMIZE COAX KEYBOARD TRANSLATION MENU

To return to the Customized Coax Keyboard Translation menu after identifying all the keyboard types that will be defined for the system, press Enter since the default number on the input line is the number next to "Accept."

MODIFY A KEYBOARD

This option lists the keyboard tables identified for modification.

NOTE: If only one A/A emulation style has been identified, this menu does not appear and the system proceeds directly to the next menu.

To begin keyboard modification process, select a keyboard by typing in the number next to the identifier on the input line and pressing Enter.

The keyboards identified as STD (standard) cannot be modified, hence, will not appear on this screen.

SYSTEM DEFINITION UTILITY						
4.3	Modify a Keyboard					Page 1
	ID	Language	Key	Keyboard	Modes	Keypad
1.	J	Spanish	122	ACS Emulation	None	Default
2.	K	French (AZERTY)	87	Data Entry	None	Default
3.	Accept					
Command ==> 3						
ENTER PF1=Help			PF3=Abort			

Figure 4-26. Keyboards Identified for Customization

SYSTEM DEFINITION UTILITY

KEYBOARD MODIFICATION MENU

After selecting a keyboard table to modify, use this menu to exchange, copy, add, and delete functions for individual keys. In addition, on coax keyboards you can select keypads and indicate the modes that are affected by the keyboard modifications.

NOTE: If you have selected an ACS Emulation keyboard type to modify, "Initialize Keypad" and "Select Keyboard Mode(s) to be Affected" will not appear as options on the screen. Also, "Copy ASCII Host Interface Code to a Key" will appear as Option 2.

SYSTEM DEFINITION UTILITY			
4.3.1	Select the Keyboard Modification		Page 1
1.	Add Function(s) to a Key		
2.	Copy EBCDIC Host Interface Code to a Key		
3.	Copy Function(s) of a Key to Another		
4.	Delete Function(s) from a Key		
5.	Exchange Function(s) of Two Keys		
6.	Initialize Keypad		
7.	Remove Keyboard Function Mode (APL/Text Multilingual)		
8.	Select Keyboard Mode(s) to be Affected		
9.	Accept		
Command ==> 8			
K	French (AZERTY)	87 Data Entry	None Default
ENTER	PF1=Help	PF3=Abort	

Figure 4-27. Keyboard Modification Menu

SELECTION DEFINED

Type the number next to the desired keyboard modification on the input line and press Enter.

- 1. Add Function(s) to a Key** – Restore or add coax functions to a keyboard. Add ACS emulation sequences or system functions, or user-defined sequences to a keyboard used during A/A Emulation mode.
- 2. Copy EBCDIC or ASCII Host Interface Code to a Key** – Copy the host interface I/O character to a key.
- 3. Copy Function(s) of a Key to Another** – Two keys on the keyboard will have identical functions.
- 4. Delete Function(s) from a Key** – Remove function(s) from a keyboard.
- 5. Exchange Function(s) of Two Keys** – The operation of two keys can be switched.

6. Initialize Keypad – Select keypad to accompany modified keyboard. This selection does not appear if you are modifying a keyboard table for ACS emulation.

7. Remove Keyboard Feature Mode (APL/Text Multilingual) – Remove APL/Text mode from the keyboard.

8. Select Keyboard Mode(s) to be Affected – Select terminal mode where keyboard modifications will take affect. This selection does not appear if you are modifying a keyboard for ACS emulation.

9. Accept – Returns you to the Modify a Keyboard menu.

The following discussion explains the keyboard modification selections available from this menu in detail.

ADD FUNCTION(S) TO A KEY

The Add Function(s) to a Key menu appears in different ways depending on the type of keyboard you are modifying.

NOTE: If you are modifying a coax keyboard emulating an A/A keyboard, the menu in Figure 4-28 appears. If you are modifying a coax keyboard, only “Add Coax Keyboard Operation” and “Accept” appear as options on the menu.

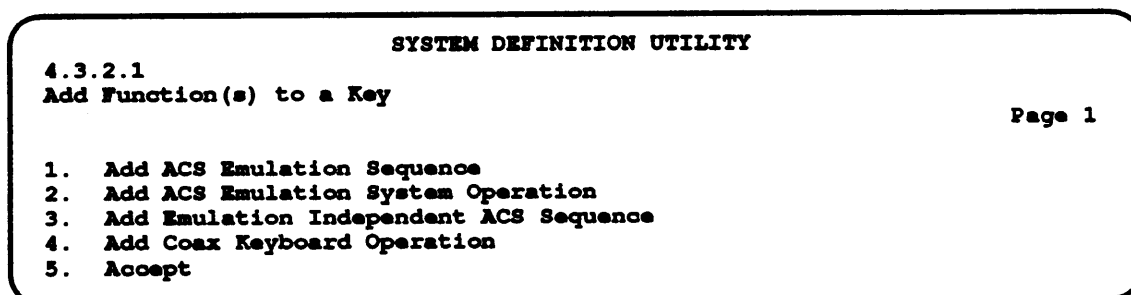


Figure 4-28. Function Options for an A/A Emulated Keyboard

SELECTIONS DEFINED

1. Add ACS Emulation Sequence – Place ACS emulation sequence operations on a key.

2. Add ACS Emulation System Operation – Place system functions on a key.

3. Add Emulation Independent ACS Sequence – Place user-defined, emulation-independent sequence on a key.

4. Add Coax Keyboard Operation – Add or restore coax functions to any coax keyboard.

SYSTEM DEFINITION UTILITY

5. Accept – Returns you to the Keyboard Modification menu.

The following discussion explains the keyboard functions available from this menu in detail.

ADD ACS EMULATION SEQUENCE

This option lets you place ACS emulation sequence operations on a key.

NOTE: First, you may want to use Option 5, "Customize ACS Device Emulation (Modify ACS Emulation Sequences)" to modify the ACS emulation sequences. Then, use this selection to place those ASCII sequences onto a coax keyboard that is emulating an A/A device.

SELECT SEQUENCE

Select an ACS emulation sequences listed on this menu by typing the number next to the sequence name on the input line and pressing Enter.

Reveal all ACS emulation sequences by pressing PF8 to page the screen down and PF7 to page the screen up.

The ACS sequences identified as S1 through S126 have been arbitrarily named "S." The value of S depends on what ACS emulation style (VT52, VT100, VT220 7-bit, VT220 8-bit, IBM 310) or modifications of these styles is selected.

```

                                SYSTEM DEFINITION UTILITY
4.3.2.1.1
Add ACS Emulation Sequence                                           Page 1

121.  S121
122.  S122
123.  S123
124.  S124
125.  S125
126.  S126
127.  Forward
128.  Backward
129.  Up
130.  Down
131.  Insert
132.  Delete
133.  Enter
134.  NewLine
135.  Tab

Command ==> 137
ENTER PF1=Help           PF3=Abort           PF7=Page up  PF8=Page down
More: + -
```

Figure 4-29. Partial List of ACS Emulation Sequences

SYSTEM DEFINITION UTILITY

ADD SEQUENCE TO KEYBOARD

After selecting an ACS emulation sequence and pressing Enter, a partial keyboard layout replaces the list of sequences.

View the remaining parts of the keyboard by pressing PF8.

	1	2	3	4	5	6	7	8	9	0	?		Backspace Backspace
\	Q	W	E	R	T	Y	U	I	O	P	^	*	
Tab	q	w	e	r	t	y	u	i	o	p	\	+	
US	Xof	ETB	ENQ	DC2	DC4	EM	NAK	HT	SI	DLE	{	}	
BIMay	A	S	D	F	G	H	J	K	L				NewL
BIMay	a	s	d	f	g	h	j	k	l				NewL
BIMay	SOH	Xon	EOT	ACK	BEL	BS	LF	VT	FF	[]]	BckJ
MayS	>	Z	X	C	V	B	N	M	;	:	-		MayS
MayS	<	z	x	c	v	b	n	n	/	.	-		MayS
MayS		SUB	CAN	EXT	SYN	STX	SO	CR	FS	G S	RS		MayS
Reset			LAltva	Espac						Altva		Enter	
Reset			LAltva	Espac						Altva		Enter	
NoScro			LAltva	NULL						Altva		Enter	
Add All levels All Modes: S1 S1 S1 More:+ J Spanish 122 ACS emulation None Default ENTER PF1=Help PF2=Select PF3=Abort PF6=Shift PF7=Page Up PF8=Page Down													
Keyboard ID	Language	Mode Field	Keyboard Style	Sequence, Function, or Operation	Mode	Keypad							

Figure 4-30. Sample View of a Partial Keyboard

STEP 1: Begin the process of adding the ACS emulation sequence to the keyboard by moving the cursor to the desired key on the partial keyboard layout.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

SYSTEM DEFINITION UTILITY

PLACE ON KEY

STEP 3: Press PF2 and "X clock" appears on the status line for a few seconds. When these symbols disappear, the ACS Emulation Sequence is now added to the selected key appearing on the keyboard layout screen.

RETURN TO ADD ACS EMULATION SEQUENCE MENU

To return to the Add ACS Emulation Sequence menu and select another sequence, press Enter.

RETURN TO ADD FUNCTION(S) TO A KEY MENU

To return to the Add Function(s) to a Key menu after you have added all the desired ACS emulation sequences to the keyboard, press Enter since the default number on the input line is the number next to "Accept."

ADD ACS EMULATION SYSTEM OPERATION

This option lets you add ACS emulation system operations to the coax keyboard when emulating an A/A device.

Since these functions control the emulation operation, they do not generate a specific sequence that is sent to the A/A host.

SELECT SYSTEM OPERATION

Select one of the system operation keys listed on the ACS Emulation System Operation menu by typing in the number next to the system operation on the input line and pressing Enter.

```

                                SYSTEM DEFINITION UTILITY
4.3.2.1.2
Add ACS Emulation System Operation
Page 1

1. HostSel
2. Break
3. Formulate
4. Offline
5. Reset
6. NoScroll
7. Xoff
8. Xon
9. Beep
10. Accept

Command ==> 10

ENTER PF1=Help          PF3=Abort
```

Figure 4-31. List of ACS Emulation System Operations

ADD SYSTEM OPERATION TO KEYBOARD

After selecting a system operation and pressing Enter, a partial keyboard layout replaces the list of system operations.

View the remaining parts of the keyboard by pressing PF8.

ESC	S25		S75			S75	Espac
ESC	S25		()		S75	NULL
Formul			Delete	Insert	Delete	S77	Tab
S26	S28		Delete	Insert	Delete	S77	Tab
S26	S28			Insert		S81	S84
Offlin	Break			FwdJmp		S81	S84
ExSel	S27			Up		S82	S83
ExSel	S27			Up		S82	S84
						S83	S83
			Backwa		Forwa	S85	S88
			Backwa		Forwa	S85	S88
	Prba			S29		S86	S86
				Down		S87	S87
				Down		S87	S87
						S89	S90
						S89	S90

Add All levels All Modes: Host Sel Host Sel Host Sel More:+ -
 J Spanish 122 ACS Emulation None Default
 ENTER PF1=Help PF2=Select PF3=Abort PF6=Shift PF7=Page Up PF8=Page Down

Figure 4-32. Sample View of a Partial Keyboard

STEP 1: Begin the process of adding the ACS emulation system operation to the keyboard by moving the cursor to the desired key on the partial keyboard layout.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

SYSTEM DEFINITION UTILITY

PLACE ON KEY

STEP 3: Press PF2 and "X clock" appears on the status line for a few seconds. When these symbols disappear, the ACS system operation is now added to the selected key appearing on the keyboard layout screen.

RETURN TO ADD ACS EMULATION SYSTEM OPERATION MENU

To return to the Add ACS Emulation System Operation menu and select another ACS emulation system operation, press Enter.

RETURN TO ADD FUNCTION(S) TO A KEY MENU

To return to the Add Functions to a Key menu after you have added all the desired ACS emulation system operation to the keyboard, press Enter since the default number on the input line is the number next to "Accept."

ADD EMULATION-INDEPENDENT ACS SEQUENCE

This option lets you place emulation-independent ACS sequences on a key.

NOTE: First, you may want to use Option 5, "Customize ACS Device Emulation (Create Emulation Independent ACS Sequences)" to create the emulation-independent ASCII sequences. Then, use this option to place those sequences onto a keyboard that is emulating an A/A device.

SELECT EMULATION-INDEPENDENT ACS SEQUENCE

Select an ACS sequence listed on this menu by typing in the number next to the sequence on the input line and pressing Enter.

These ACS sequences do not depend on the selected A/A emulation style.

```

                                SYSTEM DEFINITION UTILITY
4.3.2.1.3
Add Emulation Independent ACS Sequence                                     Page 1

1. LOGON
2. LOGOFF
3. USER ID
4. PASSWORD

Command ==> _

ENTER PF1=Help                PF3=Abort                PF6=Toggle

```

Figure 4-33. Sample List of Emulation-Independent ACS Sequences

SYSTEM DEFINITION UTILITY

REVIEW SEQUENCE

If you have first created the sequence, use PF6 to review the ASCII sequence assigned to the emulation-independent name.

ADD EMULATION-INDEPENDENT ACS SEQUENCE TO KEYBOARD

After selecting a customized ACS sequence and pressing Enter a partial keyboard layout replaces the list of customized sequences.

View the remaining parts of the keyboard by pressing PF8.

S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24
S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24
									ParC	CrAl	Clic
S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12

Add All levels All Modes: Logon Logon Logon More:+ -
J Spanish 122 ACS Emulation None Default
ENTER PF1=Help PF2=Select PF3=Abort PF6=Shift PF7=Page Up PF8=Page Down

Figure 4-34. Sample View of a Partial Keyboard

STEP 1: Begin the process of adding the ACS sequence to the keyboard by moving the cursor to the desired key on the partial keyboard layout.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

PLACE ON KEY

STEP 3: Press PF2 and "X clock" appears on the status line for a few seconds. When these symbols disappear, the Emulation-Independent ACS Sequence is now added to the selected key appearing on the keyboard layout screen.

SYSTEM DEFINITION UTILITY

RETURN TO ADD ACS EMULATION CUSTOMIZED SEQUENCE MENU

To return to the Add ACS Emulation Customized Sequence menu and select another customized sequence, press Enter.

RETURN TO ADD FUNCTION(S) TO A KEY MENU

To return to the Add Function(s) to a Key menu after you have added all the desired ACS emulation custom sequences to the keyboard, press Enter since the default number on the input line is the number next to "Accept."

ADD COAX KEYBOARD OPERATION

This option lets you add or restore coax functions to any coax keyboard.

SELECT COAX OPERATION

Select one of the coax keys listed on this menu by typing in the number next to the coax operation on the input line and pressing Enter.

Reveal all coax keys on the menu by pressing PF8 to page the screen down and PF7 to page the screen up.

```

                                SYSTEM DEFINITION UTILITY
4.3.1.1.1
Add Coax Keyboard Operation
                                                    Page 3

31. Prba
32. Atenc
33. HstPAM
34. Intro (m/b)
35. Rest
36. Rest (m/b)
37. CancD
38. CancD (m/b)
39. Ptsis
40. Jump
41. AJmp
42. BJmp
43. CJmp
44. DJmp
45. EJmp
                                                    More:+ -

Command ==> 80
ENTER PF1=Help          PF3=Abort          PF7=Page Up  PF8=Page Down
```

Figure 4-35. Partial List of Coax Keyboard Operations

NOTE: On 122-key keyboards, either one of the following two conditions must be met for Caps Lock to work in place of Shift Lock. The 122-key terminal must be in native mode, or the terminal can be in ACS Emulation mode if the keyboard is identified as an 87-key keyboard.

SYSTEM DEFINITION UTILITY

ADD COAX KEYBOARD OPERATION TO KEYBOARD

After selecting a coax operation and pressing Enter a partial keyboard layout replaces the list of coax operations.

View the remaining parts of the keyboard by pressing PF8.

STEP 1: Begin the process of adding the coax operation to the keyboard by moving the cursor to the desired key on the partial keyboard layout.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of hex numbers.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

PLACE ON KEY

STEP 3: Press PF2 and "X clock" appears on the status line for a few seconds. When these symbols disappear, the coax operation is now added to the selected key appearing on the keyboard layout screen.

MODE AND KEYPAD SELECTIONS

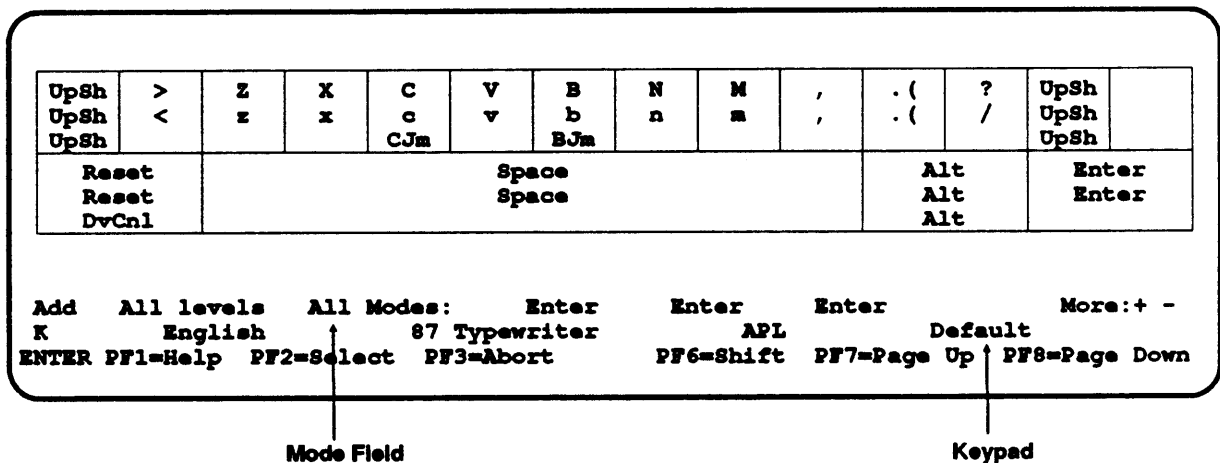


Figure 4-36. Mode and Keypad Indicators

SYSTEM DEFINITION UTILITY

MODE FIELD

The Mode Field in the lower part of the screen identifies which mode the terminal will be operating in when these modifications take place. Refer to the discussion "Select Keyboard Mode(s) to be Affected" for selections.

KEYPAD

The Keypad identifier in the lower part of the screen identifies the keypad for this keyboard style. Refer to discussion "Initialize Keypad" for selections.

RETURN TO ADD COAX KEYBOARD OPERATION MENU

To return to the Add Coax Keyboard Operation menu and select another coax keyboard operation, press Enter.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu after you have added all the desired coax keyboard operations, press Enter since the default number on the input line is the number next to "Accept."

COPY ASCII OR EBCDIC HOST INTERFACE CODE TO A KEY

If you have selected an ACS Emulation keyboard type to modify, "Copy ASCII Host Interface Code to a Key" will appear. If you have selected a coax keyboard type to modify, "Copy EBCDIC Host Interface Code to a Key" will appear.

SELECT ASCII HOST TABLE

First, select which ASCII host interface table to customize.

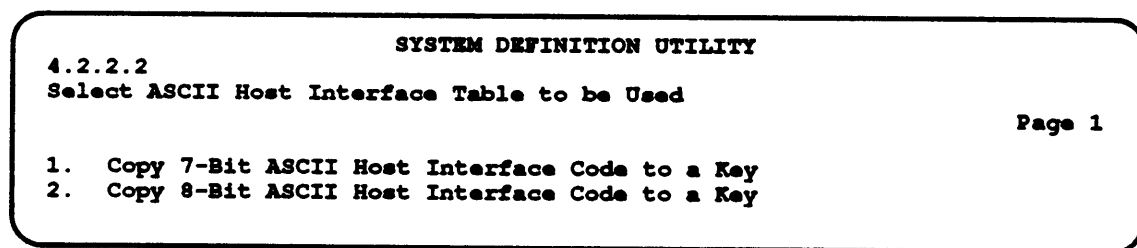


Figure 4-37. Select Host Interface Table to Modify

MODIFY TABLE

Figure 4-38 displays the EBCDIC to IBM code or the ASCII to IBM code translation table, whichever is appropriate. Use this table to copy characters from the I/O table onto a keyboard.

SYSTEM DEFINITION UTILITY

4.2.2.2
Copy 7-bit ASCII Host Interface Code to a key

Page 1

	2x	3x	4x	5x	6x	7x
x0	10	20	2d	af	3d	8f
x1	19	21	a0	b0	80	90
x2	13	22	a1	b1	81	91
x3	2c	23	a2	b2	82	92
x4	1a	24	a3	b3	83	93
x5	2e	25	a4	b4	84	94
x6	30	26	a5	b5	85	95
x7	12	27	a6	b6	86	96
x8	0d	28	a7	b7	87	97
x9	0c	29	a8	b8	88	98
xA	bf	34	a9	b9	89	99
xB	35	be	aa	0a	8a	0f
xC	33	09	ab	15	8b	17
xD	31	11	ac	0b	8c	0e
xE	32	08	ad	3a	8d	3b
xF	14	18	ae	2f	8e	

Move the cursor to the desired field to select the I/O code.
 J Spanish 122 ACS Emulation None Default
 ENTER PF1=Help PF2=Select PF3=Abort PF6=Shift PF7=Pg Up PF8=Pg Down

Figure 4-38. Sample ASCII Host Interface Code Translation Table

REVIEW CHARACTERS

Use PF6 to toggle the translation table between hexadecimal values and a character display of the codes. Since the codes from 0H to FF are undisplayable, they are always shown in a hexadecimal format.

PLACE HOST INTERFACE CODE ON KEYBOARD

STEP 1: To begin the process of copying a host interface code to a key, place the cursor on the appropriate I/O entry. Press PF2 and a partial keyboard layout replaces the list of Host Interface codes.

View the remaining parts of the keyboard by pressing PF8.

STEP 2: Move the cursor to the desired key on the partial keyboard layout.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SYSTEM DEFINITION UTILITY

SHIFT FIELD

STEP 3: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

PLACE ON KEY

STEP 4: Press PF2 and "X clock" appears on the status line for a few seconds. When these symbols disappear, the Host Interface Code is now added to the selected key appearing on the keyboard layout screen.

RETURN TO HOST INTERFACE MENU

To copy additional interface codes from the host interface Code table, press Enter.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

COPY FUNCTION(S) OF A KEY TO ANOTHER

After selecting this option, a partial keyboard layout appears on the screen.

View the remaining parts of the keyboard by pressing PF8.

STEP 1: Begin the process of copying a function by moving the cursor to the key you want to copy.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

PLACE ON KEY

STEP 3: Press PF2 while the cursor is on the key you want to copy. "X clock" appears on the status line for a few seconds.

STEP 4: When these symbols disappear, move the cursor to the key you want replaced. To copy the function(s) on the first key over onto the function(s) of the second key, press PF2 again. The function now appears copied on the keyboard layout appearing on the screen.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

DELETE FUNCTION(S) FROM A KEY

After selecting this option, a partial keyboard layout appears on the screen.

View the remaining parts of the keyboard by pressing PF8.

STEP 1: Begin the process of removing a function by moving the cursor to the key you want deleted.

NOTE: Use Left and Right Arrow to move horizontally along the entire keyboard; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of keys.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

REMOVE FROM KEY

STEP 3: Press PF2 while the cursor is on the key and the function is now deleted from the selected key.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

SYSTEM DEFINITION UTILITY

EXCHANGE FUNCTION(S) OF TWO KEYS

After selecting this option, a partial keyboard mapping appears on the screen so you can switch the operation of two keys.

View the remaining parts of the keyboard by pressing PF8.

STEP 1: Begin the exchange process by moving the cursor to the first of the two keys to be exchanged.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of hex numbers.

SHIFT FIELD

STEP 2: Use PF6 to toggle between All levels and Single level.

The shift field in the lower part of the screen has two options: All levels and Single level. All levels refer to all the characters in the unshifted, shifted, and alternate positions appearing in the key field. Single level refers to a single character appearing in the key field.

PLACE ON KEY

STEP 3: Press PF2 while the cursor is on the first of the two keys to be exchanged. "X clock" appears on the status line for a few seconds.

STEP 4: When these symbols disappear, move the cursor to the second key and press PF2 again. The characters now appear exchanged on the keyboard layout appearing on the screen.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

INITIALIZE KEYPAD

This option lists the possible keypads for the selected keyboard.

NOTE: If you are modifying a keyboard table for ACS emulation, this menu does not appear.

Type the number next to desired keypad on the input line and press Enter (see Figure 4-39).

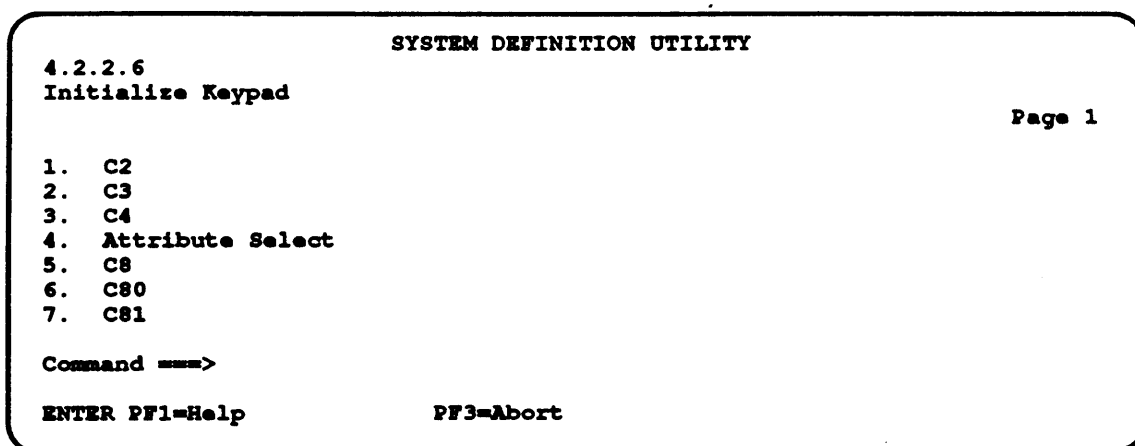


Figure 4-39. Keypad Selections

For additional keypad information, refer to "Customizing the 87-key Typewriter Style Keyboard," in Appendix F.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

REMOVE KEYBOARD FEATURE MODE

This option lets you remove the APL/Text mode from the keyboard.

NOTE: If you are modifying a keyboard table for ACS emulation, this menu does not appear.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter.

SELECT KEYBOARD MODE(S) TO BE AFFECTED

The keyboard table modifications will affect the indicated operating mode. The mode selections differ depending on the selected keyboard style and language.

Type in the number next to the desired mode and press Enter (see Figure 4-40).

NOTE: If you are modifying a keyboard table for ACS emulation, this menu does not appear.

RETURN TO KEYBOARD MODIFICATION MENU

To return to the Keyboard Modification menu, press Enter since the default number on the input line is the number next to "Accept."

SYSTEM DEFINITION UTILITY

```

                                SYSTEM DEFINITION UTILITY
4.2.1.7
Select Keyboard Mode(s) to be Affected
                                                    Page 1
1. Keyboard Changes Apply to All Modes.
2. Keyboard Changes Apply to the Default Mode Only.
3. Keyboard Changes Apply to the Multilingual, APL, or Text Mode Only.

Command ==>
ENTER PF1=Help                PF3=Abort

```

Figure 4-40. Keyboard Mode Selections

RETURN TO MODIFY A KEYBOARD MENU

To return to the Modify a Keyboard menu and select another keyboard to modify, press Enter since the default number on the input line is the number next to "Accept."

Alternately, to return to the Customize Coax Keyboard Translation Menu after customizing the keyboards, press Enter since the default number on the input line is the number next to "Accept."

VIEW A KEYBOARD

This option lists all of the standard and modified keyboard tables made available to the system.

```

                                SYSTEM DEFINITION UTILITY
4.4
View a Keyboard
                                                    Page 1
   ID  Language      Key  Keyboard      Modes  Keypad
1.  STD  French (AZERTY)  87  Typewriter    APL    Default
2.  STD  French (AZERTY) 122  Typewriter    APL    Default
3.  STD  French (AZERTY) 103  Typewriter    None   Default
4.  K    French (AZERTY)  87  Data Entry    None   Default
5.  STD  Spanish        87  Typewriter    APL    Default
6.  STD  Spanish        122  Typewriter    APL    Default
7.  STD  Spanish        103  Typewriter    None   Default
8.  J    Spanish        122  ACS Emulation None   Default
9.  Accept

Command ==> 2
ENTER PF1=Help                PF3=Abort

```

Figure 4-41. Sample List of Standard and Modified Keyboards

INSPECT KEYBOARD LAYOUT

To inspect a keyboard layout, type the number next to the keyboard and press Enter. A partial keyboard panel appears so you can review the placement of: ACS emulation sequences, ACS emulation system operations, emulation-independent ACS sequences, coax operations, and host interface codes.

RETURN TO VIEW A KEYBOARD MENU

To return to the View a Keyboard menu, press Enter.

RETURN TO THE CUSTOMIZE COAX KEYBOARD TRANSLATION MENU

To return to the Customize Coax Keyboard Translation menu, press Enter since the default number on the input line is the number next to "Accept."

ACCEPT

To return to the SDU Main menu, press Enter since the default number on the input line is the number next to "Accept."

OPTION 5 – CUSTOMIZE ACS DEVICE EMULATION

From the SDU Main menu, use this option to: modify an A/A emulation style for a coax terminal that will be emulating an A/A terminal, modify ACS emulation sequences, and create emulation independent ACS sequences.

OVERVIEW

The flowchart in Figure 4-42 provides a brief description of the tasks involved in customizing an A/A emulation style.

CUSTOMIZE ACS DEVICE EMULATION MENU

NOTE: The menu shown in Figure 4-43 will appear differently the first time you use SDU. "Delete a Custom ACS Emulation" and "Modify a Custom ACS Emulation" do not appear until you have identified an A/A emulation style with "Add a Custom ACS Emulation."

SELECTIONS DEFINED

- 1. Add a Custom ACS Emulation** – Select an ACS emulation style and identify a style for modification.
- 2. Delete a Custom ACS Emulation** – Remove a custom ACS emulation style.

SYSTEM DEFINITION UTILITY

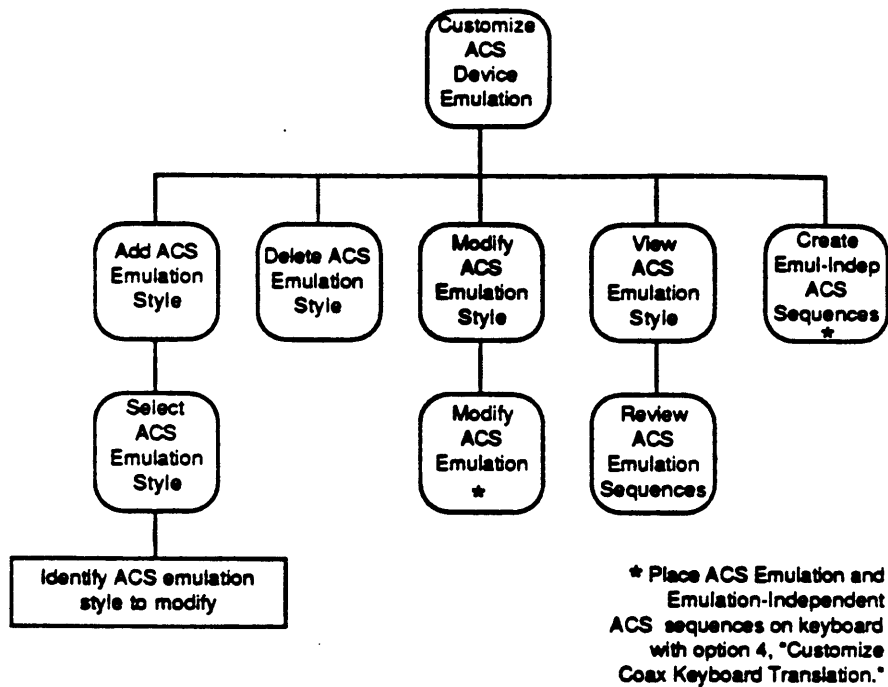


Figure 4-42. Customize ACS Device Emulation Summary

SYSTEM DEFINITION UTILITY

5
Customize ACS Device Emulation Page 1

1. Add a Custom ACS Emulation
2. Delete a Custom ACS Emulation
3. Modify a Custom ACS Emulation
4. View an ACS Emulation
5. Create Emulation Independent ACS Sequence
6. Accept

Command ==>

ENTER PF1=Help PF3=Abort

Figure 4-43. A/A Emulation Style Options

3. **Modify a Custom ACS Emulation** – Modify ACS emulation sequences.
4. **View an ACS Emulation** – Lists the selected standard and custom ACS emulation styles.
5. **Create Emulation Independent ACS Sequences** – Create user-defined ACS sequences.
6. **Accept** – Returns you to the SDU Main menu.

SYSTEM DEFINITION UTILITY

The following discussion explains the customizing options available from this menu in detail.

ADD A CUSTOM ACS EMULATION

This option lets you select an A/A emulation style to modify.

If you want to use the following standard A/A emulation styles *without* modification, you do not need to use this option but can proceed directly to LCP.

- DEC VT-52
- DEC VT-100
- DEC VT-220 (7-bit)
- DEC VT-220 (8-bit)
- IBM 3101

However, if you want to modify an A/A emulation style, use this option to select an A/A emulation style to serve as a foundation that you can customize.

SELECT EMULATION

Make a selection by typing in the number next to the desired A/A emulation style on the input line and pressing Enter.

```

                                SYSTEM DEFINITION UTILITY
5.1
Add a Custom ACS Emulation
Page 1

Identifier                Emulation Style
1.  STD                    VT-52
2.  STD                    VT-100
3.  STD                    VT-220 (7-bit)
4.  STD                    VT-220 (8-bit)
5.  STD                    IBM 3101
6.  Accept

Command ==> 6

ENTER PF1=Help           PF3=Abort
```

Figure 4-44. List of Standard A/A Emulation Styles

SYSTEM DEFINITION UTILITY

SELECT IDENTIFIER

Associate the A/A emulation style with an identifier.

Type the number next to the desired identifier on the input line and press Enter.

NOTE: The A/A emulation style identified with this screen must match the selection you enter in the Asynchronous Emulation field when the LCP CO command is used configure coax devices.

SYSTEM DEFINITION UTILITY

5.1.1
Select an Identifier for the ACS Emulation

Page 1

1. A
2. B
3. C
4. D
5. E
6. F

Command ==>

ENTER PF1=Help PF3=Abort

Figure 4-45. Sample List of A/A Emulation Style Identifiers

RETURN TO ADD A CUSTOM ACS EMULATION MENU

After pressing Enter, you are returned to the Add a Custom ACS Emulation menu, where the ACS emulation style identified for modification appears. From this menu, you can select another ACS emulation style to modify.

RETURN TO CUSTOMIZE ACS DEVICE EMULATION MENU

Alternately, to return to the Customize ACS Device Emulation menu, press Enter since the default number on the input line is the number next to "Accept."

DELETE A CUSTOM ACS EMULATION

This option lets you remove a custom A/A emulation style.

To remove an A/A emulation style, type in the number next to the desired style on the input line and press Enter (see Figure 4-46).

```

                                SYSTEM DEFINITION UTILITY
5.2
Delete a Custom ACS Emulation
                                Page 1

Identifier      Emulation Style
1.  A           VT-52
2.  B           VT-100
3.  C           VT-220 (7-bit)
4.  Accept

Command ==> 6

ENTER PF1=Help          PF3=Abort

```

Figure 4-46. Sample List of A/A Emulation Styles Identified for Customization

RETURN TO CUSTOMIZE ACS DEVICE EMULATION MENU

To return to the Customize ACS Device Emulation menu, press Enter since the default number on the input line is the number next to "Accept."

MODIFY A CUSTOM ACS EMULATION

This option lists the selected A/A emulation styles and lets you modify ACS emulation sequences.

SELECT A/A EMULATION STYLE

To select an A/A emulation style for modification, type in the number next to the desired emulation style on the input line and press Enter.

NOTE: If only one A/A emulation style has been identified, this menu does not appear and the system proceeds directly to the next menu.

```

                                SYSTEM DEFINITION UTILITY
5.3
Modify a Custom ACS Emulation
                                Page 1

Identifier      Emulation Style
1.  A           VT-52
2.  B           VT-100
3.  C           VT-220 (7-bit)
4.  Accept

Command ==>

ENTER PF1=Help          PF3=Abort

```

Figure 4-47. Sample List of Identified A/A Emulation Styles

SYSTEM DEFINITION UTILITY

MODIFY ACS EMULATION

This option lists ACS emulation sequences that send a string of bytes to the A/A host. View the remaining sequences by pressing PF8.

To modify an ACS emulation sequence, assign different values to replace the default values for the sequences listed on the screen. Each value is limited to six bytes.

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Bcaktab. Use Up and Down Arrow to move vertically within each column of sequences.

SYSTEM DEFINITION UTILITY									
5.3.1 Modify a Custom ACS Emulation								Page 1	
Sequence Name	Mode	Cnt	Mode	Off	Sequence	Cnt	Mode	On	Sequence
S1	None	02	1b	50	00 00 00 00	02	1B	50	00 00 00 00
S2	None	02	1b	51	00 00 00 00	02	1B	51	00 00 00 00
S3	None	02	1b	52	00 00 00 00	02	1B	52	00 00 00 00
S4	None	02	1b	53	00 00 00 00	02	1B	53	00 00 00 00
S5	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S6	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S7	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S8	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S9	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S10	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S11	None	01	0a	00	00 00 00 00	01	0A	00	00 00 00 00
S12	None	00	00	00	00 00 00 00	00	00	00	00 00 00 00
S13	KP Numeric	03	1b	3f	77 00 00 00	01	37	00	00 00 00 00
S14	KP Numeric	03	1b	3f	78 00 00 00	01	38	00	00 00 00 00
S15	KP Numeric	03	1b	3f	79 00 00 00	01	39	00	00 00 00 00

More: + -
Enter a hexadecimal value in the desired field to modify the table
A VT-52
ENTER PF1=Help PF3=Abort PF6=Next mode PF7=Page Up PF8=Page Down

Figure 4-48. Partial List of Custom ACS Emulation Sequences

COLUMNS DEFINED

Sequence Name – This field lists the following keystrokes that generate sequences. Use this menu to define the following keystrokes and identify them as custom ASCII sequences:

S1-126	up	delete	tab
forward	down	enter	backspace
backward	insert	new line	

The ASCII sequences identified as S1 through S126 have been arbitrarily named "S." The value of S depends on the ACS emulation style (VT52, VT100, VT220 7-bit, VT220 8-bit, IBM 3101) or modifications of these styles.

Mode – Use PF6 to toggle among the following three terminal modes: KP Numeric, Cursor Key, or None. KP Numeric refers to Keypad Numeric or Keypad Application mode. Cursor Key refers to Set or Reset mode.

The ASCII bytes, for the ACS emulation sequence you are defining, will be sent to the A/A host when the key is pressed while this mode is on and a different set of ASCII bytes could presumably be sent to the A/A host while this mode is off. If you want to generate the ASCII sequence regardless of terminal mode, toggle to None.

Cnt (Count) – Specify how many ASCII bytes in a custom sequence will be sent to the A/A host when the key is pressed.

Mode Off Sequence and Mode On Sequence – Specify the ASCII bytes sent to the A/A host when the mode is off and on.

RETURN TO CUSTOMIZE ACS DEVICE EMULATION MENU

To abort this procedure *without* keeping the defined ACS emulation sequence and return to the Customize ACS Device Emulation menu, press PF3.

To keep the defined ACS emulation sequences and return to the Customize ACS Device Emulation menu, press Enter.

PLACE ON KEYBOARD

Use Option 4, “Customize Coax Keyboard, Add Function(s) to a Key (Add ACS Emulation Sequence)” to place these ACS emulation sequences on a keyboard.

VIEW AN ACS EMULATION

This option lets you review the standard and custom ACS emulation styles (see Figure 4-49).

REVIEW ACS EMULATION SEQUENCES

To review the ACS emulation sequences, type the number next to the desired emulation style on the input line and press Enter. The system reveals the specific sequence table customized for that emulation style (see Figure 4-50).

RETURN TO VIEW AN ACS EMULATION MENU

To return to View an ACS Emulation menu, press Enter. From this menu, select another ACS emulation style to view.

SYSTEM DEFINITION UTILITY

```

                                SYSTEM DEFINITION UTILITY
5.4
View an ACS Emulation
Page 1

Identifier           Emulation Style
1.  STD              VT-52
2.  STD              VT-100
3.  STD              VT-220 (7-bit)
4.  STD              VT-220 (8-bit)
5.  STD              IBM 3101
6.  A                VT-52
7.  B                VT-100
8.  C                VT-220 (7-bit)
9.  Accept

Command ==> 2

ENTER PF1=Help          PF3=Abort
```

Figure 4-49. Sample List of Standard and Custom A/A Emulation Styles

```

                                SYSTEM DEFINITION UTILITY
5.4.1
Modify a Custom ACS Emulation
Page 1

Sequence Name  Mode      Cnt Mode Off Sequence  Cnt Mode On Sequence
S1             None      02 1b 50 00 00 00 00  02 1B 50 00 00 00 00
S2             None      02 1b 51 00 00 00 00  02 1B 51 00 00 00 00
S3             None      02 1b 52 00 00 00 00  02 1B 52 00 00 00 00
S4             None      02 1b 53 00 00 00 00  02 1B 53 00 00 00 00
S5             None      00 00 00 00 00 00 00  00 00 00 00 00 00 00
S6             None      00 00 00 00 00 00 00  00 00 00 00 00 00 00
S7             None      00 00 00 00 00 00 00  00 00 00 00 00 00 00
S8             None      00 00 00 00 00 00 00  00 00 00 00 00 00 00
S9             None      00 00 00 00 00 00 00  00 00 00 00 00 00 00
```

Figure 4-50. Partial List of Custom ACS Emulation Sequences

RETURN TO CUSTOMIZE ACS DEVICE EMULATION MENU

To return to the Customize ACS Device Emulation menu, press Enter since the default number on the input line is the number next to "Accept."

CREATE EMULATION-INDEPENDENT ACS SEQUENCES

This option lets you create user-defined, emulation-independent, ACS sequences. These ASCII sequences are generated regardless of which A/A Emulation mode is selected.

To create a user-defined ACS sequence, use the three columns on this menu. Each custom ACS sequence is limited to six bytes (see Figure 4-51).

SYSTEM DEFINITION UTILITY		
5.5 Create Emulation Independent ACS Sequences		
		Page 1
Sequence Name	Cnt	Sequence
LOGON	02	0c 0e 00 00 00 00
LOGOFF	02	0c 06 00 00 00 00
USER ID	03	0e 0a 0b 00 00 00
PASSWORD	04	07 12 0f 07 00 00

Figure 4-51. Sample List of Emulation-Independent ACS Sequences

NOTE: Use Left and Right Arrow to move horizontally along the entire table; you can also use Tab and Backtab. Use Up and Down Arrow to move vertically within each column of sequences.

COLUMNS DEFINED

Sequence Name – Enter a name (maximum of 15 characters long) for the ASCII sequence you are creating.

Cnt (Count) – Specify how many ASCII bytes in a sequence will be sent to the A/A host when the key is pressed.

Sequence – Enter the bytes that will be generated when you press the key.

PLACE ON KEYBOARD

Use Option 4, "Customize Coax Keyboard, Add Function(s) to a Key (Add Emulation-Independent ACS Sequence)" to place these custom ACS sequences on a keyboard.

RETURN TO CUSTOMIZE ACS DEVICE EMULATION MENU

To return to the Customize ACS Device Emulation menu, press Enter.

ACCEPT

To return to the SDU Main menu, press Enter since the default number on the input line is the number next to "Accept."

OPTION 6 – MANAGE SYSTEM CONFIGURATION LIBRARY

From the SDU Main menu, select this option to write definitions files to a library diskette instead of a system diskette. The library diskette can later be used to create individual system configurations.

SYSTEM DEFINITION UTILITY

This feature was designed for use in conjunction with a PC to assist companies in the creation of custom system diskettes. Refer to the *1374 Central Site Customization Guide* for more information.

SYSTEM DEFINITION UTILITY	
6 Manage System Configuration Library	Page 1
 1. Add the Configuration to the Library 2. Delete a Configuration from the Library 3. Retrieve a Configuration from the Library 4. View the Configuration in the Library 5. Accept	
Command ==>	
ENTER PF1=Help	PF3=Abort

Figure 4-52. Library Menu

SELECTIONS DEFINED

1. **Add the Configuration to the Library** – Name and saves the current SDU definitions on a library diskette.
2. **Delete a Configuration from the Library** – Removes entry from the library diskette.
3. **Retrieve a Configuration from the Library** – Reclaims a library entry.
4. **View the Configuration in the Library** – Lists all the entries saved on the library diskette.
5. **Accept** – Returns you to the SDU Main menu.

ADD THE CONFIGURATION TO THE LIBRARY

After you name and provide a description of the SDU definitions, the system writes the definitions onto a library diskette (see Figure 4-53).

DELETE A CONFIGURATION FROM THE LIBRARY

Use this option to remove an entry from the library diskette.

RETRIEVE A CONFIGURATION FROM THE LIBRARY

Use this option to reclaim a library entry. To read an entry into the control unit, insert the library diskette (instead of the system diskette) into the control unit's disk drive. To load a library diskette, refer to the discussion "Access SDU" at the beginning of this chapter.

SYSTEM DEFINITION UTILITY	
6.1	Page 1
Add the Configuration to the Library	
Name	Description
	Insert Library disk into the drive.
	Press the ENTER key to continue.
Fill in library name and description.	
ENTER PF1=Help	PF3=Abort
PF7=Page Up	PF8=Page Down

Figure 4-53. Add SDU Definitions to the Library

VIEW THE CONFIGURATION IN THE LIBRARY

This option lists all the entries saved on the library diskette and shows available disk space.

ACCEPT

To return to the SDU Main menu, press Enter since the default number on the input line is the number next to "Accept."

OPTION 7 - STORE SYSTEM CONFIGURATION

This option lets you write the SDU definitions to a system diskette *without* exiting SDU.

This feature was designed for use in conjunction with a PC to assist companies in the creation of custom system diskettes. Refer to the *1374 Central Site Customization Guide* for more information.

To store the SDU definitions, the system prompts you to insert the system diskette and press Enter. After the definitions are written to a system diskette, you are returned to the SDU Main menu.

OPTION 8 - VIEW SYSTEM DEFINITION STATUS

From the SDU main menu, select this option to see all of the SDU definitions defined through the previous options.

RETURN TO SDU MAIN MENU

To return to the SDU Main menu, press Enter.

SYSTEM DEFINITION UTILITY

```
8                                     SYSTEM DEFINITION UTILITY                                     Page 1
View System Definition Status

Languages Defined: 2
  Spanish
  French (AZERTY)
Keyboards Defined: 7
  STD French (AZERTY)      87 Typewriter      APL      Default
  STD French (AZERTY)     122 Typewriter     APL      Default
  STD French (AZERTY)     103 Typewriter     None     Default
  K   French (AZERTY)      87 Data Entry      None     Default
  STD Spanish             122 Typewriter     APL      Default
  STD Spanish             103 Typewriter     None     Default
  J   Spanish             122 ACS Emulation  None     Default
Total Translation Table: 10

ACS Emulations Defined: 1
  A VT-52

Press ENTER to continue
ENTER PF1=Help          PF3=Abort
```

Figure 4-54. Sample List of Definitions Achieved Through SDU

OPTION 9 - ACCEPT SYSTEM DEFINITION

This option writes the SDU definitions to the system diskette and exits SDU, all in one step.

To begin processing the SDU definitions, the system prompts you to insert the system diskette and press Enter.

SDU DEFINITIONS AVAILABLE TO SYSTEM WITH LCP

The system languages, custom host interface tables, standard and custom keyboard tables, keyboard mappings, and A/A emulation styles are identified to the control unit when the system operator configures the control unit with LCP.