# PCSA <br> International Features Guide 

Order Number AA-MG67A-TH

October 1988

Revision/Update Information: This manual supersedes the International Features Guide, Version 2.0, order number AA-LD51A-TH.

Operating System and Version: VAX/VMS, Versions 4.7, 5.0, or later DOS, Versions 3.2 and 3.3 or later MS-DOS, Versions 3.2 and 3.3

## Software Version:

DECnet/PCSA Client, Version 2.1 VAXmate Services for MS-DOS, Version 2.1
VAX/VMS Services for MS-DOS, Version 2.1
VAXmate Standalone, Version 2.1

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## First Published, October 1988

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## About This Manual

> The Personal Computing Systems Architecture (PCSA) is an extension of DIGITAL systems and networking architecture that merges VMS and MS-DOS environments. The PCSA network may include VAX, MicroVAX, or VAXmate servers running VAX/VMS Services for MS-DOS or VAXmate Services for MS-DOS. It also includes the DECnet/PCSA Client software that runs on PC workstations and on VAXmate workstations. Other PCSA products include ThinWire Ethernet products and other peripherals, such as the LN03 Plus and LA75 Companion printers.

The DIGITAL PCSA network fully integrates all the elements of personal and corporate computing required for direct information access and sharing. Thus, it has computing and communication capabilities substantially better than those of conventional PC local area networks (LANs).

## Manual Objectives

The purposes of this guide are to:

- Provide general information about the international features of the PCSA product
- Describe how to change the default settings of your DOS and MS-Windows environments


## Intended Readers

This guide is intended for PCSA workstation users who want to use the international features of PCSA.

Readers of this guide should:

- Have a general understanding of:
- MS-Windows
- MS-DOS (if you use a VAXmate workstation)
- DOS (if you use a PC workstation)
- Know how to use the mouse to select and perform commands
- Have access to the associated documentation:
- Your native DOS documentation if you use a PC workstation. This documentation is not supplied with the PCSA documentation set.
- DOS Enhancements (if you use a PC workstation).
- MS-DOS Reference Guide (if you use a VAXmate workstation).
- Microsoft Windows User's Guide.
- MS-Windows Enhancements.
- Overview.
- Using Networks from Your Workstation.


## Manual Organization

Information about the international features of the PCSA product is organized into six chapters, as follows:

| Chapter 1 | The PCSA product supports the use of several character <br> sets. This section describes each character set and <br> explains how the implementation of the character sets <br> differs, depending on whether you are using the DOS or <br> MS-Windows interface. |
| :--- | :--- |
| Chapter 2 | An alternate character is one which is either the third or <br> fourth character on a keycap, or which is not legended on <br> the keyboard. This section describes how to create third, <br> fourth, and nonlegended characters and explains the <br> differences between creating alternate characters within |
| DOS and MS-Windows. |  |

## Conventions Used

| Convention | Meaning |
| :--- | :--- |
| Ctrl/Alt/Del | Hold down the Ctrl and Alt keys while you press the <br> Del key on the numeric keypad. The Del key is also <br> labeled Sel. You use the Ctrl/Alt/Del keys to reboot the <br> workstation. |
| Alt/Shift/Tab | Hold down both the Alt key and the Shift key while you <br> press the Tab key. |
| Backspace/Delete | Press the <x key located on the upper right side of the <br> main keypad. |
| Key | The word Shift, followed by a slash, then by a letter or <br> number means that you must hold down the Shift key <br> while you press the letter or number. |
| Left Shift Key | Press the Shift key located on the lower left side of the <br> main keypad. |
| enter | Type all text, spaces, and punctuation marks exactly as <br> they are printed. Then press the Return key. <br> All numbers shown in this manual are in decimal form, <br> unless otherwise noted. |
| numbers | A term used to refer to a VAXmate or PC computer used <br> in a network or a standalone VAXmate computer. |
| workstation |  |

## International Character Sets in PCSA

## Introduction

PCSA supports the use of the following character sets:

1. DIGITAL Multinational Character Set (MCS)

This is the 8-bit character set developed by Digital. It includes the majority of the characters required by the Western European languages.
2. ISO Latin-1

This is the 8-bit character set developed by the International Standards Organization for Western European languages. It is similar to the Digital MCS.
3. Industry-Standard Extended

This is an 8-bit industry-standard character set, of which PCSA supports two variants: Industry-Standard Extended and IndustryStandard Norway and Denmark Extended. The first variant includes those characters required by all Western European languages except Norway and Denmark, and the second variant includes those characters required by Norway and Denmark. Within PCSA, the first variant is known as STD and the second variant as ST2.
4. National Replacement Character Set (NRC)

This is a set of 7-bit character sets within which a number of the less commonly used symbols (such as [, @, ) are replaced by national characters. Different countries use different variants of this character set. For example, Germany replaces the \ with Ö, while France replaces the same character with ç. Each country therefore has its own NRC.

Within PCSA, the implementation of these character sets differs, depending on whether or not they are being used within DOS or MS-Windows. The following sections describe the different implementations. Table 1-1 summarizes how the above character sets are supported within PCSA.

Table 1-1 Support of Character Sets Within PCSA

| Use | VAXmate | PC |
| :--- | :--- | :--- |
| MS-Windows | ISO(default) | ISO(default) |
|  | (STD/ST2) | (STD/ST2) |
| VT200 Series | ISO (default) | ISO (default) |
| with MS-Windows | MCS | MCS |
|  | NRC | NRC |
| DOS | STD/ST2 (default) | STD/ST2 |
|  | MCS |  |
|  | ISO |  |
|  | NRC |  |

NOTE
One aspect of character set support that is common to both DOS and MS-Windows is that multinational characters (for example, é, ü, ç) should not be used in file names. It is very important that you remember this when you are creating files.

## Character Sets in MS-Windows

When working within MS-Windows, the character set will vary, depending on how your application interacts with MS-Windows. You cannot choose a character set; the character set that is loaded depends on the application you use. For example:

- Applications that were developed specifically for use with MS-Windows (for example, Notepad, Paint, MS-DOS Executive) default to the ISO character set.
- Applications that were developed for DOS, but which run in a window (for example, COMMAND.COM), use the Industry-Standard Extended character set.
- Applications that do not run in a window (for example, the Microsoft BASIC Compiler) use the character set that was last loaded by DOS. Other applications may use their own character sets.


## Character Sets in DOS

When working within DOS, the default character set (held in RAM) is Industry-Standard Extended. However, VAXmate users can choose their preferred character set (MCS, ISO, NRC) by using the DOS DECKEYB and FONT commands. If you do this, you must ensure that the character set and keyboard driver you choose are compatible. For further details on customizing your DOS environment, see the appropriate section of this guide.

## 2

## Creating Alternate Characters

An alternate character is one which is either:

- The third or fourth character on a keycap (situated on the right-hand side of a keycap) or
- Not legended on the keyboard


## How to Display the Third or Fourth Character on a Keycap

All LK250 and industry-standard international keyboards contain multilegend keys; that is, keys that contain three or four characters. See the appropriate section of this guide for diagrams of the supported LK250 international keyboards. For diagrams of other keyboards, see your PC documentation.

This section describes how to display multilegend keys in the following situations:

- In DOS, when using an LK250 keyboard. Users of other keyboards should consult their PC documentation.
- In MS-Windows, when using an LK250, an IBM XT, IBM Personal Computer AT, Enhanced, or other industry-standard keyboard.
The following figure shows an example of a three-legend key.


MR-S-4724-88
Figure 2-1 Three-legend key
LK250 international keyboards are divided into three groups:

1. Group 1: U.S./U.K.

On this keyboard, alternate characters are displayed by the same method, whether within DOS or MS-Windows.

The third character is located at the upper-right corner of the key.
If you are using U.S. software, to display the third character, press Ctri/Alt/3. Note that you cannot display the $£$ sign using this method if the Industry-Standard Extended character set (STD) is loaded.
If you are using U.K. software, to display the third character, press Shift/3.
2. Group 2: French, German, Spanish, Italian, Swiss-French, Swiss-German.

On these keyboards, alternate characters are displayed by the same method, whether within DOS or MS-Windows.

The third character is located at the lower-right corner of the key. To display this character, press Ctrl/Alt together with the key.
3. Group 3: Danish, Norwegian, Swedish, Finnish, Canadian-English, Canadian-French.

The third character is located at the lower-right corner of the key, and the fourth character is located at the upper-right corner of the key.

Within DOS: To display the third character, press Alt together with the key. To display the fourth character, press Alt/Shift together with the key.

Within MS-Windows: To display the third character, press Ctrl/Alt together with the key. To display the fourth character, press Ctrl/Alt/Left Shift together with the key.

## How to Display Nonlegended Characters

You can display nonlegended characters using the following methods:

- Two-key compose sequence
- Three-key compose sequence
- Alt/numeric pad sequence

All three of the above methods enable you to display characters on the screen that are not legended on the keyboard. For example, a French user will be able to display the character ä, or a U.S. user will be able to display the character ç.

Availability of the three methods differs, depending on the type of keyboard you are using, and whether you are using DOS or MS-Windows. The following sections explain these differences.

## Two-Key Compose Sequence

To create a character using the two-key compose sequence, press the key containing the nonspacing diacritical mark (see NOTE), followed by the relevant key. You can use this method on all LK250 keyboards containing at least one diacritical mark; that is, all keyboards except the U.S./U.K. keyboard. Table 2-1 lists the valid two-key compose sequences. You can use two-key compose sequences in the following situations:

- In DOS. Table 2-1 indicates which characters can be used only when the ISO Latin- 1 character set is loaded, and which characters can be used when the Digital MCS character set is loaded. See the appropriate section of this guide for further information on character sets.
- In MS-Windows, when you are using an application that was designed for use with MS-Windows, such as VT220 Emulator or Notepad. The VT220 Emulator uses ISO Latin-1 or Digital MCS. Notepad uses ISO Latin-1.


## NOTE <br> Nonspacing diacritical marks are those diacritical marks associated with the nationality of the keyboard. For example, the nonspacing diacritical mark on a German keyboard is the umlaut. Nonspacing diacritical marks are also known as dead-diacriticals.

The following are nonspacing diacritical marks:

- Dieresis (umlaut mark)
- Acute accent
- Grave accent
- Circumflex accent
- Tilde mark
- Ring mark

See Table 2-1 for character representations of the above diacritical marks.
To use the two-key compose sequence, take the following actions:

1. Locate in the first column of Table 2-1 the character you want to create, and verify from the second column that this character can be created using a two-key compose sequence.
2. Enter the first character of the required two-key compose sequence. This will not be displayed on the screen.
3. Enter the second character. The composed character will be displayed.

You must enter the two characters in the order shown in the table.
Otherwise the composed character will not be created.
To terminate a compose sequence before the composed character has been created, or to delete a composed character, press the $<\mathbb{\chi}$ (Backspace) key.
If you enter an invalid compose sequence, the keyboard bell will ring once, and the compose sequence will be terminated. You will then need to restart the compose sequence.

## Three-Key Compose Sequence

To create a character using the three-key compose sequence, press the Compose key, followed by the two relevant keys. You can use this method in the following situations:

- In DOS, when using a keyboard that contains a Compose key. Note that this method may not be used when the Industry-Standard Extended character set is loaded.
- In MS-Windows, when using a keyboard that contains a Compose key, or a keyboard mapping chart that contains a Compose key mapping. Note that this method will only work when you are running an application that was designed for MS-Windows, such as VT220 Emulator, Notepad.

To use the three-key compose sequence, take the following actions:

1. Locate in the first column of Table 2-1 the character you want to create.
2. Press the Compose key.
3. Enter the two characters indicated in column three of the table. Neither of these characters will be displayed on the screen. When you have entered both characters, the composed character will be displayed.
The order in which you enter the two characters does not matter, unless otherwise indicated in Table 2-1.

To terminate a compose sequence before the composed character has been created, or to delete a composed character, press the $<$ (Backspace) key. If you accidentally press the Compose key during a compose sequence, a new three-key sequence will be started. The previous sequence will be terminated.

If you enter an invalid compose sequence, the keyboard bell will ring once, and the compose sequence will be terminated. You will then need to restart the compose sequence.
When you use a diacritical mark in a three-key compose sequence, it is treated as its equivalent character. Table 2-2 lists the diacritical marks and their equivalent characters.

## Table 2-1 Valid Compose Sequences

| Character | Character Set | Two-Key Sequence | Three-Key Sequence |
| :---: | :---: | :---: | :---: |
| \# (number sign) |  |  | ++ |
| @ (commercial at) |  |  | aa |
| [ (opening bracket) |  |  | (( |
| $\backslash$ (backslash) |  |  | /< or // |
| ] (closing bracket) |  |  | )) |
| \{ (opening brace) |  |  | -( |
| 1 (vertical line) |  |  | /^ |
| : (broken vertical bar) | ISO |  | 11 or! ${ }^{\text {a }}$ |
| \} (closing brace) |  |  | )- |
| «(angle quotes left) |  |  | << |
| " (angle quotes right) |  |  | >> |
| NBSP (No Break Space) | ISO |  | (sp)(sp) (Two spaces) |
| i (inverted!) |  |  | !! |
| ¿ (inverted ?) |  |  | ?? |
| ${ }^{\circ}$ (degree sign) |  |  | $0^{\wedge}$ or * (sp) |
| © (copyright sign) |  |  | co |
| $®$ (reg. trademark) | ISO |  | ro |
| ¢ (cent sign) |  |  | c/or cl |
| £ (pound sign) |  |  | l - or l= |
| a (general currency) |  |  | xo |
| ¥ (yen sign) |  |  | $y$ - or $\mathrm{y}=$ |
| - (soft hyphen) | ISO |  | -- |
| - (macron sign) | ISO |  | $\chi^{\wedge}$ or $\sim^{\wedge}$ |
| $\mu$ (micro sign) |  |  | /u |
| $\neg$ (logical NOT sign) |  |  | -, (order sensitive) |
| $\pm$ (plus/minus sign) |  |  | +- |
| $\times$ (multiply sign) |  |  | xx |

## Table 2-1 (Cont.) Valid Compose Sequences

| Character | Character Set | Two-Key Sequence | Three-Key Sequence |
| :---: | :---: | :---: | :---: |
| $\div$ (divide sign) |  |  | -: (order sensitive) |
| ${ }^{1}$ (superscript 1) |  |  | $1{ }^{\wedge}$ |
| 2 (superscript 2) |  |  | $2^{\wedge}$ |
| ${ }^{3}$ (superscript 3) |  |  | $3^{\wedge}$ |
| II (paragraph sign) |  |  | !p |
| § (section sign) |  |  | so or s! |
| ${ }^{\text {a }}$ (feminine ordinal) |  |  | _a or _A |
| $\bigcirc$ (masculine ordinal) |  |  | _o or _O |
| - (middle dot) |  |  | $\wedge$. |
| 1/4 (fraction one-quarter) |  |  | 14 (order sensitive) |
| 1/2 (fraction one-half) |  |  | 12 (order sensitive) |
| 3/4 (fraction threequarters) | ISO |  | 34 (order sensitive) |
| $\beta$ (German sharp s) |  |  | SS |
| (cap Icelandic Eth) | ISO |  | -D |
| (sm Icelandic Eth) | ISO |  | -d |
| $\varnothing$ (O slash) |  |  | O/ |
| $\varnothing$ (o slash) |  |  | o/ |
| (cap Icelandic Thorn) | ISO |  | TH (order sensitive) |
| (sm Icelandic Thorn) | ISO |  | th (order sensitive) |
| $\sim$ (tilde character) |  | $\sim(\mathrm{sp})$ | $\sim(\mathrm{sp})$ |
| - (grave accent) |  | '(sp) | '(sp) |
| (apostrophe) |  | , (sp) | , (sp) |
| ' (acute accent) | ISO |  | " |
| $\wedge$ (circumflex character) |  | $\wedge(\mathrm{sp})$ | $\wedge$ (sp) |
| " (double quote) |  | " (sp) | dieresis (sp) |
| . (dieresis) | ISO |  | " " |

Table 2-1 (Cont.) Valid Compose Sequences

| Character | Character Set | Two-Key Sequence | Three-Key Sequence |
| :---: | :---: | :---: | :---: |
| , (cedilla) | ISO |  | " |
| À (A grave) |  | 'A | $\mathrm{A}^{\text {c }}$ |
| à (a grave) |  | 'a | $\mathrm{a}^{\text {6 }}$ |
| Á (A acute) |  | 'A | $A^{\prime}$ |
| á (a acute) |  | 'a | $\mathrm{a}^{\prime}$ |
| Â (A circumflex) |  | $\wedge \mathrm{A}$ | $\mathrm{A}^{\wedge}$ |
| â (a circumflex) |  | $\wedge \mathrm{a}$ | $\mathrm{a}^{\wedge}$ |
| A (A tilde) |  | $\sim \mathrm{A}$ | A~ |
| ã (a tilde) |  | $\sim \mathrm{a}$ | a~ |
| Ä (A umlaut) |  | "A | A" |
| ä (a umlaut) |  | "a | a" |
| Å (A ring) |  | * A or ${ }^{\circ} \mathrm{A}$ | $A^{*}$ or $A^{\circ}$ (degree sign) |
| å (a ring) |  | *a or ${ }^{\circ} \mathrm{a}$ | $\mathrm{a}^{*}$ or $\mathrm{a}^{\circ}$ (degree sign) |
| $\mathbb{\oiiint}$ (AE ligature) |  |  | AE (order sensitive) |
| æ (ae ligature) |  |  | ae (order sensitive) |
| Ç (C cedilla) |  | ,C | C , |
| ç (c cedilla) |  | , c | c, |
| È (E grave) |  | 'E | E |
| è (e grave) |  | 'e | $\mathrm{e}^{\text {6 }}$ |
| É (E acute) |  | 'E | E' |
| é (e acute) |  | 'e | e' |
| $\hat{\mathrm{E}}$ (E circumflex) |  | $\wedge \mathrm{E}$ | $\mathrm{E}^{\wedge}$ |
| ê (e circumflex) |  | $\wedge$ e | $\mathrm{e}^{\wedge}$ |
| Ë (E umlaut) |  | "E | E" |
| ë (e umlaut) |  | "e | e" |
| İ (I grave) |  | 'I | $\mathrm{I}^{\text { }}$ |
| ì (i grave) |  | 'i | $\mathrm{i}^{\text {¢ }}$ |

Table 2-1 (Cont.) Valid Compose Sequences
$\left.\begin{array}{lll}\hline \text { Character } & \begin{array}{lll}\text { Character } \\ \text { Set }\end{array} & \begin{array}{l}\text { Two-Key } \\ \text { Sequence }\end{array}\end{array} \begin{array}{l}\text { Three-Key } \\ \text { Sequence }\end{array}\right]$

Table 2-1 (Cont.) Valid Compose Sequences

| Character | Character <br> Set | Two-Key <br> Sequence | Three-Key <br> Sequence |
| :--- | :--- | :--- | :--- |
| ü (u umlaut) |  | "u | $\mathrm{u} "$ |
| $\dot{\text { Y (Y acute) }}$ | ISO | 'Y | Y |
| ý (y acute) | ISO | 'y | $\mathrm{y}^{\prime}$ |
| Y̌ (Y umlaut) | MCS | "Y | $\mathrm{Y}^{\prime \prime}$ |
| $\ddot{y}$ (y umlaut) |  | "y | $\mathrm{y} "$ |

Table 2-2 Diacritical Mark in a Three-Key Sequence

| Diacritical Mark | Equivalent Character |
| :--- | :--- |
| Dieresis (umlaut mark) | Double quote " |
| Acute accent | Apostrophe ' |
| Grave accent | Single quote ' |
| Circumflex accent | Circumflex character ${ }^{\wedge}$ |
| Tilde mark | Tilde character $\sim$ |
| Ring mark | Asterisk * or degree sign |

## Alt/Numeric Pad Sequence

Users of LK250 and other supported industry-standard keyboards may use this method to display characters that are not legended on the keyboard. This method is especially useful for users of IBM XT and IBM Personal Computer AT keyboards, who cannot use the three-key compose sequence method, because their keyboard does not include a Compose key.

You can use Alt/Numeric pad sequences in both DOS and MS-Windows, with any character set that is loaded.

To use the Alt/Numeric pad sequence, take the following actions:

1. Locate on the relevant character set chart the ASCII value of the character you wish to create.
2. Press and hold down the ALT key.
3. Enter the three digits corresponding to the ASCII value of the character you wish to create.
4. Release the ALT key.

See Appendix A which contains illustrated character set charts and their corresponding ASCII values.
$\square$



## 3

## Customizing the DOS Environment

The DOS environment you purchased defaults to the following information:

- U.S. keyboard
- Industry-Standard Extended character set
- U.S. Country Format Information (date, time, number, and currency formats)
- Industry-Standard Extended graphics font
- Industry-Standard Extended collating sequence

If you do not want to use the default information, you may customize your DOS environment so that it supports your preferences.
You can set up your country information either for the current session only (that is, until you switch off or reboot your workstation), or as the user-defined default.

## Country Information That Can Be Customized Within DOS

This section lists the country information you may customize, and indicates the various methods of doing this.

- Keyboard and Character Set
- Using the DECKEYB and FONT commands. Any information you change using this method will be valid for the current session only. Note that both the DECKEYB and FONT commands are available to VAXmate users. Only the DECKEYB command is available to PC users.
- Using the Configuration Aide. Note that this utility is not available to standalone VAXmate users.
- Using the MS-DOS SELECT command. Note that this command is not available to PC users.
- Modifying the DECKEYB and FONT commands in your AUTOEXEC.BAT file. VAXmate users can modify both these commands; PC users can modify only the DECKEYB command.
To load your country collating sequence, use the SORT command. The system will automatically load the collating sequence that corresponds to the currently loaded character set.
- Country Format Information (Date, Time, Number, Currency)
- Using the LCOUNTRY command. Note that any information you change using this method will be valid for the current session only. This command is only available to VAXmate users.
- Using the MS-DOS SELECT command. Note that this command is not available to PC users.
- Modifying the LCOUNTRY command in your CONFIG.SYS file. Note that this command is not available to PC users.
- Graphics Information
- Using the GRAFTABL command. Note that any information you change using this method will be valid for the current session only. This command is not available to PC users.
- Modifying the GRAFTABL command in your AUTOEXEC.BAT file.


## How to Use the DECKEYB, FONT and LCOUNTRY Commands

To customize your keyboard, character set and country information for the current session only, use the DECKEYB, FONT, and LCOUNTRY commands.

Any changes you make using these commands will remain active until you switch off or reboot your workstation. It is recommended that you run these commands from the \COUNTRY directory since that is where the country files (.KEY and .FNT) are usually held. Otherwise you will need to either use the APPEND command to append the \COUNTRY directory to whichever directory you are currently using, or set the default directory to the COUNTRY area.

For further information on the DECKEYB, FONT, LCOUNTRY, PATH and APPEND commands, see the MS-DOS Reference Manual.

You may use the DECKEYB, FONT and LCOUNTRY commands in any order, but you must ensure that all the files used in the commands are compatible. For example, if you are setting up a French DOS environment, and want to use the Digital Multinational Character Set, you should enter the commands at the appropriate drive, as follows:

```
> DECKEYB MCSER.KEY
> FONT MCS.FNT
> LCOUNTRY 033 (033 is the country code for France)
NOTE
Each country has its own National Replacement Character Set (NRC). The MCS, ISO and STD (or ST2) character sets support all Western European countries.
```

For a full list of supported country codes, .KEY and .FNT files, see the MS-DOS Reference Manual.

## How to Use the GRAFTABL Command

To customize your graphics font for the current session only, use the GRAFTABL command.

## NOTE <br> This command is not available to PC users.

It is recommended that you run this command from the \COUNTRY directory, since that is where the graphics files (.GRF) are usually held. Otherwise you will need to either use the APPEND command to append the $\backslash$ COUNTRY directory to whichever directory you are currently using, or set the default directory to the COUNTRY area. command in your AUTOEXEC.BAT and AUTOUSER.BAT files.

You must load the graphics font file that corresponds to your current text font file. For example, if your current text font file is ST2.FNT (ST2 character set), you must enter the GRAFTABL command as follows:

```
> GRAFTABL ST2.GRF
```

For a full list of supported graphics font files, see the MS-DOS Reference Manual.

## How to Use the SELECT Command

The SELECT command enables you to set up your keyboard, character set and country format information as the user-defined default.

## NOTE <br> The SELECT command is not available to PC users.

The SELECT command automatically inserts the DECKEYB and FONT commands into your AUTOEXEC.BAT file, and the LCOUNTRY command into your CONFIG.SYS file. Both these files are held in your root directory, and are loaded each time your system is booted. For further information on the AUTOEXEC.BAT and CONFIG.SYS files, see the MS-DOS Reference Manual and Using Networks from Your Workstation.

To use the SELECT command, perform the following steps:

1. Decide which country information you wish to set up, then locate the following information in the MS-DOS Reference Manual:

- Country code
- Character set code and .FNT filename
- Country keyboard abbreviation and .KEY filename

For a full list of supported country codes, character set codes and country keyboard abbreviations, see the MS-DOS Reference Manual.

You must ensure that the information you choose matches. For example, if you want to set up Norwegian country information and use the ST2 character set, you must choose the following information:

- 047
- ST2 and ST2.FNT
- NO and ST2NO.KEY

2. Move to your root directory (the directory from which you boot). Copy the .FNT and .KEY files into your root directory from your system directory, for example, at the prompt, enter:
```
> COPY L:\COUNTRY\filename *
```

3. From the root directory, enter the SELECT command. A Norwegian user wanting to use the ST2 character set would enter the SELECT command as follows:
> SELECT 047 ST2 NO
4. Reboot your workstation to make the new information in the CONFIG.SYS and AUTOEXEC.BAT files effective.

See the MS-DOS Reference Manual for further information on the SELECT command.

## How to Use the Configuration Aide

Client users can use the Country option of the Configuration Aide (AIDE.EXE) to set up their preferred keyboard and character set as the user-defined default. The Configuration Aide will store your selected keyboard and character set in your AUTOEXEC.BAT file, in the form of DECKEYB and FONT commands for VAXmate users, and DECKEYB commands for PC users.

For further information on the Configuration Aide, see Using Networks from Your Workstation.

## How to Modify Your AUTOEXEC.BAT and CONFIG.SYS Files

To set up your preferred country information as the user-defined default, the relevant commands need to be listed in your AUTOEXEC.BAT and CONFIG.SYS files.

To set up your preferred keyboard, character set and graphics font, edit the DECKEYB, FONT and GRAFTABL commands in your AUTOEXEC.BAT file. To set up your preferred country format information (date, time, number, currency), edit the LCOUNTRY command in your CONFIG.SYS file.
For detailed information on the AUTOEXEC.BAT and CONFIG.SYS files, see the MS-DOS Reference Manual.

e

## 4

## Customizing the MS-Windows Environment

The MS-Windows environment you purchased is already set up to default to your country requirements, that is, your usual country keyboard, date format, time format, number format and currency format. You may customize this environment to include your preferences.

## Country Information That Can Be Customized Within MS-Windows

Within MS-Windows, you can:

- Select your preferred keyboard, using the MS-Windows SETUP utility.
- Select your country preferences defaults.
- Modify your country format information (date, time, number, currency, etc.), using the Control Panel.


## How to Use the SETUP Utility

To select your preferred keyboard, use the MS-Windows SETUP utility. The SETUP utility creates a new version of MS-Windows (consisting of seven files), which then becomes the user-defined default. Refer to MS-Windows Enhancements for detailed information on how to use the SETUP utility.

NOTE
You may only customize your MS-Windows keyboard if you have write access to your system directory. Normally, only system administrators and standalone users have such access.

If you are a system administrator, after you have used the SETUP utility you should run the Configuration Aide, to include the location of the new version of MS-Windows in your AUTOEXEC.BAT file. For further information on the Configuration Aide, see Using Networks from Your Workstation.

If you are a standalone user, there are two ways of ensuring that the new version of MS-Windows is used when MS-Windows is started:

- Store the new version of MS-Windows in the subdirectory \WIN $\backslash$ STD, which overwrites the existing version of MS-Windows.
- Alter the PATH command line in the AUTOEXEC.BAT to set up a path for the new version of MS-Windows. See the MS-DOS Reference Manual for detailed information on the PATH command.

For diagrams of all supported LK250 international keyboards, see the appropriate section of this guide.

## How to Use the Control Panel

Each time MS-Windows is started up, the system reads the WIN.INI file, which contains all the information specific to your MS-Windows environment. To customize the country format information within your MS-Windows environment, you need to amend your WIN.INI file, using the Control Panel. Any changes you make will be incorporated in your WIN.INI file, and will be effective immediately.
For detailed information on the WIN.INI file, see the Microsoft Windows User's Guide.

To change all the default country information to that of another country, highlight your chosen country in the Control Panel list box.
If you want only to amend a particular format (for example, number format), move the cursor to the appropriate field in the Control Panel window, and overwrite the existing information.
For further information on the Control Panel, see the Microsoft Windows User's Guide.

Character Set Charts

|  <br> B4 B3 B2 B1 ROW |  | $\begin{array}{llll} \hline{ }^{0} & & \\ & 0 & & \\ & 0 & 0 & 0 \\ \hline \text { COLUMN } \\ \mathbf{O} \end{array}$ |  | ${ }^{0}{ }^{0} 0$  <br>  1 <br>  1 |  | $\begin{array}{lllll}0 & 0 & & \\ & 0 & 1 & \\ & & 1 & 0\end{array}$ |  | $\begin{array}{llll}0 & 0 & & \\ & 0 & 1 & \\ & & 1\end{array}$ |  | $\begin{array}{llll}0 & & & \\ & 1 & 0 & \\ & & & 0\end{array}$ |  | ${ }^{0} 10$ |  |  |  | ${ }^{0} 1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | 4 |  |  |  |  |  | 7 |  |
| 0000 | 0 |  |  |  | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \end{aligned}$ | $8{ }^{3}$ 䜌 | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | ＠ | $\begin{aligned} & 100 \\ & 64 \\ & 40 \end{aligned}$ | P | $\begin{array}{\|c\|} \hline 120 \\ 80 \\ 50 \\ \hline \end{array}$ | $\checkmark$ | $\begin{array}{r} 140 \\ 96 \\ 60 \end{array}$ | p | 160 <br> 112 <br> 70 <br> 10 |
| 00001 | 1 | S\％\％ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | Kivis. | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | ！ | $\begin{aligned} & \hline 41 \\ & 33 \\ & 21 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \\ & \hline \end{aligned}$ | A | $\begin{array}{r} 101 \\ 65 \\ 41 \\ \hline \end{array}$ | Q | $\begin{array}{\|r\|} \hline 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{array}{r} 141 \\ 97 \\ 61 \\ \hline \end{array}$ | 9 | 161 <br> 113 <br> 71 <br> 1 |
| 00010 | 2 | \％is\％\％ | $\begin{aligned} & 2 \\ & 2 \\ & \hline \end{aligned}$ | V， | $\begin{aligned} & 22 \\ & 18 \\ & 12 \\ & \hline \end{aligned}$ | ＇ 1 | $\begin{aligned} & 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{array}{r} 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{\|r\|} \hline 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{aligned} & 142 \\ & 98 \\ & 62 \\ & \hline \end{aligned}$ | r | $\begin{array}{\|c} \hline 162 \\ 114 \\ 72 \\ \hline \end{array}$ |
| 00011 | 3 | W\％\％ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | Wivisink | $\begin{aligned} & 23 \\ & 19 \\ & 13 \\ & \hline \end{aligned}$ | \＃ | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{\|r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \\ \hline \end{array}$ | S | $\begin{aligned} & 163 \\ & 115 \\ & 73 \end{aligned}$ |
| 0100 | 4 | \％i\％\％\％ | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | \％\％\％ | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \＄ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \end{aligned}$ | D | $\begin{array}{\|c\|} \hline 104 \\ 68 \\ 44 \end{array}$ | T | $\begin{array}{\|c} \hline 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{aligned} & 144 \\ & 100 \\ & 64 \end{aligned}$ | t | $\begin{array}{\|c} 164 \\ 166 \\ 74 \end{array}$ |
| 01001 | 5 | स 4 － | $\begin{aligned} & \hline 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ | Winkt | $\begin{aligned} & 25 \\ & 21 \\ & 15 \end{aligned}$ | \％ | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{r} 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|c} 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & 65 \end{aligned}$ |  | $\begin{array}{r}165 \\ 117 \\ 75 \\ \hline 15\end{array}$ |
| 01110 | 6 | 令納納 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ | 4ivitit | $\begin{array}{\|l} \hline 26 \\ 22 \\ 16 \\ \hline \end{array}$ | \＆ | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \\ & \hline \end{aligned}$ | F | $\begin{array}{\|c} \hline 106 \\ 70 \\ 46 \\ \hline \end{array}$ | V | $\begin{array}{\|c} 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{aligned} & 146 \\ & 102 \\ & 66 \end{aligned}$ | v | $\begin{array}{r}166 \\ 118 \\ 76 \\ \hline\end{array}$ |
| 0111 | 1 |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ | Nis， | $\begin{aligned} & 27 \\ & 23 \\ & 17 \end{aligned}$ | ， | $\begin{aligned} & 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{r} 107 \\ 71 \\ 47 \\ \hline 1 \end{array}$ | W | $\begin{array}{\|r} 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{array}{r} 147 \\ 103 \\ 67 \end{array}$ | w | $\begin{array}{r}167 \\ 119 \\ 77 \\ \hline 18\end{array}$ |
| 1000 | 8 |  | $\begin{gathered} 10 \\ 8 \\ 8 \end{gathered}$ | \％\％${ }^{\text {a }}$ | $\begin{aligned} & \hline 30 \\ & 24 \\ & 18 \\ & \hline \end{aligned}$ | （ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \\ & \hline \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & \hline \end{aligned}$ | H | $\begin{aligned} & 110 \\ & 72 \\ & 48 \end{aligned}$ | X | $\begin{array}{\|c} 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 17\end{array}$ |
| 1001 | 9 | 的寺 | $\begin{aligned} & 11 \\ & 9 \\ & 9 \end{aligned}$ | 紷 | $\begin{aligned} & 31 \\ & 25 \\ & 19 \end{aligned}$ | ） | $\begin{aligned} & 51 \\ & 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \end{aligned}$ | 1 | $\begin{aligned} & 111 \\ & 73 \\ & 49 \end{aligned}$ | Y | $\begin{gathered} 131 \\ 89 \\ 59 \end{gathered}$ | i | $\begin{array}{r} 151 \\ 105 \\ 69 \end{array}$ | y | 171 121 79 172 |
| $1 \begin{array}{llll}1 & 0 & 0\end{array}$ | 10 | 納納 | $\begin{gathered} 12 \\ 10 \\ A \end{gathered}$ |  | $\begin{aligned} & \hline 32 \\ & 26 \\ & 1 A \\ & \hline \end{aligned}$ | ＊ | $\begin{aligned} & 52 \\ & 42 \\ & 2.1 \end{aligned}$ | ： | $\begin{aligned} & 72 \\ & 58 \\ & 3 \mathrm{~A} \end{aligned}$ | J | $\begin{aligned} & 112 \\ & 74 \\ & 4 \mathrm{~A} \end{aligned}$ | Z | $\begin{gathered} 132 \\ 90 \\ 5 A \end{gathered}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 \mathrm{~A} \end{aligned}$ | $z$ | 172 122 78 713 |
| $1 \begin{array}{llll}1 & 1 & 1\end{array}$ | 11 | 险納 | $\begin{gathered} 13 \\ 11 \\ B \end{gathered}$ | 4\％＊＊ | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | ＋ | $\begin{aligned} & 53 \\ & 43 \\ & 28 \end{aligned}$ | ； | $\begin{aligned} & 73 \\ & 59 \\ & 3 B \end{aligned}$ | K | $\begin{gathered} 113 \\ 75 \\ 48 \end{gathered}$ | ［ | $\begin{aligned} & 133 \\ & 91 \\ & 58 \end{aligned}$ | k | $\begin{aligned} & 153 \\ & 150 \\ & 68 \end{aligned}$ | \｛ | $\begin{array}{r}173 \\ 123 \\ 78 \\ \hline 18\end{array}$ |
| 1100 | 12 | 洨i＊＊＊ | $\begin{aligned} & 14 \\ & 12 \\ & c \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 16 \end{aligned}$ | ， | $\begin{aligned} & 54 \\ & 44 \\ & 20 \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \\ & \hline \end{aligned}$ | L | $\begin{array}{\|c} \hline 14 \\ 76 \\ 4 C \\ \hline \end{array}$ | $\$ & $\begin{array}{\|r\|} \hline-134 \\ 92 \\ 5 C \\ \hline \end{array}$ & 1 & $\begin{aligned} & 154 \\ & 108 \\ & 60 \\ & \hline \end{aligned}$ & 1 & $\begin{array}{r}174 \\ 124 \\ 70 \\ \hline 18\end{array}$ |  |  |  |  |  |
| 11001 | 13 | \％ini＊ | $\begin{array}{r} 15 \\ 13 \\ 0 \\ \hline \end{array}$ | \％ 6 \％ | $\begin{array}{r} 35 \\ 29 \\ 10 \\ \hline \end{array}$ | － | $\begin{aligned} & 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | ＝ | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{array}{\|c\|} \hline 15 \\ 77 \\ 40 \\ \hline \end{array}$ | $]$ | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | \} | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline\end{array}$ |
| 11110 | 14 |  | $\begin{gathered} 16 \\ 14 \\ \mathrm{E} \end{gathered}$ | \％\％ | 36 <br> 30 <br> 30 <br> $1 E$ | － | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \end{aligned}$ | ＞ | $\begin{aligned} & 76 \\ & 62 \\ & 3 \mathrm{E} \end{aligned}$ | N | $\begin{aligned} & 16 \\ & 78 \\ & 4 \mathrm{E} \end{aligned}$ | $\wedge$ | $\begin{aligned} & 136 \\ & 94 \\ & 5 E \end{aligned}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 6 \mathrm{E} \end{aligned}$ | $\sim$ | $\begin{array}{r}176 \\ 126 \\ 76 \\ \hline 78 \\ \hline\end{array}$ |
| $1{ }^{1} 111$ | 15 | «\％＊＊ |  |  | 37 <br> 31 <br> 1F | ／ | 57 47 2F | ？ | 77 63 $3 F$ | 0 | $\begin{gathered} 117 \\ 79 \\ 4 F \end{gathered}$ | － | $\begin{array}{r}137 \\ 95 \\ 95 \\ \hline\end{array}$ | 0 | $\begin{aligned} & 157 \\ & 111 \\ & 67 \\ & \hline \end{aligned}$ | DEL | $\begin{array}{r}177 \\ 127 \\ 75 \\ \hline\end{array}$ |

KEY


Figure A－1 ISO Latin－1 Character Set 0－7

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} \& - \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline \& \& \multicolumn{2}{|l|}{8} \& \multicolumn{2}{|l|}{9} \& \multicolumn{2}{|l|}{10} \& \multicolumn{2}{|l|}{11} \& \multicolumn{2}{|c|}{12} \& \multicolumn{2}{|c|}{13} \& \multicolumn{2}{|c|}{14} \& \multicolumn{2}{|c|}{15} \\
\hline 0000 \& 0 \& \& \[
\begin{aligned}
\& 200 \\
\& \begin{array}{l}
208 \\
88
\end{array}{ }_{8}^{288}
\end{aligned}
\] \& \#\#\$ \&  \& NBS \& \[
\left.\mathbf{P} \begin{array}{l}
240 \\
160
\end{array}\right]
\] \& \multicolumn{2}{|l|}{\[
\left.\begin{array}{c|c|}
\hline \& 260 \\
\hline \& 1 / 6 \\
\& 80
\end{array} \right\rvert\,
\]} \& A \& [ \(\begin{array}{r}300 \\ 192 \\ \text { co } \\ \hline\end{array}\) \& Đ \& \[
\begin{gathered}
320 \\
208 \\
00
\end{gathered}
\] \& à \&  \& ठ \& ( \begin{tabular}{c}
360 \\
240 \\
Fo \\
a \\
\hline
\end{tabular} \\
\hline 000 \& 1 \& \& \begin{tabular}{|c}
201 \\
129 \\
81 \\
81
\end{tabular} \& PU4 \&  \& \multicolumn{2}{|l|}{} \& \(\pm\) \& \[
\begin{gathered}
261 \\
217 \\
17 \\
87
\end{gathered}
\] \& Á \& \[
\begin{gathered}
30! \\
193 \\
193 \\
\hline \\
\hline
\end{gathered}
\] \& \multicolumn{2}{|l|}{} \& á \& \[
\begin{array}{|l|}
\hline \\
\hline 241 \\
245 \\
\hline
\end{array}
\] \& \multicolumn{2}{|l|}{} \\
\hline 0010 \& 2 \& \& \[
\begin{aligned}
\& 202 \\
\& 130 \\
\& 82 \\
\& 88
\end{aligned}
\] \& \%42. \& ( 1222 \& ¢ \& \[
\begin{array}{|l|}
\hline \frac{A 2}{242} \\
162 \\
{ }_{42} 2 \\
\hline
\end{array}
\] \& 2 \& \[
\begin{aligned}
\& 262 \\
\& 18 \\
\& 18 \\
\& 82
\end{aligned}
\] \& A \& + \begin{tabular}{l}
302 \\
194 \\
c2 \\
\hline 2
\end{tabular} \& ò \& \[
\begin{aligned}
\& 322 \\
\& 210 \\
\& 10 \\
\& 02
\end{aligned}
\] \& a \& \[
\begin{aligned}
\& \text { an } \\
\& 326 \\
\& 226 \\
\& E 2 \\
\& \hline
\end{aligned}
\] \& \(\bigcirc\) \& \(\begin{array}{r}362 \\ 242 \\ \text { F2 } \\ \hline\end{array}\) \\
\hline 0011 \& \({ }^{3}\) \& \& \[
\begin{array}{r}
203 \\
\begin{array}{c}
131 \\
83 \\
8
\end{array}{ }^{3}
\end{array}
\] \& M, \& 1223
147
93
93 \& £ \&  \& 3 \& \[
\left[\begin{array}{c}
263 \\
179 \\
83
\end{array}\right.
\] \& Ã \& \(\begin{array}{r}\text { 303 } \\ \hline 195 \\ \text { c3 } \\ \hline\end{array}\) \& ó \& \[
\left\lvert\, \begin{aligned}
\& 323 \\
\& 211 \\
\& 03 \\
\& \hline
\end{aligned}\right.
\] \& a \& \[
\begin{aligned}
\& 343 \\
\& 227 \\
\& E 3 \\
\& \hline
\end{aligned}
\] \& ó \& \(\begin{array}{r}363 \\ 243 \\ \text { F3 } \\ \hline 1\end{array}\) \\
\hline 0100 \& 4 \& N\% \& \[
\begin{gathered}
204 \\
\begin{array}{c}
132 \\
8 \\
88
\end{array} \\
\hline
\end{gathered}
\] \& cल: \& \begin{tabular}{l}
122 \\
\hline 148 \\
148 \\
94 \\
\end{tabular} \& M \& \[
\begin{aligned}
\& 124 \\
\& \hline 164 \\
\& 164 \\
\& \hline 44
\end{aligned}
\] \& ' \& \[
\begin{array}{|}
2 \\
\hline 18 \\
180 \\
84 \\
\hline
\end{array}
\] \& A \& \begin{tabular}{|l|l|}
\hline 304 \\
196 \\
\hline 64 \\
\hline 4
\end{tabular} \& ô \& \[
\begin{array}{|l|}
\hline 324 \\
212 \\
04 \\
\hline
\end{array}
\] \& ä \& \[
\begin{aligned}
\& 324 \\
\& 328 \\
\& \text { E4 } \\
\& \hline
\end{aligned}
\] \& o \& \(\begin{array}{r}364 \\ 244 \\ \text { F4 } \\ \hline\end{array}\) \\
\hline 0101 \& 5 \& MA. \& \[
\begin{array}{r}
205 \\
\begin{array}{c}
235 \\
\hline \\
8
\end{array} \\
\hline 8
\end{array}
\] \& \#H\% \& 225
149
95 \& 7 \& \[
\begin{array}{|}
245 \\
165 \\
45 \\
\hline
\end{array}
\] \& \(\mu\) \& \[
\begin{array}{|l|}
\hline 265 \\
181 \\
85 \\
\hline
\end{array}
\] \& \[
\AA
\] \& \[
\begin{array}{|l}
305 \\
197 \\
\\
\hline
\end{array}
\] \& Õ \& \[
\begin{array}{|}
325 \\
213 \\
05 \\
\hline 0
\end{array}
\] \& a \& \[
\begin{aligned}
\& 345 \\
\& 292 \\
\& \text { E5 } \\
\& \hline
\end{aligned}
\] \& \% \& \(\begin{array}{r}365 \\ 245 \\ \text { F5 } \\ \hline 8\end{array}\) \\
\hline 01110 \& 6 \& SSH. \& \[
\begin{array}{r}
206 \\
134 \\
8 \\
88
\end{array}
\] \& 3FA \& 1926
226
150
96 \& 1 \& \[
\begin{array}{|l|l|}
\hline 246 \\
1 \\
1 \\
\hline
\end{array}
\] \& 4 \& \[
\begin{array}{|c}
216 \\
182 \\
86 \\
\hline 8
\end{array}
\] \& FE \& \[
\begin{array}{|l|l}
\hline 306 \\
198 \\
\hline 6 \\
\hline
\end{array}
\] \& 0 \& \[
\begin{gathered}
326 \\
214 \\
06 \\
06
\end{gathered}
\] \& æ \& \[
\begin{gathered}
346 \\
230 \\
20 \\
E 6
\end{gathered}
\] \& ö \& \(\begin{array}{r}366 \\ 246 \\ \text { F6 } \\ \hline\end{array}\) \\
\hline - 111 \& , \& ESA, \& \[
\begin{gathered}
207 \\
y_{1} \\
\hline 85 \\
8
\end{gathered}
\] \& E¢\# \& \[
\begin{array}{|}
27 \\
\begin{array}{l}
27 \\
151 \\
97
\end{array}
\end{array}
\] \& § \& \[
\left.\begin{array}{|c|c}
246 \\
187 \\
187 \\
47
\end{array} \right\rvert\,
\] \& - \& \[
\begin{array}{|l|l|}
\hline 267 \\
183 \\
87 \\
87
\end{array}
\] \& ¢ \& \[
\left[\left.\begin{array}{c}
307 \\
199 \\
c 7
\end{array} \right\rvert\,\right.
\] \& x \& \[
\left.\begin{array}{|c|}
327 \\
215 \\
07
\end{array} \right\rvert\,
\] \& ¢ \& \[
\begin{array}{r}
341 \\
321 \\
231 \\
E 7
\end{array}
\] \& \(\div\) \& \(\begin{array}{r}367 \\ 247 \\ 247 \\ \text { F7 } \\ \hline\end{array}\) \\
\hline 1000 \& 8 \& H:5 \& \[
\begin{aligned}
\& 210 \\
\& 136 \\
\& 136
\end{aligned}
\] \& \& \begin{tabular}{l} 
230 \\
\\
\hline 152 \\
98 \\
98
\end{tabular} \& .. \& \[
\begin{array}{|c|}
\hline 25 \\
258 \\
168 \\
48 \\
\hline
\end{array}
\] \& , \& \[
\begin{array}{|l|}
\hline 270 \\
\hline 184 \\
88 \\
\hline
\end{array}
\] \& E \& \[
\begin{gathered}
\frac{61}{310} \\
200 \\
c 8 \\
8
\end{gathered}
\] \& \(\varnothing\) \& \[
\begin{array}{|c|}
\hline 30 \\
216 \\
08 \\
\hline
\end{array}
\] \& è \&  \& \(\varnothing\) \& \begin{tabular}{l}
370 \\
248 \\
F88 \\
\hline
\end{tabular} \\
\hline 001 \& 9 \& tat: \& \[
\begin{array}{r}
211 \\
\begin{array}{c}
217 \\
137 \\
89
\end{array}
\end{array}
\] \& \& 152

231
153
99

9 \& © \&  \& 1 \& $$
\begin{array}{|l|}
\hline 271 \\
185 \\
\hline 89 \\
\hline 89
\end{array}
$$ \& É \& \[

$$
\begin{array}{|c|c}
\hline 611 \\
\hline 311 \\
201 \\
c
\end{array}
$$

\] \& Ù \& \[

$$
\begin{gathered}
331 \\
217 \\
09 \\
09
\end{gathered}
$$

\] \& é \& \[

$$
\begin{aligned}
& \text { co } \\
& 251 \\
& 233 \\
& E 9
\end{aligned}
$$

\] \& ù \& | 347 |
| :--- |
|  |
| 249 |
|  |
| 79 |
| 9 | <br>

\hline 010 \& 10 \& M1\% \& $$
\begin{array}{r}
212 \\
138 \\
188 \\
8
\end{array}
$$ \& \& \[

$$
\begin{aligned}
& 93 \\
& \begin{array}{l}
23 \\
154 \\
\\
9 A
\end{array}
\end{aligned}
$$

\] \& $\underline{a}$ \& \[

$$
\begin{array}{|l|}
\hline{ }_{29}^{252} \\
110 \\
A A \\
\hline
\end{array}
$$

\] \& - \& \[

$$
\begin{array}{|c}
\frac{0}{272} \\
186 \\
186 \\
8 A
\end{array}
$$

\] \& $\hat{E}$ \& \[

$$
\begin{gathered}
\text { 312 } \\
202 \\
202 \\
c A
\end{gathered}
$$

\] \& Ú \& \[

$$
\begin{array}{|c|c}
\hline 332 \\
3218 \\
0 A \\
\hline
\end{array}
$$

\] \& e \& \[

$$
\begin{aligned}
& \text { C92 } \\
& \text { 234 } \\
& \text { EA }
\end{aligned}
$$
\] \& ú \& 372

250
FA
F <br>

\hline 0.1 \& 11 \& Ptos \& $$
\begin{aligned}
& 213 \\
& 139 \\
& 88 \\
& 88
\end{aligned}
$$ \& ¢\&\% \& \[

$$
\begin{array}{r}
233 \\
155 \\
98 \\
\hline 98
\end{array}
$$

\] \& < \& \[

\left.$$
\begin{array}{|l|}
253 \\
177 \\
A B
\end{array}
$$ \right\rvert\,

\] \& $\gg$ \& \[

$$
\begin{gathered}
273 \\
187 \\
88 \\
88
\end{gathered}
$$

\] \& E \& \[

$$
\begin{array}{|l|}
313 \\
23 \\
\text { 203 } \\
\hline 8
\end{array}
$$

\] \& Û \& \[

$$
\begin{aligned}
& \hline 33 \\
& 329 \\
& 219 \\
& 08
\end{aligned}
$$

\] \& $\ddot{\text { ë }}$ \& \[

$$
\begin{aligned}
& 2535 \\
& 235 \\
& \text { EB }
\end{aligned}
$$

\] \& ¢ \& | 373 |
| :--- |
|  |
| 251 |
| FB |
|  |
|  | <br>

\hline 0 \& ${ }^{12}$ \& PW \& \[
$$
\begin{array}{r}
214 \\
\begin{array}{r}
214 \\
1 \\
8 \\
80
\end{array}
\end{array}
$$

\] \& ST \&  \& $\neg$ \& \[

$$
\begin{array}{|c|}
\hline 254 \\
172 \\
\mathrm{AC} \\
\hline
\end{array}
$$

\] \& 1/4 \& \[

$$
\begin{array}{|}
274 \\
188 \\
180 \\
\hline
\end{array}
$$

\] \& I \& \[

$$
\begin{array}{|l|l|}
\hline 314 \\
204 \\
204 \\
\hline
\end{array}
$$

\] \& Ü \& \[

$$
\begin{array}{|}
\hline 33 \\
320 \\
\text { 20 } \\
\hline
\end{array}
$$

\] \& i \& \[

$$
\begin{aligned}
& 356 \\
& 336 \\
& \text { EC } \\
& \hline
\end{aligned}
$$
\] \& u \& 374

252
FC <br>

\hline 1101 \& ${ }^{13}$ \& \#\# \& \[
$$
\begin{aligned}
& 215 \\
& 141 \\
& 141 \\
& 8 \\
& \hline
\end{aligned}
$$

\] \& 95.5 \& \[

$$
\begin{array}{r}
235 \\
\hline 257 \\
\\
\hline
\end{array}
$$

\] \& SHY \& \[

$$
\begin{array}{|l|}
\hline 25 \\
\hline 153 \\
A_{0} \\
\hline
\end{array}
$$

\] \& 1/2 \& \[

$$
\begin{aligned}
& 20 \\
& \hline 27 \\
& 189 \\
& 80 \\
& 80
\end{aligned}
$$

\] \& İ \&  \& Y' \& \[

$$
\begin{array}{|c} 
\\
\hline 35 \\
2321 \\
02 \\
\hline
\end{array}
$$

\] \& 1 \& \[

$$
\begin{aligned}
& \text { 筑 } \\
& 237 \\
& E 0 \\
& \hline
\end{aligned}
$$
\] \& y \& $\begin{array}{r}375 \\ 253 \\ \text { FD } \\ \hline\end{array}$ <br>

\hline 10 \& 14 \& SS\% \& $$
\begin{array}{r}
2162 \\
142 \\
182 \\
88
\end{array}
$$ \& P\% \& \[

$$
\begin{array}{r}
236 \\
158 \\
9 \\
\hline
\end{array}
$$

\] \& ® \& \[

$$
\begin{array}{|c}
\substack{\text { 256 } \\
174 \\
A E \\
\hline \\
\hline}
\end{array}
$$

\] \& 3/4 \& \[

$$
\begin{array}{|c}
\hline 006 \\
\hline 190 \\
190 \\
\hline 8
\end{array}
$$

\] \& I \& \[

$$
\begin{array}{|c}
316 \\
306 \\
\text { CE } \\
\hline
\end{array}
$$

\] \& P \& \[

$$
\begin{gathered}
\\
\hline 326 \\
232 \\
\text { 25 } \\
\hline
\end{gathered}
$$

\] \& ิ \& \[

$$
\begin{aligned}
& \hline 236 \\
& 388 \\
& \text { EE } \\
& \hline
\end{aligned}
$$
\] \& p \& $\begin{array}{r}376 \\ 254 \\ \text { FE } \\ \hline\end{array}$ <br>

\hline 1 111 \& 15 \& SS\% \& $$
\begin{aligned}
& 217 \\
& \begin{array}{l}
143 \\
8 \mathrm{BF}
\end{array}
\end{aligned}
$$ \& A\#¢ \& 197

159

97 \& - \& $$
\left.\begin{array}{|l|l}
255 \\
257 \\
\hline 175 \\
\hline F
\end{array} \right\rvert\,
$$ \& ¿ \& \[

$$
\begin{array}{|c|c|}
\hline 277 \\
199 \\
8 \mathrm{BF} \\
\hline
\end{array}
$$
\] \& $\ddot{I}$ \& 317

207

CF \& B \& $$
\begin{gathered}
\\
\hline 23 \\
233 \\
\text { DF }
\end{gathered}
$$ \& i \& 357

239
EF \& y \& $\begin{array}{r}377 \\ 255 \\ \text { FF } \\ \hline\end{array}$ <br>
\hline
\end{tabular}

Figure A-2 ISO Latin-1 Character Set 8-15

|  | column | 0 |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $68 \text { BITS }$ | 0 |  | 0 |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 0 | $0 \quad 000$ | NUL | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \end{aligned}$ | DLE | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | @ | $\begin{array}{\|c\|} \hline 100 \\ 64 \\ 40 \\ \hline \end{array}$ | P | $\begin{array}{\|c\|c\|} \hline 120 \\ 80 \\ 50 \end{array}$ | , | $\begin{array}{\|c} 140 \\ 96 \\ 60 \end{array}$ | p | $\begin{aligned} & 160 \\ & 112 \\ & 70 \end{aligned}$ |
| 1 | 00001 | SOH | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\underset{(\times O N)}{\text { DC1 }}$ | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | ! | $\begin{array}{\|l\|} \hline 41 \\ 33 \\ 21 \\ \hline \end{array}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{array}{\|r\|} \hline 101 \\ 65 \\ 41 \\ \hline \end{array}$ | Q | $\begin{array}{\|r\|} \hline 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{array}{\|c\|} \hline 14 \\ 97 \\ 61 \\ \hline \end{array}$ | 9 | $\begin{array}{\|c\|} \hline 161 \\ 113 \\ 71 \\ \hline \end{array}$ |
| 2 | 0010 | STX | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | DC2 | $\begin{array}{\|l} \hline 22 \\ 18 \\ 12 \end{array}$ | ' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \end{aligned}$ | B | $\begin{array}{\|c\|} \hline 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{array}{\|c} 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{array}{\|c} 142 \\ 98 \\ 62 \\ \hline \end{array}$ | $r$ | $\begin{array}{\|c\|} \hline 162 \\ 114 \\ 72 \end{array}$ |
| 3 | 0 O | ETX | $\begin{array}{r} 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \\ & \hline \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \\ & \hline \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{\|r\|} \hline 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{\|r\|} \hline 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{\|c\|} \hline 143 \\ 99 \\ 63 \\ \hline \end{array}$ | S | $\begin{array}{\|l} 163 \\ 115 \\ 73 \\ \hline \end{array}$ |
| 4 | 0100 | EOT | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | DC4 | $\begin{aligned} & \hline 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & \hline 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & \hline 64 \\ & 52 \\ & 34 \end{aligned}$ | D | 104 <br> 68 <br> 44 | T | $\left[\begin{array}{c} 124 \\ 84 \\ 54 \\ \hline \end{array}\right.$ | d | $\begin{gathered} 144 \\ 100 \\ 64 \end{gathered}$ | t | $\begin{aligned} & 164 \\ & 16 \\ & 74 \end{aligned}$ |
| 5 | 0101 | ENQ | $\begin{aligned} & \hline 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ | NAK | $\begin{aligned} & 25 \\ & 21 \\ & 15 \\ & \hline \end{aligned}$ | \% | $\begin{array}{r} 45 \\ 37 \\ 25 \\ \hline \end{array}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \end{aligned}$ | E | $\begin{array}{\|r\|} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|r\|} \hline 125 \\ 35 \\ 55 \\ \hline \end{array}$ | e | $\begin{array}{\|l\|} \hline 145 \\ 101 \\ 65 \\ \hline \end{array}$ | u | $\begin{array}{\|l\|} \hline 165 \\ 117 \\ 75 \\ \hline \end{array}$ |
| 6 | 0110 | ACK | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ | SYN | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 26 \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \\ & \hline \end{aligned}$ | F | 106 <br> 70 <br> 46 | V | $\begin{array}{\|c} 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{array}{\|l} 146 \\ 102 \\ 66 \end{array}$ | v | $\begin{array}{\|c} 166 \\ 118 \\ 76 \\ \hline \end{array}$ |
| 7 | 0111 | BEL | $\begin{aligned} & 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ | ETB | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & \hline 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{\|r} 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{\|r\|} \hline 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{array}{\|r\|} 147 \\ 103 \\ 67 \\ \hline \end{array}$ | w | 167 <br> 119 <br> 119 <br> 77 <br> 17 |
| 8 | 1000 | BS | $\begin{gathered} \hline 10 \\ 8 \\ 8 \\ 8 \end{gathered}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 18 \\ & \hline \end{aligned}$ | $($ | $\begin{aligned} & \hline 50 \\ & 40 \\ & 28 \\ & \hline \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \end{aligned}$ | H | $\begin{array}{\|c\|} \hline 10 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{array}{\|r\|} \hline 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{array}{\|c\|} \hline 150 \\ 104 \\ \hline 68 \\ \hline \end{array}$ | x | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 17\end{array}$ |
| 9 | 1001 | HT | $\begin{aligned} & 11 \\ & 9 \\ & 9 \end{aligned}$ | EM | $\begin{aligned} & 31 \\ & 25 \\ & 19 \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \end{aligned}$ | I | $\begin{array}{\|l\|} \hline 11 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{\|c\|} \hline 131 \\ 89 \\ 59 \end{array}$ | i | $\begin{gathered} 151 \\ 105 \\ 69 \end{gathered}$ | y | 171 121 79 79 |
| 10 | 1010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & A \end{aligned}$ | SUB | $\begin{array}{\|l\|} \hline 32 \\ 26 \\ 1 A \\ \hline \end{array}$ | * | $\begin{aligned} & \hline 52 \\ & 42 \\ & 2 A \\ & \hline \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \\ & \hline \end{aligned}$ | J | $\begin{array}{\|c\|} \hline 112 \\ 74 \\ 4 \mathrm{~A} \\ \hline \end{array}$ | Z | $\begin{array}{\|c\|} \hline 132 \\ 90 \\ 5 A \\ \hline \end{array}$ | j | $\begin{array}{\|c\|} \hline 152 \\ 106 \\ 6 \mathrm{~A} \\ \hline \end{array}$ | $z$ | 172 122 122 $7 A$ 183 |
| 11 | 1011 | VT | $\begin{array}{\|c} 13 \\ 11 \\ 8 \\ \hline \end{array}$ | ESC | $\begin{array}{\|l\|} \hline 33 \\ 27 \\ 18 \\ \hline \end{array}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & \hline \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \end{aligned}$ | [ | $\begin{array}{r} 133 \\ 91 \\ 5 B \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | $\{$ | $\begin{array}{r}172 \\ 173 \\ 123 \\ 18 \\ \hline 18\end{array}$ |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & c \\ & \hline \end{aligned}$ | FS | $\begin{array}{\|l\|} \hline 34 \\ 28 \\ 10 \\ \hline \end{array}$ | , | $\begin{aligned} & \hline 54 \\ & 44 \\ & 2 C \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 C \end{aligned}$ | L | $\begin{aligned} & 114 \\ & 76 \\ & 4 \mathrm{C} \\ & \hline \end{aligned}$ | 1 | $\begin{array}{\|r\|} \hline 134 \\ 92 \\ 5 \mathrm{C} \\ \hline \end{array}$ | 1 | $\begin{array}{\|c\|} \hline 154 \\ 108 \\ 6 C \\ \hline \end{array}$ | 1 | 174 124 78 715 |
| 13 | 1101 | CR | $\begin{gathered} 15 \\ 13 \\ 0 \\ \hline \end{gathered}$ | GS | $\begin{aligned} & 35 \\ & 29 \\ & 10 \\ & \hline \end{aligned}$ | - | $\begin{aligned} & \hline 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 3 D \\ & \hline \end{aligned}$ | M | $\begin{array}{r} 115 \\ 17 \\ 40 \\ \hline \end{array}$ | $]$ | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | \} | $\begin{array}{r}175 \\ 125 \\ 18 \\ 78 \\ \hline 18\end{array}$ |
| 14 | 1110 | SO | $\begin{gathered} 16 \\ 14 \\ E \\ E \end{gathered}$ | RS | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \end{aligned}$ |  | $\begin{array}{\|l\|} \hline 56 \\ 46 \\ 26 \\ \hline \end{array}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \\ & \hline \end{aligned}$ | N | $\begin{aligned} & 116 \\ & 78 \\ & 4 E \\ & \hline \end{aligned}$ | $\wedge$ | $\begin{aligned} & 136 \\ & 94 \\ & 5 E \\ & \hline \end{aligned}$ | n | $\begin{array}{\|c\|} \hline 156 \\ 110 \\ 6 E \\ \hline \end{array}$ | $\sim$ | 176 <br> 126 <br> 78 <br> 78 <br> 18 |
| 15 | 1111 | SI | $\begin{gathered} 17 \\ 15 \\ \\ \hline \end{gathered}$ | US | $\begin{aligned} & 37 \\ & 31 \\ & 1 F \\ & \hline \end{aligned}$ | / | $\begin{aligned} & 57 \\ & 47 \\ & 27 \\ & \hline \end{aligned}$ | ? | $\begin{aligned} & 77 \\ & 63 \\ & 3 F \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & 171 \\ & 79 \\ & 45 \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 137 \\ & 95 \\ & 5 F \\ & \hline \end{aligned}$ | 0 | $\left[\begin{array}{c} 157 \\ 111 \\ 6 F \\ \hline \end{array}\right.$ | DEL | 177 127 78 |



Figure A-3 DIGITAL Multinational Character Set 0-7

| 8 |  | 9 |  | 10 |  | 11 |  | 12 |  | 13 |  | 14 |  | 15 |  | column |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{0} 0$ |  | ${ }^{0}$ |  |  |  | ${ }^{0} 1$ |  |  |  | ${ }^{1}{ }^{0}$ |  |  |  |  |  |  | Row |
|  | $\begin{gathered} 200 \\ 128 \\ 80 \\ 80 \end{gathered}$ | DCS | $\begin{gathered} 220 \\ 144 \\ 90 \end{gathered}$ |  |  | - | $\begin{gathered} 260 \\ 176 \\ 80 \\ \hline \end{gathered}$ | À | $\begin{array}{\|r\|} \hline 300 \\ 192 \\ \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 320 \\ 208 \\ 00 \\ \hline \end{array}$ | a | $\begin{array}{\|c\|} \hline 340 \\ 224 \\ \text { E } \\ \hline \end{array}$ |  | $\begin{gathered} 360 \\ 240 \\ \hline 90 \\ \hline \end{gathered}$ | $0 \quad 0 \quad 0$ | 0 |
|  | $\begin{gathered} 201 \\ 129 \\ 81 \end{gathered}$ | PU1 | $\begin{gathered} 221 \\ 145 \\ 91 \end{gathered}$ | i | $\begin{array}{\|c\|} \hline 241 \\ 161 \\ \text { A1 } \end{array}$ | $\pm$ | $\begin{gathered} 261 \\ 177 \\ 81 \\ 81 \end{gathered}$ | Á | $\begin{gathered} 301 \\ 193 \\ c \end{gathered}$ | $\tilde{N}$ | $\begin{gathered} 321 \\ 209 \\ 01 \end{gathered}$ | á | $\begin{gathered} 341 \\ 225 \\ E 1 \end{gathered}$ | n | $\begin{gathered} 361 \\ 241 \\ { }_{2} \end{gathered}$ | $0 \quad 001$ | 1 |
|  | $\begin{array}{r} 202 \\ 130 \\ 82 \end{array}$ | PU2 | $\begin{array}{\|c\|} \hline 222 \\ 146 \\ 92 \\ \hline \end{array}$ | ¢ | $\begin{gathered} 242 \\ { }_{2} 162 \\ \text { A2 } \end{gathered}$ | 2 | $\begin{gathered} 262 \\ \\ \hline 178 \\ 82 \end{gathered}$ | $\hat{A}$ | $\left[\begin{array}{c} 302 \\ 194 \\ c 2 \end{array}\right.$ | O' | $\begin{array}{\|c\|c\|} \hline 322 \\ 210 \\ 02 \\ \hline \end{array}$ | a | $\begin{array}{\|r\|} \hline 342 \\ 226 \\ E 2 \\ \hline \end{array}$ | \% | $\begin{array}{r} 362 \\ 242 \\ \\ \hline 2 \end{array}$ | 0010 | 2 |
|  | $\begin{array}{\|c} 203 \\ 131 \\ 83 \\ 83 \end{array}$ | STS | $\begin{gathered} 223 \\ 147 \\ 93 \end{gathered}$ | £ | $\begin{gathered} 243 \\ 163 \\ \text { A3 } \end{gathered}$ | 3 | $\begin{array}{r} 263 \\ 179 \\ 83 \end{array}$ | $\underset{\sim}{\sim}$ | $\left\lvert\, \begin{array}{c\|} 303 \\ 195 \\ c 3 \end{array}\right.$ | Ó | $\begin{gathered} 323 \\ 211 \\ 03 \end{gathered}$ | ä | $\left[\begin{array}{c} 343 \\ 227 \\ E 3 \end{array}\right.$ | \% | $\begin{gathered} 363 \\ 243 \\ \text { F3 } \end{gathered}$ | 0011 | 3 |
| IND | $\begin{array}{\|c} 204 \\ 132 \\ 84 \\ \hline \end{array}$ | CCH | $\begin{array}{\|c} 224 \\ 148 \\ 94 \\ \hline \end{array}$ |  | $\begin{array}{\|r\|} \hline 244 \\ 164 \\ A 4 \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 264 \\ 180 \\ 84 \\ \hline \end{array}$ | $\ddot{\text { A }}$ | $\begin{array}{\|l\|} \hline 304 \\ 196 \\ \text { C } 4 \\ \hline \end{array}$ | Ô | $\begin{array}{\|c\|} \hline 324 \\ 212 \\ 04 \\ \hline \end{array}$ | $\ddot{a}$ | $\begin{gathered} 344 \\ 228 \\ E 4 \\ \hline \end{gathered}$ | ô | $\begin{array}{\|c} 364 \\ 244 \\ 54 \\ \hline \end{array}$ | 0100 | 4 |
| NEL | $\begin{array}{\|c\|} \hline 205 \\ 133 \\ 85 \end{array}$ | MW | $\begin{gathered} 225 \\ 149 \\ 95 \end{gathered}$ | 7 | $\begin{gathered} 245 \\ 165 \\ \text { A5 } \end{gathered}$ | $\mu$ | $\begin{array}{\|c\|c\|} \hline 265 \\ 181 \\ 85 \\ \hline \end{array}$ | A | $\begin{array}{\|c} 305 \\ 197 \\ c 5 \end{array}$ | 0 | $\begin{gathered} 325 \\ 213 \\ 05 \end{gathered}$ | a | $\begin{gathered} 345 \\ 229 \\ 5 \end{gathered}$ | 0 | $\begin{array}{\|c\|} \hline 365 \\ 245 \\ F 5 \\ \hline \end{array}$ | 0101 | 5 |
| SSA | $\begin{array}{r} 206 \\ 134 \\ -86 \\ \hline \end{array}$ | SPA | $\begin{array}{\|r\|} \hline 226 \\ 150 \\ 96 \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 246 \\ 166 \\ 46 \\ \hline \end{array}$ | T | $\begin{array}{r} 266 \\ 182 \\ 86 \\ \hline \end{array}$ | $\boldsymbol{A E}$ | $\begin{array}{\|l\|} \hline 306 \\ 198 \\ \mathrm{C6} \\ \hline \end{array}$ | 0 | $\begin{array}{\|c} \hline 326 \\ 214 \\ 06 \\ \hline \end{array}$ | æ | $\begin{array}{r} 346 \\ 230 \\ E 6 \\ \hline \end{array}$ | $\because$ | $\begin{array}{\|c\|} \hline 366 \\ 246 \\ 56 \\ \hline \end{array}$ | 0110 | 6 |
| ESA | $\left[\begin{array}{c} 207 \\ 135 \\ 87 \\ 87 \end{array}\right.$ | EPA | $\begin{array}{\|c\|} \hline 227 \\ 151 \\ 97 \\ \hline \end{array}$ | § | $\begin{array}{\|c\|} \hline 247 \\ 167 \\ \text { A7 } \\ \hline \end{array}$ | - | $\begin{array}{\|c\|} 267 \\ 183 \\ 87 \\ \hline \end{array}$ | Ç | $\begin{gathered} 307 \\ 199 \\ c 7 \end{gathered}$ | CE | $\begin{array}{r} 327 \\ 215 \\ 07 \\ \hline \end{array}$ | Ç | $\begin{gathered} 347 \\ 231 \\ \text { E } \end{gathered}$ | ¢ | $\begin{array}{r} 367 \\ 247 \\ 77 \end{array}$ | 011 | 7 |
| HTS | $\begin{array}{\|r\|} \hline 210 \\ 136 \\ 88 \\ \hline \end{array}$ |  | $\begin{array}{\|r\|} \hline 230 \\ 152 \\ 98 \\ \hline \end{array}$ | 0 | $\begin{array}{\|c\|} \hline 250 \\ 168 \\ 48 \\ \hline \end{array}$ |  | $\begin{array}{r} 270 \\ 184 \\ \text { 188 } \\ \hline \end{array}$ | E | $\begin{array}{\|r} 310 \\ 200 \\ \text { c8 } \\ \hline \end{array}$ | $\varnothing$ | $\begin{array}{\|c\|} \hline 330 \\ 216 \\ 08 \\ \hline \end{array}$ | è | $\begin{array}{\|r\|} \hline 350 \\ 232 \\ \text { E8 } \\ \hline \end{array}$ | $\sigma$ | $\begin{gathered} 370 \\ 248 \\ \mathrm{FB} \\ \hline \end{gathered}$ | 1000 | 8 |
| HTJ | $\begin{array}{\|c} 211 \\ 137 \\ 89 \\ 89 \end{array}$ |  | $\begin{array}{r\|} 231 \\ 153 \\ 99 \\ \hline \end{array}$ | (c) | $\begin{array}{\|c\|} \hline 251 \\ 169 \\ \text { A9 } \\ \hline \end{array}$ | 1 | $\begin{array}{\|r\|} \hline 271 \\ 185 \\ 89 \\ \hline \end{array}$ | E | $\begin{array}{\|c} 311 \\ 201 \\ \text { c9 } \end{array}$ | U̇ | $\begin{array}{\|c} 331 \\ 217 \\ 09 \\ \hline \end{array}$ | é | $\begin{array}{\|c\|} \hline 351 \\ 233 \\ 59 \\ \hline \end{array}$ | ù | $\begin{array}{\|r\|} \hline 371 \\ 249 \\ F 9 \\ \hline \end{array}$ | 1001 | 9 |
| VTS | $\begin{array}{\|c} 21212 \\ 138 \\ 88 \end{array}$ |  | $\begin{gathered} 232 \\ 154 \\ 9 \mathrm{~A} \end{gathered}$ | a | $\begin{gathered} 252 \\ 170 \\ A A \end{gathered}$ | O | $\begin{gathered} 272 \\ 186 \\ \text { BA } \end{gathered}$ | $\hat{E}$ | $\begin{array}{\|c\|} \hline 312 \\ 202 \\ C A \end{array}$ | Ú | $\begin{array}{\|c\|} \hline 332 \\ 218 \\ D A \\ \hline \end{array}$ | A | $\begin{array}{\|r\|} \hline 352 \\ 234 \\ \text { EA } \\ \hline \end{array}$ | ' | $\begin{array}{\|r\|} \hline 372 \\ 250 \\ \text { FA } \end{array}$ | 1010 | 10 |
| PLD | $\begin{array}{\|c} \hline 213 \\ 139 \\ 88 \\ \hline 8 \end{array}$ | CSI | $\begin{array}{\|c\|} \hline 233 \\ 155 \\ 98 \\ \hline \end{array}$ | < | $\begin{array}{\|c\|} \hline 253 \\ 171 \\ A B \\ \hline \end{array}$ | > | $\begin{array}{\|r\|} \hline 273 \\ 187 \\ 88 \\ \hline \end{array}$ | $\ddot{E}$ | $\begin{array}{\|c} 3113 \\ 203 \\ \text { CB } \end{array}$ | $\hat{U}$ | $\begin{gathered} 333 \\ 219 \\ 08 \\ \hline 8 \end{gathered}$ | $\ddot{e}$ | $\begin{array}{r} 353 \\ 235 \\ E B \end{array}$ | $\hat{\mathbf{u}}$ | $\begin{gathered} 3737 \\ 251 \\ \\ \hline \end{gathered}$ | 1011 | 11 |
| PLU | $\begin{array}{\|l\|l\|} \hline 214 \\ 140 \\ 8 C \end{array}$ | ST | $\begin{array}{\|c\|} \hline 234 \\ 156 \\ 9 C \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 254 \\ 172 \\ A C \\ \hline \end{array}$ | $1 / 4$ | $\begin{array}{\|c\|} \hline 274 \\ 188 \\ B C \\ \hline \end{array}$ | 1 | $\begin{gathered} 314 \\ 204 \\ \text { CC } \end{gathered}$ | u' | $\begin{gathered} 334 \\ 220 \\ D C \end{gathered}$ | $i$ | $\begin{array}{\|c\|} \hline 354 \\ 236 \\ \text { EC } \end{array}$ | ui | $\begin{array}{\|c\|} \hline 374 \\ 252 \\ \text { FC } \\ \hline \end{array}$ | 1100 | 12 |
| RI | $\begin{array}{\|r\|} \hline 215 \\ 141 \\ 80 \\ \hline \end{array}$ | OSC | $\begin{array}{\|r\|} \hline 235 \\ 157 \\ 90 \\ \hline \end{array}$ |  | $\begin{gathered} 255 \\ 173 \\ A D \\ \hline \end{gathered}$ | $1 / 2$ | $\begin{array}{\|c\|} \hline 275 \\ 189 \\ \hline 80 \\ \hline \end{array}$ | $i$ | $\begin{array}{\|r\|} \hline 315 \\ 205 \\ \mathrm{CD} \\ \hline \end{array}$ | $\ddot{Y}$ | $\begin{array}{\|c} 335 \\ 221 \\ 00 \\ \hline \end{array}$ | $i$ | $\begin{array}{\|c\|} \hline 355 \\ 237 \\ \text { ED } \\ \hline \end{array}$ | $\dddot{y}$ | $\begin{array}{\|c\|} \hline 375 \\ 253 \\ \hline \mathrm{FD} \\ \hline \end{array}$ | 1101 | 13 |
| SS2 | $\begin{array}{\|c} 216 \\ 142 \\ 88 \\ \hline 8 \end{array}$ | PM | $\begin{gathered} : 36 \\ 158 \\ 98 \\ 98 \end{gathered}$ |  | $\begin{array}{\|c\|} \hline 256 \\ 174 \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 276 \\ 190 \\ B E \\ \hline \end{array}$ | $\hat{\imath}$ | $\begin{array}{\|c} 316 \\ 206 \\ C E \\ \hline \end{array}$ |  | $\begin{gathered} 336 \\ 222 \\ \text { DE } \end{gathered}$ | $\hat{\imath}$ | [ 356 |  | [ $\begin{array}{r}376 \\ 254 \\ \text { FE } \\ \hline\end{array}$ | 1110 | 14 |
| SS3 | $\begin{gathered} 217 \\ 143 \\ 8 \mathrm{~F} \\ \hline \end{gathered}$ | APC | $\begin{gathered} 237 \\ 159 \\ 99 \\ \hline \end{gathered}$ |  | $\begin{array}{c\|} \hline 257 \\ 175 \\ \hline 4 \\ \hline \end{array}$ | ¿ | $\begin{array}{\|c\|} \hline 277 \\ 191 \\ \hline \mathrm{BF} \\ \hline \end{array}$ | $\because$ | $\begin{gathered} 317 \\ 207 \\ \mathrm{CF} \\ \hline \end{gathered}$ | $\beta$ | $\begin{gathered} 337 \\ 223 \\ \text { DF } \\ \hline \end{gathered}$ | $\because$ | $\begin{gathered} 357 \\ 239 \\ E F \\ \hline \end{gathered}$ |  | $\begin{aligned} & 377 \\ & 255 \\ & \text { FF } \\ & \hline \end{aligned}$ | 1111 | 15 |

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Figure A-4 DIGITAL Multinational Character Set 8-15

|  |  | $\frac{{ }^{0}{ }^{0}}{} 0 \begin{aligned} & \\ & \\ & \\ & \\ & \hline \text { COLUMN } \\ & 0 \end{aligned}$ |  | $\begin{array}{llll} 0 & 0 & & \\ & 0 & 0 & 1 \end{array}$ |  | $\begin{array}{lllll}0 & 0 & & \\ & 0 & 1 & \\ & & 1 & 0\end{array}$ |  | $\begin{array}{lll} 0 & 0 & \\ & 1 & \\ & & \end{array}$ |  | $\begin{array}{llll}0, & \\ & \\ & & 0 & \\ & \end{array}$ |  |  |  |  |  | 0 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |  |  |  |  |  |  |  |  |
| 00000 | 0 |  |  | $\begin{aligned} & \text { Blank } \\ & \text { INULII) } \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | 40 32 20 | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | @ | $\begin{gathered} 100 \\ 64 \\ 40 \end{gathered}$ | P | $\begin{array}{r} 120 \\ 80 \\ 50 \end{array}$ | ' | $\begin{array}{r} 140 \\ 96 \\ 60 \end{array}$ | p | 160 112 70 |  |  |  |  |  |  |  |  |
| 0 0 0001 | 1 | $\bullet$ | 1 |  | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & \hline 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{array}{\|c} 101 \\ 65 \\ 41 \end{array}$ | 0 | $\begin{array}{r} 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{gathered} 141 \\ 97 \\ 61 \end{gathered}$ | q | $\begin{gathered} 161 \\ 113 \\ 71 \end{gathered}$ |  |  |  |  |  |  |  |  |
| 00010 | 2 | $\because$ | 2 2 2 | $\downarrow$ | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | 11 | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \end{aligned}$ | B | $\begin{array}{\|c} 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{array}{r} 122 \\ 82 \\ 52 \end{array}$ | b | $\begin{array}{r} 142 \\ 98 \\ 62 \end{array}$ | r | $\begin{gathered} 162 \\ 114 \\ 72 \end{gathered}$ |  |  |  |  |  |  |  |  |
| 0 O | 3 |  | $\begin{aligned} & \hline 3 \\ & 3 \\ & 3 \end{aligned}$ | $!!$ | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \\ & \hline \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \end{array}$ | S | $\begin{array}{r} 163 \\ 115 \\ 73 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |
| 0100 | 4 |  | 4 4 4 | $97$ | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \end{aligned}$ | D | $\begin{array}{\|c} 104 \\ 68 \\ 44 \\ \hline \end{array}$ | T | $\begin{array}{r} 124 \\ 84 \\ 54 \end{array}$ | d | $\begin{gathered} 144 \\ 100 \\ 64 \end{gathered}$ | $t$ | $\begin{gathered} 164 \\ 116 \\ 74 \end{gathered}$ |  |  |  |  |  |  |  |  |
| 0101 | 5 | 8 | 5 5 5 5 | $\oint$ | $\begin{aligned} & 25 \\ & 21 \\ & 15 \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \end{aligned}$ | E | $\begin{array}{\|r\|} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | $\mathbf{U}$ | $\begin{array}{r} 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{array}{r} 145 \\ 101 \\ 65 \\ \hline \end{array}$ | $u$ | $\begin{aligned} & 165 \\ & 117 \\ & 75 \end{aligned}$ |  |  |  |  |  |  |  |  |
| - 1 1 0 | 6 |  | $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ | $\square$ | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | 8 | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \end{aligned}$ | F | $\begin{array}{\|r\|} \hline 106 \\ 70 \\ 46 \end{array}$ | V | $\begin{array}{r} 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{array}{r} 146 \\ 102 \\ 66 \end{array}$ | V | $\begin{array}{r} 166 \\ 118 \\ 76 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |
| 01011 | , |  | 7 7 7 | $\stackrel{\downarrow}{\square}$ | $\begin{aligned} & 27 \\ & 23 \\ & 17 \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \end{aligned}$ | G | $\begin{array}{\|r\|} \hline 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{r} 127 \\ 87 \\ 51 \end{array}$ | $g$ | $\begin{array}{r} 147 \\ 103 \\ 67 \end{array}$ | w | $\begin{array}{r} 167 \\ 119 \\ 77 \end{array}$ |  |  |  |  |  |  |  |  |
| 1 0000 | 8 | $\bigcirc$ | $\begin{gathered} 10 \\ 8 \\ 8 \end{gathered}$ | $4$ | $\begin{aligned} & 30 \\ & 24 \\ & 18 \end{aligned}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \end{aligned}$ | H | $\begin{aligned} & 110 \\ & 72 \\ & 48 \end{aligned}$ | X | $\begin{array}{r} 130 \\ 88 \\ 58 \end{array}$ | h | $\begin{array}{r} 150 \\ 104 \\ 68 \end{array}$ | $\mathbf{x}$ | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 172\end{array}$ |  |  |  |  |  |  |  |  |
| 10001 | 9 | $\bigcirc$ | $\begin{array}{r} 11 \\ 9 \\ 9 \\ \hline \end{array}$ | $\downarrow$ | $\begin{aligned} & 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & \hline 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \\ & \hline \end{aligned}$ | 1 | $\begin{array}{\|r\|} \hline 111 \\ 73 \\ 49 \\ \hline \end{array}$ | $Y$ | $\begin{array}{r} 131 \\ 89 \\ 59 \end{array}$ | i | $\begin{array}{\|} 151 \\ 105 \\ 69 \end{array}$ | $y$ | $\begin{array}{r}171 \\ 121 \\ 79 \\ \hline 12\end{array}$ |  |  |  |  |  |  |  |  |
| 1010 | 110 |  | $\begin{aligned} & 12 \\ & 10 \\ & A \end{aligned}$ | $\longrightarrow$ | $\begin{aligned} & 32 \\ & 26 \\ & 1 \mathrm{~A} \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{array}{\|r\|} \hline 112 \\ 74 \\ 4 \mathrm{~A} \end{array}$ | Z | $\begin{array}{r} 132 \\ 90 \\ 5 \mathrm{~A} \end{array}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | 2 | $\begin{array}{r}172 \\ 122 \\ 78 \\ \hline 173\end{array}$ |  |  |  |  |  |  |  |  |
| 011 | 11 | $\sigma^{7}$ | $\begin{aligned} & 13 \\ & 11 \\ & 8 \end{aligned}$ | $\longleftarrow$ | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | $\dagger$ | $\begin{aligned} & 53 \\ & 43 \\ & 28 \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{gathered} 113 \\ 75 \\ 48 \end{gathered}$ | [ | $\begin{array}{r} 133 \\ 91 \\ 58 \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | $\{$ | $\begin{array}{r}173 \\ 123 \\ 78 \\ \hline 174\end{array}$ |  |  |  |  |  |  |  |  |
| 1100 | 12 | $\bigcirc$ | $\begin{aligned} & 14 \\ & 12 \\ & \mathrm{C} \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 34 \\ & 28 \\ & 10 \end{aligned}$ | , | $\begin{aligned} & \hline 54 \\ & 44 \\ & 2 C \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 \mathrm{C} \\ & \hline \end{aligned}$ | L | $\begin{array}{\|r\|} \hline 114 \\ 76 \\ 4 C \\ \hline \end{array}$ | $\$ & $\begin{array}{r} 134 \\ 92 \\ 5 \mathrm{C} \\ \hline \end{array}$ & 1 & $\begin{aligned} & 154 \\ & 108 \\ & 6 \mathrm{C} \\ & \hline \end{aligned}$ & 1 &174 <br> 124 <br> 78 <br> 15 \hline 1101 & 13 & f) & $\begin{gathered} 15 \\ 13 \\ 0 \\ \hline \end{gathered}$ & $\longleftrightarrow$ | $\begin{aligned} & 35 \\ & 29 \\ & 10 \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{array}{\|r\|} \hline 115 \\ 77 \\ 40 \\ \hline \end{array}$ | ] | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{gathered} 155 \\ 109 \\ 60 \end{gathered}$ | $\}$ | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline 186\end{array}$ |
| 1110 | 14 | $f$ | $\begin{gathered} 16 \\ 14 \\ E \end{gathered}$ | A | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \end{aligned}$ | N | $\begin{gathered} 116 \\ 78 \\ 4 E \end{gathered}$ | $\wedge$ | $\begin{gathered} 136 \\ 94 \\ 5 E \end{gathered}$ | n | $\begin{array}{r} 156 \\ 110 \\ 6 \mathrm{E} \end{array}$ | 几 | $\begin{array}{r}176 \\ 126 \\ 78 \\ \hline 178\end{array}$ |  |  |  |  |  |  |  |  |
| 1 1 1 1 | 15 | - | 17 15 $F$ | $\nabla$ | $\begin{aligned} & 37 \\ & 31 \\ & 1 F \\ & \hline \end{aligned}$ | / | 57 47 27 | ? | 77 63 $3 F$ | 0 | $\begin{array}{r} 17 \\ 79 \\ 4 \mathrm{~F} \end{array}$ | - | $\begin{array}{r}137 \\ 95 \\ 95 \\ \hline\end{array}$ | 0 | 157 111 $6 F$ | $\triangle$ | 177 127 77 |  |  |  |  |  |  |  |  |

## KEY

ASCII CHARACTER | ESC | 33 |  |
| :--- | :--- | :--- |
| 27 | OCTAL |  |
|  | 18 | $\begin{array}{l}\text { DECIMAL } \\ \text { HEX }\end{array}$ |

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Figure A-5 STD Character Set 0-7

|  |  | ${ }^{1} 000$ |  | ${ }^{1} 000$, |  | ${ }^{1} 010$ |  | ${ }^{\circ}{ }^{1}$, |  | ' ' 0 |  | ' ' 0 |  | ' 1 , |  | ' ' , , |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 8 |  | 9 |  | 10 |  | 11 |  | 12 |  | 13 |  | 14 |  | 15 |  |
| 0000 | 0 | Ç | $\begin{array}{\|c} \hline 200 \\ 128 \\ 80 \\ 80 \end{array}$ | E | $\begin{array}{\|c} 220 \\ 144 \\ 90 \\ 90 \end{array}$ | á | $\begin{gathered} 240 \\ { }_{2}^{60} \\ 40 \end{gathered}$ |  | $\left.\begin{array}{c} 260 \\ 176 \\ 80 \end{array}\right]$ |  | $\begin{array}{\|c} \hline 300 \\ 192 \\ c 0 \end{array}$ | $\Perp$ | $\begin{gathered} 320 \\ 208 \\ 00 \end{gathered}$ | $\alpha$ | $\begin{gathered} 340 \\ 224 \\ E 0 \end{gathered}$ | 三 | 360 240 50 50 |
| 0001 | , | u | $\begin{array}{\|c\|} \hline 201 \\ 129 \\ 81 \end{array}$ | æ | $\begin{array}{\|c} 221 \\ 145 \\ 91 \\ \hline \end{array}$ | $i$ | $\begin{aligned} & 241 \\ & 161 \\ & \text { A1 } \end{aligned}$ |  | $\left.\begin{array}{c} 261 \\ 177 \\ 81 \end{array}\right]$ | $1$ | $\begin{gathered} 301 \\ 193 \\ c 1 \end{gathered}$ |  | $\begin{gathered} \hline 321 \\ 209 \\ 0 . \end{gathered}$ | $\beta$ | $\begin{aligned} & 341 \\ & 225 \\ & 61 \end{aligned}$ | $\pm$ | 361 |
| 0010 | 2 | é | $\begin{array}{\|c\|} \hline 202 \\ 130 \\ 82 \\ \hline \end{array}$ | EE | $\begin{array}{\|c} \hline 222 \\ 146 \\ 92 \\ \hline \end{array}$ | б | $\begin{aligned} & 242 \\ & 162 \\ & { }^{162} \\ & \hline \end{aligned}$ |  | $\begin{gathered} 2178 \\ 178 \\ 82 \end{gathered}$ |  | $\begin{gathered} 302 \\ 194 \\ c 2 \end{gathered}$ |  | $\begin{gathered} 322 \\ 210 \\ 02 \end{gathered}$ | $\Gamma$ | $\begin{aligned} & 342 \\ & 226 \\ & \text { 326 } \\ & \hline \end{aligned}$ | $\geq$ |  |
| 011 | 3 | a | $\begin{array}{\|c} 2031 \\ 131 \\ 83 \\ \hline \end{array}$ | O | $\begin{gathered} 223 \\ 147 \\ 93 \\ \hline \end{gathered}$ | u | $\begin{aligned} & 243 \\ & 163 \\ & 43 \end{aligned}$ |  | $\begin{gathered} 263 \\ 179 \\ 83 \\ 89 \end{gathered}$ |  | $\begin{array}{\|c} \hline 303 \\ 195 \\ c 3 \end{array}$ | - | $\begin{gathered} 323 \\ 211 \\ 03 \end{gathered}$ | $\Pi$ | $\begin{aligned} & 343 \\ & 222 \\ & \varepsilon 3 \end{aligned}$ | $\leq$ | ${ }^{363}$ |
| 0100 | 4 | $\because$ | $\begin{array}{\|l\|} \hline 204 \\ 132 \\ 84 \end{array}$ | $\because$ | $\begin{array}{\|c} 224 \\ 148 \\ 94 \end{array}$ | n | $\begin{aligned} & 244 \\ & 164 \\ & { }_{A 4} \end{aligned}$ | - | $\begin{array}{\|l\|} \hline 264 \\ 180 \\ 84 \end{array}$ |  | $\begin{array}{\|c\|} \hline 304 \\ 196 \\ c 4 \end{array}$ |  | $\begin{gathered} 324 \\ 321 \\ 04 \\ \hline \end{gathered}$ | $\Sigma$ | $\begin{aligned} & 344 \\ & 228 \\ & E 4 \end{aligned}$ | C | 24 <br> f4 <br> 4 |
| 0101 | 5 | à | $\begin{array}{\|l\|l\|} \hline 205 \\ 133 \\ 85 \end{array}$ | ò | $\begin{gathered} 225 \\ 149 \\ 95 \\ \hline \end{gathered}$ | $\widetilde{N}$ | $\begin{aligned} & 245 \\ & \begin{array}{l} 245 \\ \text { A5 } \end{array} \\ & \hline \end{aligned}$ | $=$ | $\begin{gathered} 265 \\ 181 \\ 85 \end{gathered}$ |  | $\begin{array}{\|c\|} \hline 305 \\ 197 \\ c 5 \\ \hline \end{array}$ | $F$ | $\begin{array}{r} 325 \\ 213 \\ 05 \\ \hline \end{array}$ | $\sigma$ | $\begin{aligned} & 345 \\ & 329 \\ & 65 \end{aligned}$ | $\int$ |  |
| 0110 | 6 | a | $\begin{array}{\|c} 206 \\ 134 \\ 86 \\ \hline 8 \end{array}$ | $\widehat{\mathbf{u}}$ | $\begin{array}{\|c} 226 \\ 150 \\ 96 \\ \hline \end{array}$ | a | $\begin{aligned} & 20 \\ & 246 \\ & { }_{2}^{266} \\ & A 6 \end{aligned}$ |  | $\begin{aligned} & \hline 218 \\ & 182 \\ & 86 \\ & \hline 86 \end{aligned}$ |  | $\begin{array}{\|c} \hline 306 \\ 198 \\ c 6 \\ \hline \end{array}$ |  | $\begin{gathered} 326 \\ 214 \\ 06 \end{gathered}$ | $\mu$ | $\begin{aligned} & 346 \\ & 230 \\ & \text { E6 } \end{aligned}$ | $\div$ | $\begin{array}{r}366 \\ 246 \\ \text { F6 } \\ \hline 86\end{array}$ |
| 0 1 1 | , | C | $\begin{array}{\|c} 207 \\ 135 \\ 87 \\ \hline \end{array}$ | ù | $\begin{array}{\|c} 227 \\ 151 \\ 97 \end{array}$ | o | $\begin{aligned} & 247 \\ & \hline 267 \\ & \text { A7 } \end{aligned}$ |  | $\begin{gathered} 266 \\ 183 \\ 87 \end{gathered}$ |  | $\begin{gathered} 300 \\ 199 \\ c 7 \\ \hline \end{gathered}$ |  | $\begin{gathered} 327 \\ 275 \\ 07 \\ \hline \end{gathered}$ | $\tau$ | $\begin{aligned} & 347 \\ & 231 \\ & \text { E } \\ & \hline \end{aligned}$ | $\approx$ | 367 <br>  <br> 264 <br> F |
| 1000 | 8 | $\widehat{\mathbf{e}}$ | $\begin{array}{\|c} 210 \\ 136 \\ 88 \\ 88 \end{array}$ | $\ddot{y}$ | $\begin{gathered} 230 \\ 152 \\ 98 \end{gathered}$ | i | $\begin{aligned} & 250 \\ & 168 \\ & \text { A8 } \\ & \hline \end{aligned}$ |  | $\begin{array}{\|l\|} \hline 270 \\ 184 \\ 88 \end{array}$ |  | $\begin{array}{\|c} \hline 310 \\ 200 \\ c 8 \end{array}$ | $\#$ | $\begin{array}{\|c} \hline 330 \\ 2316 \\ 08 \end{array}$ | ¢ | $\begin{array}{r} 350 \\ 232 \\ 232 \\ \hline \end{array}$ | $\bigcirc$ | $\begin{array}{r}370 \\ 248 \\ \text { F8 } \\ \hline 8\end{array}$ |
| 0 | 9 | $\ddot{e}$ | $\begin{array}{\|c} 211 \\ 137 \\ 89 \\ 89 \end{array}$ | $\because$ | $\begin{array}{\|c} 231 \\ 153 \\ 99 \end{array}$ | - | $\begin{aligned} & 251 \\ & \text { 269 } \\ & \text { A9 } \\ & \hline \end{aligned}$ | $=$ | $\begin{gathered} 271 \\ 185 \\ 89 \end{gathered}$ |  | $\begin{gathered} 311 \\ 201 \\ c 9 \\ \hline \end{gathered}$ |  | $\begin{gathered} 331 \\ 217 \\ 09 \end{gathered}$ | $\theta$ | $\begin{aligned} & 351 \\ & 233 \\ & 69 \end{aligned}$ | - | $\begin{array}{r}371 \\ 249 \\ \text { f9 } \\ \hline 9\end{array}$ |
| 0 | 16 | è | $\begin{array}{\|c} 212 \\ 138 \\ 8 A \\ 8 A \end{array}$ | u | $\begin{array}{\|c} \hline 232 \\ 154 \\ 94 \\ \hline \end{array}$ | $\longrightarrow$ | $\begin{aligned} & 252 \\ & 170 \\ & \text { AA } \\ & \hline \end{aligned}$ |  | $\begin{gathered} 2727 \\ 186 \\ 8 A \end{gathered}$ |  | $\begin{array}{\|c} \hline 312 \\ 202 \\ C A \\ \hline \end{array}$ |  | $\begin{array}{\|c} \hline 332 \\ 218 \\ 04 \\ \hline \end{array}$ | $\Omega$ | $\begin{aligned} & 352 \\ & 324 \\ & \text { EA } \\ & \hline \end{aligned}$ | - | 372 250 |
| 1011 | 11 | $\because$ | $\begin{array}{\|c} 213 \\ 139 \\ 88 \\ \hline 8 \end{array}$ | ¢ | $\begin{array}{\|c} \hline 233 \\ 155 \\ 98 \end{array}$ | 1/2 | $\begin{aligned} & 253 \\ & 171 \\ & \text { AB } \\ & \hline \end{aligned}$ |  | $\begin{array}{\|c} 273 \\ 187 \\ 88 \\ \hline \end{array}$ |  | $\begin{array}{\|c} \hline 313 \\ 203 \\ \text { cB } \end{array}$ |  | $\begin{array}{\|c} 333 \\ 219 \\ 08 \end{array}$ | $\delta$ | $\begin{gathered} 353 \\ 335 \\ E \end{gathered}$ | $\sqrt{ }$ | $\begin{array}{r}373 \\ 251 \\ \text { 25 } \\ \text { f8 } \\ \hline 8\end{array}$ |
| 1100 | 12 | 个 | $\begin{array}{\|l\|l\|} \hline 2140 \\ 140 \\ \text { BC } \end{array}$ | £ | $\begin{array}{\|c} \hline 234 \\ 156 \\ 90 \end{array}$ | $1 / 4$ | $\begin{aligned} & 254 \\ & 212 \\ & A C \\ & \hline \end{aligned}$ | $\ldots$ | $\begin{array}{\|c\|} \hline 27 \\ 188 \\ 88 \\ \hline \end{array}$ |  | $\begin{array}{\|c\|c} \hline 314 \\ 204 \\ c c \end{array}$ |  | $\begin{array}{\|c\|} \hline 334 \\ 202 \\ 00 \\ \hline 0 \end{array}$ | $\infty$ | $\begin{aligned} & 354 \\ & 336 \\ & \text { EC } \end{aligned}$ | n | $\begin{array}{r}374 \\ 252 \\ \text { FC } \\ \text { F } \\ \\ \hline 25\end{array}$ |
| 1101 | 13 | i | $\begin{aligned} & 215 \\ & 141 \\ & 14 \\ & 80 \end{aligned}$ | ¥ | $\begin{array}{\|c} 235 \\ 157 \\ 90 \end{array}$ | i | $\begin{aligned} & 255 \\ & 253 \\ & 173 \\ & \text { AD } \end{aligned}$ | II | $\begin{array}{\|c\|} \hline 275 \\ 189 \\ 80 \\ \hline \end{array}$ |  | $\begin{array}{\|c} \hline 315 \\ 205 \\ c 0 \end{array}$ |  | $\begin{array}{\|c\|c\|} \hline 335 \\ 221 \\ 00 \\ \hline \end{array}$ | $\varnothing$ | $\begin{aligned} & 355 \\ & \text { 237 } \\ & \text { EO } \\ & \hline \end{aligned}$ | 2 | $\begin{array}{r}375 \\ 253 \\ \text { F0 } \\ \hline\end{array}$ |
| 0 | 14 | $\ddot{\text { A }}$ | $\begin{array}{\|c\|c\|c\|} \hline 2162 \\ 142 \\ 8 E \end{array}$ | $\mathrm{P}_{\mathrm{t}}$ | $\begin{gathered} 236 \\ 158 \\ 99 \end{gathered}$ | « | $\begin{aligned} & 256 \\ & 174 \\ & A E \end{aligned}$ | $=$ | $\begin{array}{\|c\|c\|} \hline 276 \\ 190 \\ 8 E \\ \hline \end{array}$ | $\square$ | $\begin{gathered} \hline 36 \\ 306 \\ c E \\ \hline \end{gathered}$ |  | $\begin{gathered} \\ \hline 336 \\ 222 \\ 0 \mathrm{E} \\ \hline \end{gathered}$ | $\epsilon$ | 356 <br> 238 <br> EE <br>  |  | $\begin{array}{r}376 \\ 254 \\ \text { FE } \\ \hline\end{array}$ |
| 1 ' | 15 | A | $\begin{array}{\|c} 217 \\ 143 \\ 8 F \\ \hline \end{array}$ | $f$ | $\begin{array}{\|c} 237 \\ 159 \\ 99 \\ \hline \end{array}$ | " | $\begin{aligned} & 257 \\ & 175 \\ & A F \end{aligned}$ |  | $\begin{array}{\|c\|} \hline 271 \\ 191 \\ 8 F \\ \hline \end{array}$ | $1$ | $\begin{gathered} 311 \\ 207 \\ \text { cF } \\ \hline \end{gathered}$ |  | $\begin{gathered} 337 \\ 223 \\ \text { 237 } \end{gathered}$ | ก | 357 <br> 239 <br> EF | SP | 371 255 FF |

Figure A-6 STD Character Set 8-15

|  |  | $\begin{array}{ccc} \hline{ }^{0}{ }^{\circ} & \\ & { }_{0} & 0 \\ \hline \text { COLUMN } \\ 0 \end{array}$ |  | $\begin{array}{llll} 0 & 0 & \\ & 0 \end{array}$ |  | ${ }^{0} \quad{ }_{0}$ |  | $\begin{array}{llll} \hline 0 & 0 & \\ & 1 & \\ & \end{array}$ |  | $\begin{array}{lllll}0 & & & \\ & & & \\ & & 0 & 0\end{array}$ |  |  |  |  |  | $\begin{array}{llll}0 & & \\ & 1 & \\ & & 1 & \\ & & & \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| 00000 | 0 |  |  | $\begin{aligned} & \text { Blank } \\ & \text { nutlu } \end{aligned}$ | 0 0 0 |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | @ | $\begin{gathered} 100 \\ 64 \\ 40 \end{gathered}$ | P | $\begin{array}{r} 120 \\ 80 \\ 50 \end{array}$ | - | $\begin{aligned} & 140 \\ & 96 \\ & 60 \end{aligned}$ | p | $\begin{array}{r}160 \\ 112 \\ 70 \\ \hline 18\end{array}$ |
| 00001 | 1 | $\bullet$ | 1 |  | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{array}{r} 101 \\ 65 \\ 41 \end{array}$ | 0 | $\begin{array}{r} 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{gathered} 141 \\ 97 \\ 61 \end{gathered}$ | 9 | $\begin{array}{r} 161 \\ 113 \\ 71 \\ \hline \end{array}$ |
| 0010 | 2 | $\because$ | 2 2 2 | $\downarrow$ | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | ' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \end{aligned}$ | B | $\begin{array}{r} 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{array}{r} 122 \\ 82 \\ 52 \end{array}$ | b | $\begin{array}{r} 142 \\ 98 \\ 62 \end{array}$ | r | $\begin{array}{r} 162 \\ 114 \\ 72 \end{array}$ |
| 0 0 011 | 3 |  | $\begin{aligned} & \hline 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | $1!$ | $\begin{aligned} & 23 \\ & 19 \\ & 13 \\ & \hline \end{aligned}$ | \# | $\begin{aligned} & \hline 43 \\ & 35 \\ & 23 \\ & \hline \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \\ \hline \end{array}$ | S | $\begin{array}{r} 163 \\ 115 \\ 73 \\ \hline \end{array}$ |
| 0100 | 4 |  | 4 4 4 4 | $9$ | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \end{aligned}$ | D | $\begin{gathered} 104 \\ 68 \\ 44 \end{gathered}$ | T | $\begin{gathered} 124 \\ 84 \\ 54 \end{gathered}$ | d | $\begin{gathered} 144 \\ 100 \\ 64 \end{gathered}$ | t | $\begin{gathered} 164 \\ 116 \\ 74 \end{gathered}$ |
| 0 1 0 O | 5 | $4$ | 5 5 5 5 | $\delta$ | $\begin{aligned} & 25 \\ & 21 \\ & 15 \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \end{aligned}$ | $E$ | $\begin{gathered} 105 \\ 69 \\ 45 \end{gathered}$ | U | $\begin{array}{r} 125 \\ 85 \\ 55 \end{array}$ | e | $\begin{array}{r} 145 \\ 101 \\ 65 \end{array}$ | u | $\begin{array}{r} 165 \\ 117 \\ 75 \end{array}$ |
| 0110 | 6 |  | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | 8 | $\begin{aligned} & 46 \\ & 38 \\ & 26 \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \end{aligned}$ | F | $\begin{aligned} & 106 \\ & 70 \\ & 46 \end{aligned}$ | V | $\begin{gathered} 126 \\ 86 \\ 56 \end{gathered}$ | $f$ | $\begin{gathered} 146 \\ 102 \\ 66 \end{gathered}$ | v | $\begin{array}{r} 166 \\ 118 \\ 76 \end{array}$ |
| 0 1 1 1 | , |  | 7 7 7 | $\downarrow$ | $\begin{aligned} & 27 \\ & 23 \\ & 17 \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{r} 107 \\ 71 \\ 47 \end{array}$ | W | $\begin{array}{r} 127 \\ 87 \\ 57 \end{array}$ | $g$ | $\begin{array}{r} 147 \\ 103 \\ 67 \end{array}$ | w | $\begin{array}{r} 167 \\ 119 \\ 77 \end{array}$ |
| 1000 | 8 | - | $\begin{array}{\|c} 10 \\ 8 \\ 8 \\ \hline \end{array}$ |  | $\begin{aligned} & 30 \\ & 24 \\ & 18 \end{aligned}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \end{aligned}$ | H | $\begin{array}{r} 110 \\ 72 \\ 48 \end{array}$ | X | $\begin{array}{r} 130 \\ 88 \\ 58 \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | X | $\begin{gathered} 170 \\ 120 \\ 78 \end{gathered}$ |
| 001 | 9 | 0 | $\begin{array}{\|c} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ | $\downarrow$ | $\begin{aligned} & 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \\ & \hline \end{aligned}$ | 1 | $\begin{array}{r} 111 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{r} 131 \\ 89 \\ 59 \\ \hline \end{array}$ | i | $\begin{array}{r} 151 \\ 105 \\ 69 \\ \hline \end{array}$ | y | $\begin{array}{r} 171 \\ 121 \\ 79 \\ \hline \end{array}$ |
| 1010 | 10 |  | $\begin{gathered} 12 \\ 10 \\ A \end{gathered}$ | $\longrightarrow$ | $\begin{aligned} & 32 \\ & 26 \\ & 1 \mathrm{~A} \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 A \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 \mathrm{~A} \end{aligned}$ | J | $\begin{aligned} & 112 \\ & 74 \\ & 4 \mathrm{~A} \end{aligned}$ | 2 | $\begin{gathered} 132 \\ 90 \\ 5 A \end{gathered}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 \mathrm{~A} \end{aligned}$ | 2 | $\begin{aligned} & 172 \\ & 122 \\ & 7 A \end{aligned}$ |
| $0 \quad 1$ | 11 | $\sigma^{7}$ | $\begin{gathered} 13 \\ 11 \\ 8 \end{gathered}$ | $\longleftarrow$ | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \end{aligned}$ | [ | $\begin{gathered} 133 \\ 91 \\ 58 \end{gathered}$ | k | $\begin{array}{r} 153 \\ 107 \\ 68 \end{array}$ | $\{$ | $\begin{array}{r}173 \\ 123 \\ 78 \\ \hline 174\end{array}$ |
| 1 1000 | 12 | $\Upsilon$ | $\begin{aligned} & 14 \\ & 12 \\ & c \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 10 \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 24 \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 C \end{aligned}$ | L | $\begin{gathered} 114 \\ 76 \\ 4 C \end{gathered}$ | 1 | $\begin{array}{r} 134 \\ 92 \\ 5 C \end{array}$ | 1 | $\begin{array}{r} 154 \\ 108 \\ 6 \mathrm{C} \end{array}$ | 1 | $\begin{aligned} & 174 \\ & 124 \\ & 70 \end{aligned}$ |
| 101 | 13 | $f$ | $\begin{array}{\|c\|} \hline 15 \\ 13 \\ 0 \end{array}$ | $\longleftrightarrow$ | $\begin{aligned} & 35 \\ & 29 \\ & 10 \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \end{aligned}$ | $=$ | $\begin{aligned} & 75 \\ & 61 \\ & 30 \end{aligned}$ | M | $\begin{array}{r} 115 \\ 77 \\ 40 \end{array}$ | $]$ | $\begin{array}{r} 135 \\ 93 \\ 50 \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \end{aligned}$ | $\}$ | $\begin{array}{r} 175 \\ 125 \\ 70 \end{array}$ |
| $1 \quad 0$ | 14 | $\delta$ | $\begin{gathered} 16 \\ 14 \\ E \end{gathered}$ | A | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \end{aligned}$ | N | $\begin{gathered} 116 \\ 78 \\ 4 E \end{gathered}$ | $\wedge$ | $\begin{array}{r} 136 \\ 94 \\ 5 E \end{array}$ | n | $\begin{gathered} 156 \\ 110 \\ 66 \end{gathered}$ | $\checkmark$ | $\begin{array}{r}176 \\ 126 \\ 78 \\ \hline 172\end{array}$ |
| 111 | 15 | - | 17 15 $F$ | $\nabla$ | $\begin{aligned} & 37 \\ & 31 \\ & 17 \\ & \hline \end{aligned}$ | / | $\begin{aligned} & 57 \\ & 47 \\ & 2 F \\ & \hline \end{aligned}$ | $?$ | 77 <br> 63 <br> $3 F$ | 0 | $\begin{array}{r} 117 \\ 79 \\ 4 \mathrm{~F} \end{array}$ | - | $\begin{aligned} & 137 \\ & 95 \\ & 95 \\ & 5 \mathrm{~F} \end{aligned}$ | 0 | $\begin{aligned} & 157 \\ & 111 \\ & 67 \end{aligned}$ | $\triangle$ | $\begin{array}{r}177 \\ 127 \\ \hline 7 \\ \hline\end{array}$ |

KEY

ASCII CHARACTER ESC \begin{tabular}{|l|l|l}
\hline \& 33 <br>

\& 27 \& | OCTAL |
| :--- |
| DECIMAL |
| HEX |

\end{tabular}

Figure A-7 ST2 Character Set 0-7

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
88 \\
87 85 BITS
\end{tabular}}} \& \multicolumn{2}{|l|}{\(1{ }^{1} 0\)} \& \multicolumn{2}{|l|}{\({ }^{1} 00\),} \& \multicolumn{2}{|l|}{' 0 ,} \& \multicolumn{2}{|l|}{' 0,} \& \multicolumn{2}{|l|}{' 1 0} \& \multicolumn{2}{|l|}{\({ }^{1} 10\),} \& \multicolumn{2}{|l|}{' 1 ,} \& \multicolumn{2}{|l|}{' ',} \\
\hline \& \& \multicolumn{2}{|c|}{8} \& \multicolumn{2}{|c|}{9} \& \multicolumn{2}{|c|}{10} \& \multicolumn{2}{|l|}{11} \& \multicolumn{2}{|l|}{12} \& \multicolumn{2}{|l|}{13} \& \multicolumn{2}{|l|}{14} \& \multicolumn{2}{|l|}{15} \\
\hline 000 \& 0 \& Ç \& \[
\begin{array}{|c|}
\hline 200 \\
128 \\
80 \\
\hline 80
\end{array}
\] \& E \& \[
\begin{array}{|c}
220 \\
144 \\
90 \\
90
\end{array}
\] \& á \& \[
\begin{aligned}
\& 240 \\
\& 160 \\
\& \text { 10 }
\end{aligned}
\] \& \& \[
\begin{gathered}
260 \\
196 \\
80
\end{gathered}
\] \&  \& \[
\begin{array}{|l|l|}
\hline 300 \\
192 \\
c 0 \\
\hline
\end{array}
\] \& \[
I
\] \& \[
\begin{gathered}
320 \\
208 \\
00
\end{gathered}
\] \& \(\alpha\) \& \begin{tabular}{|l|}
340 \\
224 \\
E0 \\
\hline
\end{tabular} \& 三 \& \begin{tabular}{|c}
360 \\
260 \\
f0 \\
\hline 1
\end{tabular} \\
\hline 00 \& , \& ui \& \[
\begin{array}{|c|}
\hline 201 \\
129 \\
81 \\
\hline
\end{array}
\] \& æ \& \[
\begin{array}{|c}
\hline 221 \\
105 \\
91
\end{array}
\] \& ! \& \[
\begin{array}{r}
241 \\
161 \\
41 \\
41
\end{array}
\] \&  \& \[
\begin{array}{|c}
2617 \\
171 \\
8
\end{array}
\] \& \[
\perp
\] \& \[
\begin{gathered}
301 \\
193 \\
c 1 \\
c
\end{gathered}
\] \& \& \[
\begin{gathered}
321 \\
209 \\
01
\end{gathered}
\] \& \(\beta\) \& \[
\begin{aligned}
\& 341 \\
\& \begin{array}{c}
325 \\
\text { E1 }
\end{array}
\end{aligned}
\] \& \(\pm\) \& 361
261
51
51
1 \\
\hline 01 \& 2 \& r \& \[
\begin{array}{|c}
202 \\
130 \\
82 \\
82
\end{array}
\] \& AE \& \[
\begin{array}{|c}
222 \\
146 \\
92 \\
92
\end{array}
\] \& б \& \[
\begin{gathered}
242 \\
162 \\
122 \\
A 2
\end{gathered}
\] \& \& \[
\begin{gathered}
262 \\
178 \\
82 \\
8
\end{gathered}
\] \& \& \[
\begin{array}{|c}
\hline 302 \\
194 \\
c \\
\hline
\end{array}
\] \& \& \[
\begin{gathered}
\hline 322 \\
210 \\
02
\end{gathered}
\] \& \(\Gamma\) \& \[
\begin{aligned}
\& 322 \\
\& \hline 226 \\
\& \varepsilon 2
\end{aligned}
\] \& \(\geq\) \& \(\begin{array}{r}362 \\ 242 \\ 242 \\ F 2 \\ \hline 2\end{array}\) \\
\hline 0 \& 3 \& ล \& \[
\begin{array}{|c|}
\hline 203 \\
131 \\
83 \\
\hline
\end{array}
\] \& O \& \[
\begin{gathered}
223 \\
147 \\
93
\end{gathered}
\] \& u \& \[
\begin{aligned}
\& 243 \\
\& 163 \\
\& A_{3}
\end{aligned}
\] \& \& \[
\begin{gathered}
263 \\
\hline 19 \\
89 \\
83
\end{gathered}
\] \& \& \[
\begin{array}{|c}
\hline 303 \\
195 \\
c 3
\end{array}
\] \& I \& \[
\begin{gathered}
323 \\
211 \\
03 \\
0
\end{gathered}
\] \& \(\Pi\) \& \[
\begin{aligned}
\& 343 \\
\& 227 \\
\& 63 \\
\& \hline
\end{aligned}
\] \& \(\leq\) \& \(\begin{array}{r}363 \\ 263 \\ \text { F3 } \\ \hline\end{array}\) \\
\hline 100 \& 4 \& \(\because\) \& \[
\begin{gathered}
204 \\
132 \\
84 \\
\hline
\end{gathered}
\] \& \(\because\) \& \[
\begin{gathered}
224 \\
\hline 148 \\
94 \\
\hline
\end{gathered}
\] \& n \& \[
\begin{aligned}
\& 244 \\
\& \hline 164 \\
\& A 4 \\
\& \hline
\end{aligned}
\] \& - \& \[
\begin{array}{|l|}
\hline 264 \\
180 \\
84 \\
\hline
\end{array}
\] \& \& \[
\begin{array}{|l}
\hline 304 \\
196 \\
C_{4} \\
\hline
\end{array}
\] \& \[
E
\] \& \[
\begin{gathered}
324 \\
\hline 212 \\
04
\end{gathered}
\] \& \(\Sigma\) \& \[
\begin{array}{|l|l|}
\hline 344 \\
228 \\
E 4 \\
\hline
\end{array}
\] \& C \& \(\begin{array}{r}364 \\ 284 \\ \text { f4 } \\ \text { f4 } \\ \hline\end{array}\) \\
\hline 0101 \& 5 \& à \& \[
\begin{array}{|c}
205 \\
183 \\
85 \\
85
\end{array}
\] \& 0 \& \[
\begin{array}{|c}
225 \\
149 \\
95 \\
\hline
\end{array}
\] \& \(\widetilde{N}\) \& \[
\begin{aligned}
\& 245 \\
\& \hline 165 \\
\& \text { A5 } \\
\& \hline
\end{aligned}
\] \& \(=\) \& \[
\begin{gathered}
265 \\
\hline 181 \\
85 \\
85
\end{gathered}
\] \& \& \[
\begin{array}{|c}
305 \\
197 \\
65
\end{array}
\] \& \[
F
\] \& \[
\begin{array}{r}
325 \\
213 \\
05 \\
05
\end{array}
\] \& \(\sigma\) \& \[
\begin{array}{|l|l|}
\hline 345 \\
229 \\
65 \\
\hline
\end{array}
\] \& \(J\) \& \begin{tabular}{l}
365 \\
245 \\
F5 \\
\hline
\end{tabular} \\
\hline ' 1 \& 6 \& a \& \[
\begin{array}{|c}
206 \\
134 \\
86 \\
\hline
\end{array}
\] \& ¢ \& \[
\begin{gathered}
226 \\
150 \\
96 \\
\hline
\end{gathered}
\] \& \(\widetilde{0}\) \& \(\begin{array}{r}246 \\ 166 \\ \hline 16 \\ \hline 16\end{array}\) \& - \& \[
\begin{gathered}
2186 \\
\hline 182 \\
86
\end{gathered}
\] \& \& \[
\begin{array}{|c}
\hline 306 \\
198 \\
c 6 \\
\hline
\end{array}
\] \& [ \& \[
\begin{aligned}
\& \hline 326 \\
\& 214 \\
\& 06
\end{aligned}
\] \& \(\mu\) \& \[
\begin{aligned}
\& \hline 346 \\
\& 230 \\
\& E 6
\end{aligned}
\] \& \(\div\) \& \begin{tabular}{l}
366 \\
246 \\
56 \\
\hline 68
\end{tabular} \\
\hline 0111 \& \& Ç \& \[
\begin{array}{|l|}
\hline 207 \\
135 \\
\hline 87
\end{array}
\] \& ù \& \[
\begin{gathered}
201 \\
251 \\
97 \\
\hline 9
\end{gathered}
\] \& 0 \& \[
\begin{aligned}
\& 207 \\
\& \hline 107 \\
\& 167 \\
\& A 7
\end{aligned}
\] \&  \& \[
\begin{gathered}
267 \\
\hline 183 \\
87 \\
87
\end{gathered}
\] \& \& \[
\begin{gathered}
301 \\
199 \\
c \\
\hline
\end{gathered}
\] \& \& \[
\begin{gathered}
215 \\
0
\end{gathered}
\] \& \(\tau\) \& \[
\begin{gathered}
347 \\
231 \\
231 \\
E 7
\end{gathered}
\] \& \(\approx\) \& \begin{tabular}{l}
367 \\
\hline 24 \\
24 \\
\hline
\end{tabular} \\
\hline 000 \& 8 \& \(\widehat{\text { e }}\) \& \[
\begin{array}{|c}
\hline 210 \\
136 \\
88 \\
88
\end{array}
\] \& \(\ddot{y}\) \& \[
\begin{gathered}
230 \\
152 \\
98 \\
\hline
\end{gathered}
\] \& c \& \[
\begin{aligned}
\& \hline 250 \\
\& 168 \\
\& 48 \\
\& \hline
\end{aligned}
\] \& = \& \[
\begin{aligned}
\& 270 \\
\& 184 \\
\& 88 \\
\& \hline
\end{aligned}
\] \& \(\square\) \& \[
\begin{array}{|c}
\hline 310 \\
200 \\
\\
\hline
\end{array}
\] \&  \& \[
\begin{gathered}
330 \\
216 \\
08 \\
08
\end{gathered}
\] \& ¢ \& \[
\begin{aligned}
\hline 350 \\
322 \\
E 8 \\
\hline
\end{aligned}
\] \& \(\bigcirc\) \& \(\begin{array}{r}370 \\ 208 \\ \text { F88 } \\ \hline 8\end{array}\) \\
\hline 0 \& 9 \& \(\because\) \& \[
\begin{gathered}
211 \\
137 \\
139 \\
89
\end{gathered}
\] \& 0 \& \[
\begin{gathered}
231 \\
153 \\
99 \\
\hline
\end{gathered}
\] \& a \& \(\begin{array}{r}251 \\ 169 \\ 49 \\ \hline 9\end{array}\) \& - \& \[
\begin{array}{r}
211 \\
185 \\
89 \\
\hline 9
\end{array}
\] \& \& \[
\begin{gathered}
311 \\
201 \\
c 9 \\
\hline 9
\end{gathered}
\] \& \[
\pm
\] \& \[
\begin{array}{r}
331 \\
217 \\
217 \\
09 \\
\hline
\end{array}
\] \& \(\theta\) \& \[
\begin{gathered}
\hline 351 \\
\hline 233 \\
\text { 239 } \\
\hline
\end{gathered}
\] \& - \& \(\begin{array}{r}371 \\ 249 \\ 59 \\ \hline 9\end{array}\) \\
\hline \(0 \quad 0\) \& 10 \& è \& \[
\begin{array}{|c}
\hline 212 \\
138 \\
8 A \\
\hline
\end{array}
\] \& u \& \[
\begin{gathered}
932 \\
\hline 154 \\
94 \\
\hline
\end{gathered}
\] \& \(\widetilde{A}\) \& \[
\begin{aligned}
\& 252 \\
\& 170 \\
\& \text { AA } \\
\& \hline
\end{aligned}
\] \& \& \[
\begin{aligned}
\& 272 \\
\& 186 \\
\& 8 A
\end{aligned}
\] \& \[
\pm
\] \& \[
\begin{array}{|c}
312 \\
202 \\
C A \\
\hline
\end{array}
\] \& \& \[
\begin{aligned}
\& 332 \\
\& 218 \\
\& 04 \\
\& \hline
\end{aligned}
\] \& \(\Omega\) \& \[
\begin{aligned}
\& 352 \\
\& 234 \\
\& \text { 23 } \\
\& \hline
\end{aligned}
\] \& - \& 372
250
FA
F \\
\hline 1 01 \& 11 \& \(\because\) \& \[
\begin{gathered}
213 \\
139 \\
88 \\
\hline
\end{gathered}
\] \& \(\varnothing\) \& \[
\begin{gathered}
233 \\
155 \\
98 \\
\hline
\end{gathered}
\] \& \[
l
\] \& \[
\begin{aligned}
\& 253 \\
\& 171 \\
\& \text { AB } \\
\& \hline
\end{aligned}
\] \& \[
7
\] \& \[
\begin{aligned}
\& 273 \\
\& 187 \\
\& 88 \\
\& \hline 8
\end{aligned}
\] \& \& \[
\begin{array}{|c|}
\hline 313 \\
203 \\
\text { CB } \\
\hline
\end{array}
\] \& \& \[
\begin{aligned}
\& 333 \\
\& 139 \\
\& 08 \\
\& \hline
\end{aligned}
\] \& \(\delta\) \& \[
\begin{aligned}
\& 353 \\
\& 335 \\
\& E 8 \\
\& \hline
\end{aligned}
\] \& \(\sqrt{ }\) \& 373

251
F8
F8 <br>

\hline 100 \& 12 \& ̂ \& $$
\begin{array}{|c|}
\hline 214 \\
140 \\
80 \\
\hline
\end{array}
$$ \& £ \& \[

$$
\begin{array}{|l|}
\hline 236 \\
156 \\
90
\end{array}
$$

\] \& 'n \& \[

$$
\begin{aligned}
& 254 \\
& 172 \\
& A C \\
& \hline
\end{aligned}
$$

\] \&  \& \[

$$
\begin{gathered}
274 \\
188 \\
\text { BC }
\end{gathered}
$$

\] \& = \& \[

$$
\begin{array}{|c|c|}
\hline 314 \\
204 \\
c \mathrm{c}
\end{array}
$$

\] \& \& \[

$$
\begin{aligned}
& 334 \\
& 230 \\
& 06 \\
& \hline
\end{aligned}
$$

\] \& $\infty$ \& \[

$$
\begin{aligned}
& 354 \\
& 236 \\
& E C \\
& \hline
\end{aligned}
$$

\] \& n \& | 374 |
| :--- |
|  |
| 252 |
| FC |
| 65 | <br>

\hline 0 \& 13 \& 1 \& $$
\begin{array}{|l|}
215 \\
141 \\
80 \\
\hline 80 \\
\hline
\end{array}
$$ \& $\varnothing$ \& \[

$$
\begin{aligned}
& 235 \\
& 157 \\
& 90
\end{aligned}
$$

\] \& 1 \& \[

$$
\begin{aligned}
& \text { AC } \\
& 115 \\
& 173 \\
& \text { AD }
\end{aligned}
$$

\] \& \[

I

\] \& \[

$$
\begin{aligned}
& 27 \\
& 189 \\
& 80 \\
& 80
\end{aligned}
$$

\] \& \& \[

$$
\begin{array}{|c|}
\hline 315 \\
205 \\
c 0 \\
\hline
\end{array}
$$

\] \& \& $\begin{array}{r}335 \\ 221 \\ 00 \\ \hline\end{array}$ \& $\varnothing$ \& | 355 |
| :--- |
| 337 |
| 23 |
| EO | \& 2 \& $\begin{array}{r}375 \\ \\ 253 \\ \text { FO } \\ \hline\end{array}$ <br>

\hline 1 1 1 0 \& 14 \& $\ddot{A}$ \& \[
$$
\begin{array}{|c}
216 \\
142 \\
8 E \\
8 E
\end{array}
$$

\] \& レ. \& \[

$$
\begin{array}{|c}
\hline 236 \\
158 \\
99
\end{array}
$$

\] \& 3 \& \[

$$
\begin{aligned}
& 256 \\
& 174 \\
& A E
\end{aligned}
$$

\] \&  \& \[

$$
\begin{aligned}
& 276 \\
& 190 \\
& 8 E \\
& \hline
\end{aligned}
$$

\] \& \[

\pm

\] \& \[

$$
\begin{array}{|c|c}
\hline 316 \\
206 \\
C E
\end{array}
$$

\] \& \& \[

$$
\begin{aligned}
& 336 \\
& 222 \\
& 0 E \\
& \hline
\end{aligned}
$$

\] \& $\epsilon$ \& \[

$$
\begin{gathered}
356 \\
238 \\
\text { EE } \\
\hline
\end{gathered}
$$
\] \& d \& $\begin{array}{r}376 \\ \hline 254 \\ \hline 8 . \\ \hline\end{array}$ <br>

\hline 1 , \& is \& A \& $$
\begin{gathered}
217 \\
143 \\
8 \mathrm{~F} \\
\hline
\end{gathered}
$$ \& $1 \cdot$ \& \[

$$
\begin{array}{|c}
231 \\
159 \\
99
\end{array}
$$
\] \& J \& 257

115

AF \& - \& $$
\begin{gathered}
277 \\
199 \\
8 F
\end{gathered}
$$ \&  \& \[

$$
\begin{array}{|c|c}
\hline 317 \\
207 \\
c
\end{array}
$$

\] \& \& | 337 |
| :--- |
| 233 |
| 28 | \& $\bigcirc$ \& 357

239
EF \& SP \& 371

255
F <br>
\hline
\end{tabular}

| Row |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{84}{\text { BITS } 8281}$ | $\begin{array}{llll} \hline \text { B7 } & 0 & & \\ \text { B6 } & & 0 & \\ \text { B5 } & & & 0 \end{array}$ |  | ${ }^{0}{ }^{1}$ |  | ${ }^{0} 1$ |  |  |  | ${ }^{1} 0$ |  | ${ }^{1} 0$ |  | ${ }^{1}$ ' 0 |  | ${ }^{1} 1$, |  |
| 0 | 0000 | NUL | $\begin{array}{\|l\|l\|} \hline 0 \\ 0 \\ 0 \\ \hline \end{array}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \\ & \hline \end{aligned}$ | 0 | $\begin{array}{\|l\|l\|} \hline \begin{array}{l} 48 \\ 48 \\ 30 \\ \hline \end{array} \\ \hline \end{array}$ | @ | $\begin{array}{\|c\|} \hline 100 \\ 64 \\ 40 \\ \hline \end{array}$ | P | $\begin{aligned} & 120 \\ & 80 \\ & 50 \\ & 50 \end{aligned}$ | ¢ | $\begin{array}{\|c\|} \hline 10 \\ 96 \\ 60 \\ \hline \end{array}$ | p | 160 <br> 112 <br> 70 <br> 18 |
| 1 | 0001 |  | $\left[\begin{array}{l} 1 \\ i \end{array}\right.$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | $!$ | $\begin{aligned} & 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{array}{\|l\|} \hline 61 \\ 49 \\ 31 \end{array}$ | A | $\begin{array}{\|r\|} \hline 101 \\ 65 \\ 41 \\ \hline \end{array}$ | 0 | $\left.\begin{array}{c} 181 \\ 81 \\ 51 \end{array}\right]$ | a | $\begin{array}{\|l\|} 191 \\ 97 \\ 61 \\ \hline \end{array}$ | 9 | 161 <br> 111 <br> 111 <br> 71 <br> 12 |
| 2 | 0010 |  | $\begin{array}{\|l} \hline 2 \\ 2 \\ 2 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 22 \\ 18 \\ 12 \\ \hline \end{array}$ | " | $\begin{array}{\|l} \hline 42 \\ 34 \\ 22 \\ \hline \end{array}$ | 2 | $\begin{array}{\|l\|l\|} \hline 62 \\ 50 \\ 32 \\ \hline \end{array}$ | B | $\begin{array}{\|c\|} \hline 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{aligned} & 182 \\ & 82 \\ & 52 \\ & \hline \end{aligned}$ | b | $\begin{array}{\|c\|} \hline 142 \\ 98 \\ 62 \\ \hline \end{array}$ | r | 162 <br> 114 <br> 72 <br> 12 <br> 15 |
| 3 | 0011 |  | $\begin{array}{\|l\|} \hline 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{array}{\|l} \hline 23 \\ 19 \\ 13 \\ \hline \end{array}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \\ & \hline \end{aligned}$ | 3 | $\begin{array}{\|l\|} \hline 63 \\ 51 \\ 33 \\ \hline \end{array}$ | C | $\begin{array}{\|c\|} \hline 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{gathered} 183 \\ 83 \\ 53 \\ \hline \end{gathered}$ | c | $\begin{array}{\|c} 143 \\ 99 \\ 63 \\ \hline \end{array}$ | s | 163 <br> 115 <br> 73 <br> 16 |
| 4 | 0100 |  | $\begin{array}{\|l\|} \hline 4 \\ 4 \\ 4 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 24 \\ 20 \\ 14 \\ \hline \end{array}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \\ & 24 \end{aligned}$ | 4 | $\begin{array}{\|l\|l\|} \hline 64 \\ 52 \\ 34 \\ \hline \end{array}$ | D | $\begin{array}{\|l\|} \hline 104 \\ 68 \\ 44 \\ \hline \end{array}$ | T | $\begin{aligned} & 124 \\ & 84 \\ & 84 \\ & 54 \end{aligned}$ | d | $\begin{array}{\|c} 144 \\ 100 \\ 64 \\ \hline \end{array}$ | t | 164 <br> 116 <br> 74 <br> 74 <br> 16 |
| 5 | 0101 |  | $\begin{array}{\|l\|} \hline 5 \\ 5 \\ 5 \\ \hline \end{array}$ |  | $\left[\begin{array}{l} 25 \\ 21 \\ 15 \end{array}\right.$ | \% | $\left[\begin{array}{l} 45 \\ 37 \\ 25 \end{array}\right]$ | 5 | $\begin{aligned} & 65 \\ & \hline 63 \\ & 55 \\ & \hline \end{aligned}$ | E | $\begin{array}{\|c} 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{r} 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{array}{\|c\|} \hline 145 \\ 101 \\ 65 \\ \hline \end{array}$ | u | 165 <br> 117 <br> 75 <br> 76 |
| 6 | 0110 |  | $\begin{array}{\|l\|} \hline 6 \\ 6 \\ \hline 6 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|l} \hline 26 \\ 22 \\ 16 \\ \hline \end{array}$ | \& | $\begin{array}{\|l\|} \hline 46 \\ 38 \\ 26 \\ \hline \end{array}$ | 6 | $\begin{array}{\|l\|l} \hline 66 \\ 54 \\ 36 \\ \hline \end{array}$ | F | $\begin{array}{\|l\|} \hline 106 \\ 70 \\ 46 \\ \hline \end{array}$ | V | $\begin{array}{\|} \hline 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{array}{\|l\|} \hline 196 \\ 102 \\ 66 \\ \hline \end{array}$ | v | 166 <br> 118 <br> 76 <br> 76 <br> 16 |
| 7 | 0111 |  | $\begin{array}{\|l\|} \hline 7 \\ 7 \\ 7 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} 27 \\ 23 \\ 17 \\ \hline \end{array}$ | , | $\begin{aligned} & \hline 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & \hline 65 \\ & 57 \\ & \hline 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{\|} 1071 \\ 71 \\ 77 \\ \hline \end{array}$ | W | $\begin{gathered} 122 \\ 87 \\ 57 \\ 57 \end{gathered}$ | 9 | $\left[\begin{array}{c} 147 \\ 103 \\ 67 \end{array}\right.$ | w | 167 <br> 119 <br> 77 <br> 712 |
| 8 | 1000 | BS | $\begin{array}{\|c\|} \hline 10 \\ 8 \\ 8 \\ \hline \end{array}$ | CAN | $\begin{array}{\|l\|} \hline 30 \\ 24 \\ 18 \\ \hline \end{array}$ | 1 | $\begin{array}{\|l\|} \hline 50 \\ 40 \\ 28 \\ \hline \end{array}$ | 8 | $\begin{array}{\|l\|} \hline 70 \\ 56 \\ 38 \\ \hline \end{array}$ | H | $\begin{array}{\|l\|} \hline 110 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{array}{\|l\|} \hline 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{array}{\|c} 150 \\ 1504 \\ 188 \\ \hline \end{array}$ | x | $\begin{array}{r}170 \\ 120 \\ 78 \\ 17 \\ \hline 1\end{array}$ |
| 9 | 1001 | HT | $\begin{array}{\|c\|} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 31 \\ 25 \\ 19 \\ \hline \end{array}$ | ) | $\begin{array}{\|l\|} \hline 51 \\ 41 \\ 29 \\ \hline \end{array}$ | 9 | $\begin{array}{\|l\|} \hline 71 \\ 57 \\ 39 \end{array}$ | 1 | $\left[\left.\begin{array}{l\|} 111 \\ 73 \\ 49 \end{array} \right\rvert\,\right.$ | Y | $\begin{array}{\|c\|} \hline 131 \\ 89 \\ 59 \end{array}$ | i | $\begin{array}{\|c\|} \hline 151 \\ 105 \\ 69 \end{array}$ | y | 171 121 79 172 |
| 10 | 1010 | LF | $\begin{array}{\|c\|} \hline 12 \\ 10 \\ A \\ \hline \end{array}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 A \\ & \hline \end{aligned}$ | * | $\begin{array}{\|l\|} \hline 52 \\ 42 \\ 2 A \\ \hline \end{array}$ | : | $\begin{array}{\|l\|} \hline 72 \\ 58 \\ 3 A \\ \hline \end{array}$ | J | $\begin{array}{\|l\|} \hline 12 \\ 74 \\ 4 A \\ \hline \end{array}$ | z | $\begin{array}{\|l\|} \hline 132 \\ 90 \\ 90 \\ 5 A \end{array}$ | j | $\left\|\begin{array}{c\|} 152 \\ 150 \\ 6 A \end{array}\right\|$ | $z$ | 172 172 78 7 |
| 11 | 1011 | VT | $\begin{array}{\|l\|} \hline 13 \\ 11 \\ \hline 8 \\ \hline \end{array}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \\ & \hline 18 \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & 28 \end{aligned}$ | ; | $\begin{array}{\|l\|} \hline 73 \\ 59 \\ 38 \\ \hline \end{array}$ | K | $\begin{array}{\|l\|} \hline 113 \\ 75 \\ 48 \end{array}$ | A | $\left[\begin{array}{l} 133 \\ 99 \\ 58 \end{array}\right]$ | k | $\begin{array}{\|c\|} \hline 153 \\ 100 \\ 68 \\ \hline \end{array}$ | a | $\begin{array}{r}173 \\ 173 \\ 78 \\ 78 \\ \hline 18\end{array}$ |
| 12 | 1100 | FF | $\begin{array}{\|c} 14 \\ 12 \\ 12 \\ c \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} 34 \\ 28 \\ 10 \\ \hline \end{array}$ | , | $\begin{aligned} & 54 \\ & 54 \\ & 49 \\ & 20 \end{aligned}$ | $<$ | $\begin{array}{\|l\|} \hline 74 \\ 60 \\ 3 C \\ \hline \end{array}$ | L | $\begin{array}{\|l\|} \hline 114 \\ 76 \\ 48 \\ \hline \end{array}$ | ¢人 | $\begin{array}{\|} 134 \\ 92 \\ 50 \\ 50 \end{array}$ | 1 | $\begin{array}{\|c\|} \hline 154 \\ 108 \\ 6 C \\ \hline \end{array}$ | ¢ |  |
| 13 | 1101 | CR | $\begin{array}{\|c\|} \hline 15 \\ 13 \\ \hline \\ \hline \end{array}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \\ & \hline \end{aligned}$ | - | $\begin{array}{\|l} \hline 55 \\ \hline 55 \\ 45 \\ \hline \end{array}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 60 \\ & 30 \end{aligned}$ | M | $\begin{aligned} & 115 \\ & 77 \\ & 40 \\ & \hline \end{aligned}$ | A | $\left[\begin{array}{c} 135 \\ 93 \\ 50 \end{array}\right]$ | m | $\begin{array}{\|c\|} \hline 155 \\ 159 \\ 109 \\ 60 \end{array}$ | á | 175 <br> 175 <br> 70 <br> 70 <br> 18 |
| 14 | 1110 | so | $\begin{array}{\|l\|} \hline 16 \\ 14 \end{array}$ |  | $\begin{array}{\|c\|} \hline 36 \\ 30 \\ 1 E \end{array}$ | . | $\left.\begin{array}{\|l\|} \hline 56 \\ 46 \\ 26 \end{array} \right\rvert\,$ | > | $\begin{aligned} & 76 \\ & 62 \\ & 68 \\ & \hline \end{aligned}$ | N | $\begin{array}{\|c\|} \hline 116 \\ 78 \\ 48 \\ \hline \end{array}$ | U1 | $\begin{array}{\|l\|} \hline 136 \\ 94 \\ 5 E \end{array}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 68 \end{aligned}$ | \# | 176 <br> 126 <br> 76 <br> 76 <br> 122 |
| 15 | 1111 | SI | $\begin{array}{\|c\|} \hline 17 \\ 15 \\ \text { F } \\ \hline \end{array}$ |  | $\left.\begin{gathered} 37 \\ 31 \\ 31 \\ 15 \end{gathered} \right\rvert\,$ | 1 | $\begin{aligned} & 57 \\ & 57 \\ & 47 \\ & 27 \end{aligned}$ | ? |  | 0 | $\begin{aligned} & 46 \\ & 177 \\ & 79 \\ & 49 \end{aligned}$ | - | $\begin{array}{\|} 137 \\ 95 \\ 95 \\ 57 \end{array}$ | 0 | $\begin{aligned} & 02 \\ & 157 \\ & 111 \\ & 6 F \end{aligned}$ | DEL | $\begin{gathered}177 \\ 172 \\ 77\end{gathered}$ |

KEY


LJ-0861

Figure A-9 Finnish 7-Bit National Replacement Character Set

|  |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ROW | BITS <br> B4 B3 B2 B1 | $\begin{array}{\|llll} \hline 87 & 0 & & \\ 86 & & 0 & \\ 85 & & & 0 \end{array}$ |  | 0 |  | ${ }^{0} 1$ |  | 0 , |  | ${ }^{1} 0$ |  | 10 |  | 1 1 |  | 1. |  |
| 0 | 0000 | NUL | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \\ & \hline \end{aligned}$ | à | $\begin{array}{r} 100 \\ 64 \\ 40 \end{array}$ | P | $\begin{array}{\|l\|} \hline 180 \\ 80 \\ 50 \\ \hline \end{array}$ | 0 \% | $\begin{array}{r} \hline 140 \\ 96 \\ 60 \\ \hline \end{array}$ | p | $\begin{array}{r} 160 \\ 112 \\ 70 \\ \hline \end{array}$ |
| 1 | $\begin{array}{lllll}0 & 0 & 0 & 1\end{array}$ |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \\ & \hline \end{aligned}$ | A | $\begin{aligned} & 101 \\ & 65 \\ & 41 \end{aligned}$ | Q | $\begin{array}{\|r\|} \hline 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{gathered} 141 \\ 97 \\ 61 \end{gathered}$ | 9 | $\begin{gathered} 161 \\ 113 \\ 71 \end{gathered}$ |
| 2 | 0010 |  | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \\ & \hline \end{aligned}$ | 11 | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{array}{\|c\|} \hline 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{\|r\|} \hline 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{array}{r} 142 \\ 98 \\ 62 \\ \hline \end{array}$ | r | $\begin{aligned} & 162 \\ & 114 \\ & 12 \end{aligned}$ |
| 3 | 0011 |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \end{aligned}$ | C | $\begin{array}{\|c} 103 \\ 67 \\ 43 \end{array}$ | S | $\begin{array}{\|r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \end{array}$ | S | $\begin{aligned} & 163 \\ & 115 \\ & 73 \end{aligned}$ |
| 4 | 0100 |  | $\begin{aligned} & \hline 4 \\ & 4 \\ & 4 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\begin{array}{\|c\|} \hline 104 \\ 68 \\ 48 \\ 44 \\ \hline \end{array}$ | T | $\begin{array}{\|r\|} \hline 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{aligned} & 144 \\ & 100 \\ & 64 \end{aligned}$ | t | $\begin{aligned} & 164 \\ & 116 \\ & 74 \\ & \hline \end{aligned}$ |
| 5 | $0 \quad 101$ |  | $\begin{aligned} & 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 15 \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{\|r} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{r} 125 \\ 85 \\ 55 \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & 65 \end{aligned}$ | $\mathbf{u}$ | $\begin{aligned} & 165 \\ & 117 \\ & 75 \end{aligned}$ |
| 6 | 0110 |  | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \\ & \hline \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & \hline 66 \\ & 54 \\ & 36 \\ & \hline \end{aligned}$ | F | $\begin{array}{\|c} 106 \\ 70 \\ 46 \end{array}$ | , V | $\begin{array}{\|c\|} \hline 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{array}{\|c} 146 \\ 102 \\ 66 \end{array}$ | V | $\begin{array}{\|} 166 \\ 118 \\ 76 \\ \hline \end{array}$ |
| 7 | 0111 |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \end{aligned}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{\|r} \hline 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{\|r} 127 \\ 87 \\ 57 \\ \hline \end{array}$ | $g$ | $\begin{aligned} & 147 \\ & 103 \\ & 67 \\ & \hline \end{aligned}$ | w | $\begin{array}{r}167 \\ 119 \\ 77 \\ \hline 17\end{array}$ |
| 8 | 1000 | BS | $\begin{gathered} \hline 10 \\ 8 \\ 8 \\ \hline \end{gathered}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 18 \end{aligned}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & \hline \end{aligned}$ | H | $\begin{array}{\|c} 110 \\ 72 \\ 48 \\ \hline 8 \end{array}$ | X | $\begin{array}{\|r\|} \hline 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{array}{r} 150 \\ 104 \\ 68 \\ \hline \end{array}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 71\end{array}$ |
| 9 | 1001 | HT | $\begin{gathered} 11 \\ 9 \\ 9 \\ \hline \end{gathered}$ |  | $\begin{aligned} & 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \\ & \hline \end{aligned}$ | 1 | $\begin{array}{\|l\|} \hline 111 \\ 73 \\ 49 \end{array}$ | Y | $\begin{array}{r\|} 131 \\ 89 \\ 59 \end{array}$ | i | $\begin{aligned} & 151 \\ & 105 \\ & 69 \end{aligned}$ | y | 171 121 79 172 |
| 10 | 1010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & A \\ & \hline \end{aligned}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 A \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 A \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{gathered} 112 \\ 74 \\ 4 \mathrm{~A} \end{gathered}$ | Z | $\begin{gathered} 132 \\ 90 \\ 54 \end{gathered}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 \mathrm{~A} \end{aligned}$ | z | 172 <br> 122 <br> 74 <br> 18 |
| 11 | 1011 | VT | $\begin{gathered} 13 \\ 11 \\ B \\ \hline \end{gathered}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \end{aligned}$ | त̂/ | $\left[\begin{array}{r} 133 \\ 91 \\ 58 \end{array}\right]$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | ¢ | 173 <br> 123 <br> 123 <br> 78 <br> 176 |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & c \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 10 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 2 C \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 C \\ & \hline \end{aligned}$ | L | $\begin{array}{\|l} \hline 114 \\ 76 \\ 4 \\ \hline \end{array}$ | \% | $\begin{array}{r} 134 \\ 92 \\ 5 C \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 6 C \\ & \hline \end{aligned}$ | u | 174 <br> 124 <br> 78 <br> 15 |
| 13 | 1101 | CR | $\begin{gathered} 15 \\ 13 \\ 0 \\ \hline \end{gathered}$ |  | $\begin{array}{r} 35 \\ 29 \\ 10 \\ \hline \end{array}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 30 \end{aligned}$ | M | $\begin{array}{r} 115 \\ 77 \\ 40 \end{array}$ | © | $\begin{array}{r} 135 \\ 93 \\ 50 \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \end{aligned}$ | e | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline 176\end{array}$ |
| 14 | 1110 | SO | $\begin{gathered} 16 \\ 14 \\ E \\ \hline \end{gathered}$ |  | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 26 \\ & \hline \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 \mathrm{E} \end{aligned}$ | N | $\begin{aligned} & 116 \\ & 78 \\ & 48 \end{aligned}$ | \% | $\begin{gathered} 136 \\ 94 \\ 5 E \end{gathered}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 6 \mathrm{E} \end{aligned}$ | Q | 176 <br> 126 <br> $7 E$ |
| 15 | 1111 | SI | $\begin{aligned} & 17 \\ & 15 \\ & \mathrm{~F} \\ & \hline \end{aligned}$ |  | 37 31 17 17 | $/$ | $\begin{aligned} & 57 \\ & 47 \\ & 27 \end{aligned}$ | ? | 77 63 3 F | 0 | 117 79 47 | - | $\begin{aligned} & 137 \\ & 95 \\ & 5 \mathrm{~F} \end{aligned}$ | 0 | $\begin{aligned} & 157 \\ & 111 \\ & 67 \end{aligned}$ | DEL | 177 127 7 F |

KEY


LJ. 0863

Figure A-10 French-Canadian 7-Bit National Replacement Character Set

| ROW |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | BITS <br> B4 B3 B2 B1 | $\begin{array}{llll} 87 & 0 & \\ 86 \\ 85 & & 0 & \\ 85 \end{array}$ |  | ${ }^{0} 10$ |  | ${ }^{0}{ }^{1}$ |  |  |  |  |  | $10$ |  |  |  |  |  |
| 0 | 0000 | NUL | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \\ & \hline \end{aligned}$ | à | $\begin{aligned} & 100 \\ & 64 \\ & 40 \\ & \hline \end{aligned}$ | P | $\begin{array}{r} 120 \\ 80 \\ 50 \\ \hline \end{array}$ | , | $\begin{array}{r} 140 \\ 96 \\ 60 \\ \hline \end{array}$ | $p$ | $\begin{array}{r} 160 \\ 112 \\ 70 \end{array}$ |
| 1 | 0001 |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{aligned} & 101 \\ & 65 \\ & 41 \end{aligned}$ | Q | $\begin{array}{r} 121 \\ 81 \\ 51 \end{array}$ | a | $\begin{aligned} & 141 \\ & 97 \\ & 61 \end{aligned}$ | $q$ | $\begin{gathered} 161 \\ 113 \\ 71 \end{gathered}$ |
| 2 | 0010 |  | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | '' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{array}{r} 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{r} 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{array}{r} 142 \\ 98 \\ 62 \end{array}$ | r | $\begin{aligned} & 162 \\ & 114 \\ & 72 \\ & \hline \end{aligned}$ |
| 3 |  |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \& | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \end{array}$ | S | $\begin{aligned} & 163 \\ & 115 \\ & 73 \end{aligned}$ |
| 4 | 0100 |  | $\begin{aligned} & \hline 4 \\ & 4 \\ & 4 \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\begin{array}{r} 104 \\ 68 \\ 44 \end{array}$ | T | $\begin{array}{r} 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{aligned} & 144 \\ & 100 \\ & 64 \end{aligned}$ | t | $\begin{aligned} & 164 \\ & 116 \\ & 74 \\ & \hline \end{aligned}$ |
| 5 | 0101 |  | $\begin{aligned} & 5 \\ & 5 \\ & 5 \end{aligned}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 15 \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \end{aligned}$ | E | $\begin{array}{r} 105 \\ 69 \\ 45 \end{array}$ | U | $\begin{array}{r} 125 \\ 85 \\ 55 \end{array}$ | e | $\begin{gathered} \begin{array}{c} 145 \\ 101 \\ 65 \end{array} \end{gathered}$ | u | $\begin{aligned} & 165 \\ & 117 \\ & 75 \end{aligned}$ |
| 6 | 0110 |  | $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \\ & \hline \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \\ & \hline \end{aligned}$ | F | $\begin{array}{r} 106 \\ 70 \\ 46 \end{array}$ | V | $\begin{array}{r} 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{gathered} 146 \\ 102 \\ 66 \\ \hline \end{gathered}$ | v | $\begin{aligned} & 166 \\ & 118 \\ & 76 \end{aligned}$ |
| 7 | 01111 |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{aligned} & 107 \\ & 71 \\ & 47 \\ & \hline \end{aligned}$ | W | $\begin{array}{r} 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{array}{r} 147 \\ 103 \\ 67 \\ \hline \end{array}$ | w | 167 <br> 119 <br> 77 <br> 17 |
| 8 | 1000 | BS | $\begin{gathered} \hline 10 \\ 8 \\ 8 \\ \hline \end{gathered}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 18 \end{aligned}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & \hline \end{aligned}$ | H | $\begin{array}{r} 110 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{gathered} 130 \\ 88 \\ 58 \end{gathered}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \\ & \hline \end{aligned}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 17\end{array}$ |
| 9 | 10001 | HT | $\begin{gathered} \hline 11 \\ 9 \\ 9 \end{gathered}$ |  | $\begin{aligned} & 31 \\ & 25 \\ & 19 \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \end{aligned}$ | I | $\begin{array}{r} 11 \\ 73 \\ 49 \end{array}$ | Y | $\begin{aligned} & 131 \\ & 89 \\ & 59 \end{aligned}$ | 1 | $\begin{aligned} & 151 \\ & 105 \\ & 69 \end{aligned}$ | y | 171 121 79 172 |
| 10 | 10010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & A \end{aligned}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 A \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \\ & \hline \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{array}{r} 112 \\ 74 \\ 4 \mathrm{~A} \\ \hline \end{array}$ | Z | $\begin{aligned} & 132 \\ & 90 \\ & 5 A \\ & \hline \end{aligned}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | $z$ | 172 <br> 122 <br> $7 A$ <br> 13 |
| 11 | 1011 | VT | $\begin{gathered} 13 \\ 11 \\ 8 \end{gathered}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & \hline \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \\ & \hline 8 \end{aligned}$ | - | $\begin{array}{r} 133 \\ 91 \\ 58 \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | $\stackrel{\circ}{\circ}$ | 173 <br> 123 <br> 78 <br> 18 |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & c \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 1 C \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 20 \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \end{aligned}$ | L | $\begin{aligned} & 14 \\ & 76 \\ & 4 C \end{aligned}$ | C | $\begin{array}{r} 134 \\ 92 \\ 5 \mathrm{C} \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 60 \\ & \hline \end{aligned}$ | 4 | 174 <br> 124 <br> 76 <br> 15 |
| 13 | 1101 | CR | $\begin{gathered} 15 \\ 13 \\ 0 \\ \hline \end{gathered}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 30 \end{aligned}$ | M | $\begin{gathered} 15 \\ 77 \\ 40 \end{gathered}$ | \% | $\begin{aligned} & 135 \\ & 93 \\ & 50 \\ & 50 \end{aligned}$ | m | $\begin{array}{c\|} 155 \\ 109 \\ 60 \end{array}$ | e | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline 18\end{array}$ |
| 14 | 1110 | SO | $\begin{gathered} 16 \\ 14 \\ \mathrm{E} \end{gathered}$ |  | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 \mathrm{E} \end{aligned}$ | N | $\begin{gathered} 16 \\ 78 \\ 4 E \end{gathered}$ | $\wedge$ | $\begin{gathered} 136 \\ 94 \\ 5 E \end{gathered}$ | n | $\begin{gathered} 156 \\ 110 \\ 6 E \\ \hline \end{gathered}$ | ** | $\begin{array}{r}176 \\ 126 \\ 78 \\ \hline 72\end{array}$ |
| 15 | 1 111 | SI | $\begin{gathered} 17 \\ 15 \\ 7 \end{gathered}$ |  | $\begin{aligned} & 37 \\ & 31 \\ & 1 \mathrm{~F} \end{aligned}$ | $/$ | 57 <br> 47 <br> 47 | ? | 77 63 $3 F$ | 0 | $\begin{array}{r} 117 \\ 79 \\ 4 \mathrm{~F} \end{array}$ | - | 137 95 95 59 | 0 | $\begin{aligned} & 157 \\ & 111 \\ & 6 \mathrm{~F} \end{aligned}$ | DEL | 177 127 7 F |

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LJ. 0862

Figure A-11 French 7-Bit National Replacement Character Set

| ROW |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | BITS <br> B4 B3 B2 B1 | $\begin{array}{ll} 87 & 0 \\ 86 & \\ 85 & \\ 85 \end{array}$ |  | ${ }^{0} 1$ |  | ${ }^{0} \quad 1$ |  |  |  | $\begin{array}{lll} 1 & 0 \\ & 0 & 0 \end{array}$ |  | 0 <br> 1 |  |  |  | ' ', |  |
| 0 | 0000 | NUL | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | 8 | $\begin{gathered} 100 \\ 64 \\ 40 \\ \hline \end{gathered}$ | P | $\begin{gathered} 120 \\ 80 \\ 50 \\ \hline \end{gathered}$ | , | $\begin{array}{r} 140 \\ 96 \\ 66 \\ \hline \end{array}$ | p | $\begin{aligned} & 160 \\ & 112 \\ & 10 \\ & 70 \end{aligned}$ |
| 1 | 0001 |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \\ & \hline \end{aligned}$ | A | $\begin{gathered} 1 \\ 65 \\ 65 \\ 41 \end{gathered}$ | Q | $\begin{array}{r} 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{aligned} & 141 \\ & 97 \\ & 61 \\ & \hline \end{aligned}$ | 9 | $\begin{array}{r} 161 \\ 113 \\ 71 \\ \hline \end{array}$ |
| 2 | 0010 |  | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | 11 | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \end{aligned}$ | B | $\begin{array}{r} 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{array}{r} 122 \\ 82 \\ 52 \\ 52 \end{array}$ | b | $\begin{aligned} & 142 \\ & 98 \\ & 62 \end{aligned}$ | r | $\begin{aligned} & 162 \\ & 114 \\ & 72 \end{aligned}$ |
| 3 | 0011 |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \\ \hline \end{array}$ | S | $\begin{array}{r} 163 \\ 115 \\ 13 \\ \hline \end{array}$ |
| 4 | 0100 |  | $\begin{array}{\|l} \hline 4 \\ 4 \\ 4 \\ \hline \end{array}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \\ & \hline \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \end{aligned}$ | D | $\begin{array}{r} 104 \\ 68 \\ 44 \end{array}$ | T | $\begin{array}{r} 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{aligned} & 144 \\ & 100 \\ & 64 \end{aligned}$ | t | $\begin{aligned} & 164 \\ & 116 \\ & 74 \\ & \hline \end{aligned}$ |
| 5 | 0101 |  | $\begin{array}{\|l\|} \hline 5 \\ 5 \\ 5 \\ \hline \end{array}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 15 \\ & \hline \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{r} 105 \\ 69 \\ 45 \end{array}$ | U | $\begin{gathered} 125 \\ 85 \\ 65 \\ \hline \end{gathered}$ | e | $\begin{array}{r} 145 \\ 101 \\ 65 \\ \hline \end{array}$ | u | $\begin{aligned} & 165 \\ & 117 \\ & 15 \\ & \hline \end{aligned}$ |
| 6 | 0110 |  | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 76 \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \end{aligned}$ | F | $\begin{aligned} & 106 \\ & 70 \\ & 46 \end{aligned}$ | V | $\begin{array}{r} 126 \\ 86 \\ 56 \end{array}$ | $f$ | $\begin{aligned} & 146 \\ & 102 \\ & 66 \end{aligned}$ | v | $\begin{aligned} & 166 \\ & 118 \\ & 76 \end{aligned}$ |
| 7 | 0111 |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \end{aligned}$ |  | $\begin{aligned} & \hline 27 \\ & 23 \\ & 17 \end{aligned}$ | 1 | $\begin{aligned} & 47 \\ & 39 \\ & 27 \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{r} 107 \\ 71 \\ 47 \end{array}$ | W | $\begin{array}{r} 127 \\ 87 \\ 57 \end{array}$ | $g$ | $\begin{gathered} 147 \\ 103 \\ 67 \end{gathered}$ | w | $\begin{array}{r}167 \\ 119 \\ 77 \\ \hline 17\end{array}$ |
| 8 | 1000 | BS | $\begin{array}{\|c\|} \hline 10 \\ 8 \\ 8 \\ \hline \end{array}$ | CAN | $\begin{array}{\|l\|l} \hline 30 \\ 24 \\ 18 \\ \hline \end{array}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \\ & \hline \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & \hline \end{aligned}$ | H | $\begin{array}{r} 110 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{array}{r} 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \\ & \hline \end{aligned}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 17\end{array}$ |
| 9 | 1001 | HT | $\begin{array}{\|r} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 31 \\ 25 \\ 19 \\ \hline \end{array}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \end{aligned}$ | 1 | $\begin{array}{r} 111 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{r} 131 \\ 89 \\ 59 \\ \hline \end{array}$ | i | $\begin{aligned} & 151 \\ & 105 \\ & 69 \\ & \hline 69 \end{aligned}$ | y | $\begin{array}{r}171 \\ 121 \\ 79 \\ \hline 9\end{array}$ |
| 10 | 1010 | LF | $\begin{gathered} 12 \\ 10 \\ A \end{gathered}$ | SUB | $\begin{aligned} & \hline 32 \\ & 26 \\ & 1 A \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{gathered} 112 \\ 74 \\ 4 \mathrm{~A} \end{gathered}$ | Z | $\begin{gathered} 132 \\ 90 \\ 5 \mathrm{~A} \end{gathered}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | z | 172 <br> 122 <br> 74 <br> 18 |
| 11 | 10011 | VT | $\begin{aligned} & 13 \\ & 11 \\ & 8 \end{aligned}$ | ESC | $\begin{array}{\|l} 33 \\ 27 \\ 18 \\ \hline \end{array}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \\ & \hline \end{aligned}$ | Á | $\begin{array}{r} 133 \\ 91 \\ 98 \\ \hline \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | 9 | 173 <br> 123 <br> 78 <br> 18 |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & c \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 10 \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 2 \mathrm{C} \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 C \end{aligned}$ | L | $\begin{array}{r} 114 \\ 76 \\ 40 \\ \hline \end{array}$ | \% | $\begin{array}{r} 134 \\ 92 \\ 50 \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 60 \\ & \hline \end{aligned}$ | \% | $\begin{array}{r}174 \\ 124 \\ 7 C \\ \hline 15\end{array}$ |
| 13 | $1 \quad 101$ | CR | $\begin{gathered} 15 \\ 13 \\ 0 \end{gathered}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | $=$ | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{array}{r} 115 \\ 77 \\ 40 \\ \hline \end{array}$ | U | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | $\ddot{4}$ | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline\end{array}$ |
| 14 | 1110 | SO | $\begin{gathered} 16 \\ 14 \\ E \end{gathered}$ |  | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \end{aligned}$ | N | $\begin{aligned} & 116 \\ & 78 \\ & 4 E \end{aligned}$ | $\wedge$ | $\begin{gathered} 136 \\ 94 \\ 5 E \end{gathered}$ | n | $\begin{gathered} 156 \\ 110 \\ 6 E \end{gathered}$ | 月 | 176 <br> 126 <br> 78 <br> 17 |
| 15 | 1111 | SI | $\begin{aligned} & 17 \\ & 15 \\ & F \end{aligned}$ |  | $\begin{aligned} & 37 \\ & 31 \\ & 1 F \end{aligned}$ | $/$ | 57 47 47 27 | ? | $\begin{aligned} & 77 \\ & 63 \\ & 3 F \end{aligned}$ | 0 | $\begin{gathered} 117 \\ 79 \\ 4 \mathrm{~F} \end{gathered}$ | - | 137 95 95 5 F | - | 157 111 6 F | DEL | 177 <br> 127 <br> 77 |

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LJ. 0864

Figure A-12 German 7-Bit National Replacement Character Set

| Row |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { BITS } \\ \text { 84 } 83 \text { в2 } 18 \end{gathered}$ |  |  | ${ }^{\circ}$ |  | ${ }^{\circ} 1$ |  | ${ }^{\circ}$ |  |  |  | 0 |  | 1. |  | ', |  |
| 0 | 0000 | NUL | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | 40 <br> 32 <br> 20 | 0 | $\begin{aligned} & \hline 60 \\ & 48 \\ & 30 \end{aligned}$ | 9 | $\begin{array}{\|c\|} \hline 100 \\ 64 \\ 40 \end{array}$ | P | 120 <br> 80 <br> 50 <br> 50 | W | 140 96 60 6 | $p$ | 160 <br> 112 <br> 70 <br> 70 |
| 1 | 0001 |  | 1 | $D C 1$ | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & \hline 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{array}{\|c\|} \hline 101 \\ 65 \\ 41 \end{array}$ | 0 | $\begin{array}{\|c} \hline 121 \\ 818 \\ 51 \end{array}$ | a | $\begin{aligned} & 191 \\ & 97 \\ & 97 \end{aligned}$ | 9 | $\begin{array}{r}161 \\ 111 \\ 71 \\ 71 \\ \hline 12\end{array}$ |
| 2 | 0010 |  | $\begin{aligned} & \hline 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | ' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & 32 \end{aligned}$ | B | $\begin{array}{\|c} 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{gathered} 1 \begin{array}{c} 122 \\ 82 \\ 52 \end{array} \\ \hline \end{gathered}$ | b | $\begin{gathered} \hline 142 \\ 98 \\ 62 \\ 68 \end{gathered}$ | r | 162 <br> 114 <br> 72 <br> 72 <br> 18 |
| 3 | 0011 |  | $\begin{array}{r} 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \\ & \hline \end{aligned}$ | ¢ | $\begin{aligned} & 43 \\ & 35 \\ & 23 \\ & \hline \end{aligned}$ | 3 | $\begin{aligned} & \hline 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{\|r} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | c | $\begin{array}{r} 143 \\ 99 \\ 63 \\ \hline \end{array}$ | s | 163 <br> 115 <br> 73 <br> 73 |
| 4 | 0100 |  | $\begin{aligned} & 4 \\ & 4 \\ & 4 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 36 \\ & 24 \\ & \hline \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 54 \\ & \hline \end{aligned}$ | D | $\begin{aligned} & 104 \\ & 68 \\ & 44 \\ & \hline \end{aligned}$ | T | $\begin{aligned} & \hline 124 \\ & 84 \\ & 84 \\ & 54 \\ & \hline \end{aligned}$ | d | $\begin{aligned} & 144 \\ & 190 \\ & 64 \\ & \hline \end{aligned}$ | t | 154 116 74 74 |
| 5 | 010 | ENQ | $\begin{aligned} & 5 \\ & 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 21 \\ & \hline \end{aligned}$ | \% | $\begin{array}{r} 45 \\ 37 \\ 25 \\ \hline \end{array}$ | 5 | $\begin{aligned} & \hline 65 \\ & 53 \\ & \hline 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{\|c} 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|l} 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & 65 \\ & \hline \end{aligned}$ | $u$ | 165 <br> 117 <br> 75 <br> 71 <br> 18 |
| 6 | 0110 |  | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 26 \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \\ & 36 \end{aligned}$ | F | $\begin{array}{\|l\|} \hline 100 \\ 70 \\ 46 \end{array}$ | V | $\begin{aligned} & \hline 126 \\ & 86 \\ & 56 \\ & 56 \end{aligned}$ | f | $\begin{gathered} 146 \\ 102 \\ 66 \end{gathered}$ | v | 166 <br> 118 <br> 76 <br> 16 |
| 7 | 0111 | BEL | $\begin{aligned} & 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 39 \\ & \hline 27 \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & \hline 37 \\ & \hline \end{aligned}$ | G | $\begin{gathered} 107 \\ 71 \\ 47 \end{gathered}$ | w | $\begin{array}{r} 127 \\ \hline 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{gathered} 147 \\ 103 \\ 67 \\ \hline \end{gathered}$ | w | 167 119 17 717 |
| 8 | 1000 | BS | $\begin{aligned} & \hline 10 \\ & 8 \\ & 8 \\ & \hline \end{aligned}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 24 \\ & 18 \end{aligned}$ | 1 | $\begin{aligned} & 50 \\ & \hline 40 \\ & 20 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & 38 \end{aligned}$ | H | $\begin{array}{\|c\|} \hline 10 \\ 72 \\ 48 \end{array}$ | X | $\begin{gathered} 130 \\ \hline 88 \\ 58 \\ 58 \end{gathered}$ | h | $\begin{array}{\|l\|} \hline 150 \\ 150 \\ 68 \\ \hline 68 \end{array}$ | x | 170 120 78 78 |
| 9 | 1001 | HT | $\begin{array}{r} 11 \\ 11 \\ 9 \\ \hline \end{array}$ |  | $\begin{aligned} & 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 49 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 70 \\ & 57 \\ & 59 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 111 \\ & 73 \\ & 49 \\ & \hline \end{aligned}$ | Y | $\begin{gathered} 131 \\ 89 \\ 59 \\ \hline \end{gathered}$ | i | $\begin{array}{\|l\|} \hline 151 \\ 105 \\ 69 \\ \hline \end{array}$ | y | 171 121 79 72 |
| 10 | 1010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & 10 \end{aligned}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 26 \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 \mathrm{~A} \end{aligned}$ | J | $\begin{gathered} 112 \\ 74 \\ 4 A \end{gathered}$ | Z | $\begin{gathered} 132 \\ 90 \\ 5 A \end{gathered}$ | j | $\begin{aligned} & \hline 152 \\ & 150 \\ & 100 \\ & 6 A \end{aligned}$ | $z$ | 172 122 128 $7 A$ |
| 11 | 1011 | VT | $\begin{aligned} & 13 \\ & 11 \\ & 11 \\ & \hline \end{aligned}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \\ & \hline \end{aligned}$ | + | $\begin{array}{r} 53 \\ 43 \\ 28 \\ \hline \end{array}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \\ & \hline \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \\ & \hline \end{aligned}$ | 。 | $\begin{gathered} 133 \\ 94 \\ 58 \\ \hline \end{gathered}$ | k | $\begin{array}{\|l\|l\|} \hline 153 \\ 107 \\ 68 \\ \hline \end{array}$ | \% | 123 123 128 78 17 |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & 12 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 10 \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 20 \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 3 C \\ & \hline \end{aligned}$ | L | $\begin{aligned} & 14 \\ & 76 \\ & 4 \mathrm{C} \\ & \hline \end{aligned}$ | 9 | $\begin{array}{\|c} 134 \\ 99 \\ 90 \\ 59 \end{array}$ | 1 | $\begin{aligned} & \hline 154 \\ & 108 \\ & 60 \\ & \hline \end{aligned}$ | © | 174 1124 78 718 |
| 13 | 1101 | CR | $\begin{aligned} & 15 \\ & 13 \\ & 13 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \end{aligned}$ | - | $\begin{aligned} & \hline 55 \\ & 45 \\ & 20 \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{gathered} 115 \\ 77 \\ 40 \end{gathered}$ | 6 | $\begin{gathered} 135 \\ 93 \\ 50 \\ \hline \end{gathered}$ | m | $\begin{array}{\|l\|} \hline 155 \\ 109 \\ 60 \\ \hline \end{array}$ | è | 125 125 125 70 18 |
| 14 | 1110 | So | $\begin{aligned} & \hline 16 \\ & 14 \\ & E \end{aligned}$ |  | $\begin{gathered} 36 \\ 30 \\ 1 E \end{gathered}$ | - | $\begin{aligned} & 56 \\ & .{ }^{56} \\ & 26 \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & \hline 62 \\ & 3 E \end{aligned}$ | N | $\begin{array}{\|c\|} \hline 116 \\ 78 \\ 4 E \\ \hline \end{array}$ | $\wedge$ | $\begin{gathered} 136 \\ 94 \\ 58 \\ 58 \end{gathered}$ | n | $\begin{array}{\|l\|} \hline 156 \\ 110 \\ 6 E \end{array}$ | \% | 176 <br> 126 <br> 126 <br> 78 <br> 12 |
| 15 | 111 | SI | $\begin{aligned} & 17 \\ & 15 \\ & \hline \\ & \hline \end{aligned}$ |  | 37 31 31 17 | / | 57 47 47 27 | ? | 77 <br> 63 <br> 3 | 0 | $\begin{array}{\|c\|} \hline 17 \\ 79 \\ 45 \\ \hline \end{array}$ | - | $\begin{array}{\|c\|c\|} \hline 139 \\ 95 \\ 5 F \end{array}$ | - | $\begin{aligned} & 1517 \\ & 111 \\ & 67 \\ & \hline \end{aligned}$ | DEL | 177 127 127 |

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LJ. 0893

Figure A-13 Italian 7-Bit National Replacement Character Set

| Row |  | $\begin{aligned} & \text { Column } \\ & \hline \end{aligned}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\bigcirc$ |  | ${ }^{\circ}$, |  | 0 , |  | ' ${ }^{4}$ |  | ${ }^{1} 0$ |  | ' ${ }^{1}$ 。 |  | 1 |  |
| 0 | 0000 | NUL | $\begin{array}{\|l\|l} \hline 0 \\ 0 \\ 0 \end{array}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | @ | $\begin{array}{\|c\|} \hline 100 \\ 64 \\ 40 \end{array}$ | P | $\begin{array}{\|c\|} \hline 120 \\ 80 \\ 50 \\ \hline \end{array}$ | - | $\begin{aligned} & 140 \\ & 96 \\ & 60 \end{aligned}$ | p | 160 <br> 112 <br> 70 <br> 17 |
| 1 | 000 |  | $\begin{array}{\|c} \hline 1 \\ \vdots \\ \hline \end{array}$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \end{aligned}$ | ! | $\begin{aligned} & \hline 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & \hline 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{gathered} 101 \\ 65 \\ 61 \end{gathered}$ | 0 | $\begin{array}{\|c\|} \hline 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{gathered} 141 \\ 97 \\ 61 \end{gathered}$ | q | $\begin{array}{r}161 \\ 113 \\ 71 \\ \hline 17 \\ \hline 18\end{array}$ |
| 2 | 0010 |  | $\begin{array}{\|l\|} \hline 2 \\ 2 \\ 2 \\ \hline \end{array}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \\ & \hline \end{aligned}$ | '' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & \hline 52 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{array}{\|l\|} \hline 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{\|l\|l} \hline 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{aligned} & 142 \\ & 98 \\ & 92 \\ & \hline \end{aligned}$ | r | 162 <br> 114 <br> 72 <br> 71 <br> 15 |
| 3 | 0011 |  | $\begin{array}{\|l\|l\|} \hline 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & \hline 63 \\ & 51 \\ & 33 \end{aligned}$ | C | $\left[\begin{array}{c} 103 \\ 67 \\ 43 \end{array}\right]$ | S | $\begin{array}{\|c\|} \hline 123 \\ 83 \\ 53 \\ \hline \end{array}$ | c | $\begin{aligned} & 143 \\ & 99 \\ & 63 \end{aligned}$ | s | 163 115 73 715 |
| 4 | 0100 |  | 4 <br> 4 <br> 4 <br> 4 |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & \hline 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\begin{array}{\|l\|} \hline 104 \\ 68 \\ 44 \\ \hline \end{array}$ | T | $\begin{aligned} & 124 \\ & 84 \\ & 54 \\ & \hline \end{aligned}$ | d | $\begin{aligned} & 144 \\ & 100 \\ & 64 \end{aligned}$ | t | 164 <br>  <br> 116 <br> 14 <br> 14 <br> 14 |
| 5 | 0101 |  | $\begin{array}{\|l\|l} \hline 5 \\ 5 \\ 5 \end{array}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 21 \\ & 15 \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \\ & 25 \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline 35 \end{aligned}$ | E | $\begin{array}{\|l\|} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|c\|} \hline 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & 65 \end{aligned}$ | $\mathbf{u}$ | 165 <br> 117 <br> 75 <br> 75 |
| 6 | 0110 |  | $\begin{array}{\|l\|l\|} \hline 6 \\ 6 \\ 6 \\ \hline \end{array}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \\ & \hline \end{aligned}$ | \& | $\begin{aligned} & \hline 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{array}{\|l\|} \hline 66 \\ 54 \\ 36 \\ \hline \end{array}$ | F | $\begin{aligned} & 106 \\ & 70 \\ & 46 \\ & \hline \end{aligned}$ | V | $\begin{array}{\|c\|} \hline 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{aligned} & 146 \\ & 102 \\ & 66 \\ & \hline \end{aligned}$ | v | 16 <br> 118 <br> 18 <br> 16 <br> 19 |
| 7 | 0111 |  | $\begin{array}{\|l} 7 \\ 7 \\ 7 \end{array}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \end{aligned}$ | 7 | $\begin{array}{\|l\|} \hline 67 \\ 55 \\ 37 \\ \hline \end{array}$ | G | $\begin{array}{\|c\|} \hline 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{\|c} 122 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{aligned} & 197 \\ & 103 \\ & 67 \end{aligned}$ | w | 167 167 179 717 |
| 8 | 1000 | BS | $\begin{array}{\|c\|} \hline 10 \\ 8 \\ 8 \\ \hline \end{array}$ | CAN | $\begin{aligned} & \hline 30 \\ & 24 \\ & 18 \\ & \hline \end{aligned}$ | 1 | $\begin{array}{\|l\|} \hline 50 \\ 40 \\ 28 \\ \hline \end{array}$ | 8 | $\begin{array}{\|l\|l} 70 \\ 56 \\ 38 \\ \hline \end{array}$ | H | $\left.\begin{array}{\|c\|} 110 \\ 72 \\ 48 \end{array}\right]$ | x | $\begin{array}{\|l\|l\|} \hline 138 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | x | 170 178 78 7 17 |
| 9 | 1001 | HT | $\begin{array}{\|l\|} \hline 11 \\ 9 \\ 9 \end{array}$ |  | $\begin{array}{\|l\|} \hline 31 \\ 25 \\ 19 \\ \hline \end{array}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{array}{\|l\|} \hline 71 \\ 57 \\ 39 \\ \hline \end{array}$ | 1 | $\begin{array}{\|l\|} \hline 11 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{\|l\|} 131 \\ 89 \\ 59 \end{array}$ | i | $\begin{aligned} & 151 \\ & 105 \\ & 69 \\ & \hline \end{aligned}$ | y | $\begin{array}{r}171 \\ 121 \\ 79 \\ \hline 12\end{array}$ |
| 10 | 1010 | LF | $\begin{array}{\|l\|l\|} \hline 12 \\ 10 \\ A \\ \hline \end{array}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 A \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 A \\ & \hline \end{aligned}$ | : | $\begin{array}{\|l\|} \hline 72 \\ 58 \\ 3 A \\ \hline \end{array}$ | J | $\left.\begin{array}{\|l\|l\|} 112 \\ 74 \\ 4 A \end{array} \right\rvert\,$ | z | $\begin{array}{\|l\|l\|} \hline 132 \\ 99 \\ 5 A \\ \hline \end{array}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | $z$ | 172 <br> 122 <br> 124 <br> 17 |
| 11 | i 011 | VT | $\begin{array}{\|c\|} \hline 13 \\ 11 \\ 8 \\ \hline \end{array}$ | ESC | $\begin{array}{\|l\|} \hline 33 \\ 27 \\ 18 \\ \hline \end{array}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & \hline \end{aligned}$ | ; | $\begin{array}{\|l\|} \hline 73 \\ 59 \\ 38 \\ \hline \end{array}$ | K | $\begin{array}{\|l\|} \hline 113 \\ 75 \\ 48 \\ \hline \end{array}$ | $\stackrel{F}{\text { F }}$ | $\begin{array}{r} 133 \\ \\ 91 \\ 58 \\ \hline \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | a. | 173 <br> 123 <br> 128 <br> 18 <br> 12 |
| 12 | 1100 | FF | $\begin{array}{\|l\|l} 14 \\ 12 \\ c \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 34 \\ 28 \\ 10 \end{array}$ | , | $\begin{aligned} & 54 \\ & \hline 44 \\ & 26 \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \\ & \hline \end{aligned}$ | L | $\begin{aligned} & 119 \\ & 76 \\ & 40 \end{aligned}$ | $\theta$ | $\begin{aligned} & 134 \\ & 92 \\ & 92 \\ & 50 \end{aligned}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 6 \mathrm{C} \end{aligned}$ | \% | 174 1124 76 78 |
| 13 | 1101 | CR | $\begin{array}{\|c\|} \hline 15 \\ 13 \\ 0 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|l\|} \hline 35 \\ 29 \\ 10 \\ \hline \end{array}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 45 \\ & 20 \end{aligned}$ | = | $\begin{array}{\|l\|} \hline 75 \\ 61 \\ 30 \end{array}$ | M | $\begin{array}{\|c\|} \hline 115 \\ 77 \\ 40 \end{array}$ | A | $\begin{array}{r} 135 \\ 93 \\ 95 \\ \hline 9 \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & 60 \end{aligned}$ | ล̇ | 175 125 125 70 |
| 14 | 1 1 1 0 | so | $\begin{array}{\|c\|c\|} \hline 16 \\ 14 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 36 \\ 30 \\ 1 E \\ \hline \end{array}$ | . | $\begin{aligned} & 56 \\ & 46 \\ & 46 \\ & \hline 26 \\ & \hline \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 62 \\ & \hline \end{aligned}$ | N | $\begin{aligned} & 116 \\ & 78 \\ & 48 \\ & \hline \end{aligned}$ | $\wedge$ | $\begin{array}{\|c\|} \hline 136 \\ 94 \\ 55 \\ \hline \end{array}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 6 \mathrm{E} \\ & \hline \end{aligned}$ | $\sim$ | 176 126 76 76 128 |
| 15 | 1111 | SI | $\begin{aligned} & 17 \\ & 15 \\ & 5 \\ & \hline \end{aligned}$ |  | $\begin{array}{\|c\|} \hline 33 \\ 31 \\ 15 \\ \hline \end{array}$ | 1 | $\begin{aligned} & 27 \\ & 47 \\ & 47 \\ & 27 \end{aligned}$ | ? | $\begin{aligned} & 77 \\ & 63 \\ & 3 F \\ & \hline \end{aligned}$ | 0 | $\begin{array}{\|l} 17 \\ 79 \\ 49 \\ 47 \end{array}$ | - | $\begin{aligned} & 137 \\ & 95 \\ & 95 \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & 157 \\ & 117 \\ & 67 \end{aligned}$ | DEL | 177 127 127 |

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Figure A-14 Norwegian/Danish 7-Bit National Replacement Character Set

|  |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Row | BITS |  |  | ${ }^{\circ}{ }^{1}$ |  | ${ }^{0} 10$ |  | $0^{0},$ |  | '0 ${ }^{1}$ |  | ${ }^{1} 0$ |  | ' ' 0 |  | ', |  |
| 0 | 0000 | NUL | $\begin{aligned} & 0 \\ & 0 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 30 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | E | $\begin{gathered} 100 \\ 64 \\ 40 \\ \hline \end{gathered}$ | P | $\begin{array}{\|l\|l\|} \hline 120 \\ 80 \\ 50 \end{array}$ | é | $\begin{aligned} & 190 \\ & 96 \\ & 60 \end{aligned}$ | $p$ | $\begin{array}{r}160 \\ 112 \\ 70 \\ \hline 12\end{array}$ |
| 1 | 000 |  | $i$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 111 \\ & \hline \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \end{aligned}$ | 1 | $\begin{aligned} & \hline 61 \\ & 49 \\ & 31 \end{aligned}$ | A | $\begin{array}{\|c\|} \hline 101 \\ 65 \\ \hline 41 \\ \hline \end{array}$ | 0 | $\left[\left.\begin{array}{c} 121 \\ 81 \\ 51 \end{array} \right\rvert\,\right.$ | a | $\begin{aligned} & 191 \\ & 97 \\ & 61 \end{aligned}$ | q | 161 <br> 111 <br> 111 <br> 71 <br> 12 |
| 2 | 0010 |  | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \end{aligned}$ | " | $\begin{aligned} & 42 \\ & 34 \\ & 32 \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & 32 \end{aligned}$ | B | $\begin{array}{\|l\|} \hline 102 \\ 66 \\ 42 \end{array}$ | R | $\begin{array}{\|l\|} \hline 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{aligned} & 142 \\ & 98 \\ & 62 \\ & \hline \end{aligned}$ | 「 | 162 114 72 72 |
| 3 | 0011 |  | $\begin{array}{\|l} \hline 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | \# | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \end{aligned}$ | C | $\begin{array}{\|c} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\left[\begin{array}{c} 123 \\ 83 \\ 53 \end{array}\right]$ | c | $\begin{aligned} & 143 \\ & 99 \\ & 63 \end{aligned}$ | s | $\begin{array}{r}163 \\ 115 \\ 73 \\ 73 \\ \hline 15\end{array}$ |
| 4 | 0100 |  | $\begin{aligned} & \hline 4 \\ & 4 \\ & 4 \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \end{aligned}$ | 4 | $\begin{aligned} & \hline 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\begin{array}{\|c\|} \hline 104 \\ 68 \\ 44 \\ \hline \end{array}$ | T | $\begin{array}{\|c\|} \hline 124 \\ 84 \\ 54 \end{array}$ | d | $\begin{aligned} & 149 \\ & 100 \\ & 64 \end{aligned}$ | t | 164 <br> 116 <br> 74 <br> 74 <br> 16 |
| 5 | 0101 |  | $\begin{aligned} & \hline 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 215 \\ & \hline \end{aligned}$ | \% | $\begin{array}{r} 45 \\ 37 \\ 25 \\ \hline \end{array}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{\|c} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|l\|} \hline 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & \text { 65 } \\ & \hline \end{aligned}$ | $u$ | 165 <br> 117 <br> 75 <br> 76 <br> 16 |
| 6 | 0110 |  | $\begin{array}{\|l\|} \hline 6 \\ 6 \\ 6 \\ \hline \end{array}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \\ & \hline \end{aligned}$ | \& | $\begin{aligned} & \hline 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & \hline 66 \\ & 54 \\ & 36 \\ & \hline \end{aligned}$ | F | $\begin{array}{\|c\|} \hline 106 \\ 70 \\ 46 \\ \hline \end{array}$ | V | $\begin{array}{\|l\|l} \hline 126 \\ 86 \\ 56 \\ \hline \end{array}$ | f | $\begin{aligned} & 146 \\ & 102 \\ & 66 \\ & \hline \end{aligned}$ | v | 166 <br> 118 <br> 76 <br> 16 <br> 18 |
| 7 | 0111 |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \end{aligned}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \end{aligned}$ | , | $\begin{aligned} & 47 \\ & 39 \\ & 27 \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \end{aligned}$ | G | $\begin{array}{\|c\|} \hline 107 \\ 71 \\ 47 \\ \hline 4 \end{array}$ | W | $\begin{array}{\|c} 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\left.\begin{array}{l} 147 \\ 103 \\ 67 \end{array}\right]$ | w | $\begin{array}{r}167 \\ 119 \\ 77 \\ \hline 17\end{array}$ |
| 8 | 1000 | BS | $\begin{array}{\|l\|} \hline 10 \\ 8 \\ 8 \end{array}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 18 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & \hline 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & \hline 70 \\ & 56 \\ & 38 \\ & \hline 8 \end{aligned}$ | H | $\begin{array}{\|l\|} 110 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{array}{\|l\|} \hline 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | x | 170 <br> 120 <br> 18 <br> 18 |
| 9 | 1001 | HT | $\begin{array}{\|c\|} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{aligned} & 31 \\ & 25 \\ & 19 \end{aligned}$ | ) | $\begin{aligned} & \hline 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{array}{\|l\|} \hline 71 \\ 57 \\ 39 \end{array}$ | 1 | $\begin{array}{\|l\|l\|} \hline 113 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{gathered} 131 \\ 89 \\ 59 \\ \hline \end{gathered}$ | i | $\begin{aligned} & 1515 \\ & 105 \\ & 69 \end{aligned}$ | y | 171 <br> 121 <br> 79 <br> 19 |
| 10 | 1010 | LF | $\begin{gathered} 12 \\ 10 \\ A \\ \hline \end{gathered}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 A \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \\ & \hline \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \\ & \hline \end{aligned}$ | J | $\left[\begin{array}{l} 12 \\ 74 \\ 4 A \end{array}\right]$ | Z | $\begin{array}{\|c\|c\|} \hline 132 \\ 90 \\ 5 A \\ \hline \end{array}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | 2 | 172 <br> 122 <br> 122 <br> $7 A$ <br> 12 |
| 11 | 1011 | VT | $\begin{array}{\|l\|} \hline 13 \\ 11 \\ 8 \\ \hline \end{array}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \\ & \hline \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & \hline \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \\ & \hline \end{aligned}$ | K | $\begin{array}{\|l\|l\|} \hline 13 \\ 75 \\ 48 \\ \hline 8 \end{array}$ | A | $\begin{gathered} 133 \\ 99 \\ 58 \end{gathered}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | a | 173 <br> 123 <br> 123 <br> 18 <br> 12 |
| 12 | 1100 | FF | $\begin{array}{\|l\|} \hline 14 \\ 12 \\ c \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 34 \\ 28 \\ 10 \\ \hline \end{array}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 20 \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & \hline 74 \\ & 60 \\ & 30 \\ & \hline \end{aligned}$ | L | $\begin{array}{\|c\|} \hline 14 \\ 76 \\ \\ \hline 18 \end{array}$ | Ó | $\begin{array}{r} \begin{array}{r} 134 \\ 92 \\ 95 \\ 5 \end{array} \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 6 \mathrm{CC} \\ & \hline \end{aligned}$ | ò | 174 174 724 76 |
| 13 | 1101 | CR | $\begin{array}{\|l} \hline 15 \\ 13 \\ 0 \\ \hline \end{array}$ |  | $\begin{array}{\|l} \hline 35 \\ 29 \\ 10 \\ \hline \end{array}$ | - | $\begin{aligned} & \hline 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | = | $\begin{aligned} & 75 \\ & 61 \\ & 60 \\ & \hline \end{aligned}$ | M | $\begin{array}{\|c\|} \hline 115 \\ 17 \\ 40 \\ \hline \end{array}$ | A | $\begin{array}{r} 135 \\ 93 \\ 50 \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | á | 175 1125 70 70 |
| 14 | 1110 | so | $\begin{gathered} 16 \\ 14 \\ 14 \\ \hline \end{gathered}$ |  | $\begin{array}{\|c\|} \hline 36 \\ 30 \\ 18 \\ \hline \end{array}$ | - | $\begin{array}{\|l\|} \hline 56 \\ \hline \\ \hline 66 \\ \hline 6 \\ \hline \end{array}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \\ & 3 E \end{aligned}$ | N | $\begin{array}{\|c\|} \hline 16 \\ 78 \\ 48 \\ \hline \end{array}$ | U | $\begin{aligned} & 136 \\ & \begin{array}{l} 139 \\ 99 \\ 55 \end{array} \end{aligned}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 66 \\ & \hline \end{aligned}$ | \# | 176 <br> 126 <br> 726 <br> 78 <br> 12 |
| 15 | 11 | SI | $\begin{gathered} 17 \\ 15 \\ \hline \\ \hline \end{gathered}$ |  | $\begin{gathered} 37 \\ 31 \\ 31 \\ 15 \end{gathered}$ | 1 | $\begin{aligned} & 57 \\ & 47 \\ & 47 \\ & 27 \end{aligned}$ | ? | $\begin{aligned} & 77 \\ & 63 \\ & 65 \\ & 37 \end{aligned}$ | 0 | $\left.\begin{array}{\|c\|} \hline 17 \\ 79 \\ 45 \\ \hline 1 \end{array} \right\rvert\,$ | - | $\begin{array}{\|l\|l\|} \hline 137 \\ 95 \\ 55 \end{array}$ | 0 | $\begin{aligned} & 157 \\ & 111 \\ & 67 \\ & 67 \end{aligned}$ | DEL | 177 177 177 77 |

KEY


|  |  | $\begin{gathered} \left.\hline 0 \begin{array}{c} 0 \\ 0 \end{array}\right] \\ \hline \begin{array}{c} \text { column } \\ 0 \end{array} \\ \hline \end{gathered}$ |  | $0^{0}$ 0  <br>  0  <br>  1  <br>  1  <br>    |  | 0 0   <br>  2   <br>   0  <br>     <br>     |  | ${ }^{0} 001$, |  | 0.1044 |  |  |  |  |  | ${ }^{0} 1.1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | 6 |  |  |  | 7 |  |
| 0000 | 0 |  |  | NUL | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  | $\begin{array}{\|l\|l\|} \hline 20 \\ 16 \\ 10 \end{array}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \\ & 20 \end{aligned}$ | 0 | $\begin{array}{\|l\|l\|} \hline 60 \\ 48 \\ 40 \\ 30 \end{array}$ | a | $\begin{array}{\|c\|} \hline 100 \\ 64 \\ 40 \end{array}$ | P | $\begin{array}{\|c\|} \hline 120 \\ 80 \\ 50 \end{array}$ | $\stackrel{\square}{ }$ | $\begin{array}{\|l\|} \hline 140 \\ \hline \\ \hline \end{array}$ | $p$ | \| 160 |
| 0001 | 1 |  | $\begin{array}{\|l} \hline 1 \\ 1 \\ \hline \end{array}$ | DCON | $\begin{array}{\|l\|} \hline 21 \\ 17 \\ 11 \end{array}$ | ! | $\begin{array}{\|l\|} \hline 41 \\ 33 \\ 21 \\ \hline \end{array}$ | 1 | $\begin{array}{\|l\|} \hline 61 \\ 49 \\ 31 \\ \hline \end{array}$ | A | $\begin{array}{\|l\|} \hline 101 \\ 65 \\ \hline 41 \\ \hline \end{array}$ | 0 | $\begin{array}{\|} 121 \\ 81 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{array}{\|c\|} \hline 141 \\ 97 \\ 61 \\ \hline \end{array}$ | q | (161161 <br> 111 <br> 71 <br> 12 |
| 0010 | 2 |  | $\begin{array}{\|l\|} 2 \\ 2 \\ 2 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 22 \\ 18 \\ 12 \\ \hline \end{array}$ | " | $\begin{aligned} & \hline 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{array}{\|l\|l\|} \hline 62 \\ 50 \\ 32 \\ \hline \end{array}$ | B | $\begin{array}{\|l\|} \hline 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{\|c\|} 172 \\ 82 \\ 52 \\ \hline \end{array}$ | b | 142 <br> 98 <br> 62 <br> 18 | r | 162 <br> 114 <br> 72 <br> 12 |
| 0011 | 3 |  | $\begin{array}{\|l\|} \hline 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{array}{\|r\|} \hline 23 \\ 19 \\ 13 \\ \hline \end{array}$ | u | $\begin{array}{r} 43 \\ 35 \\ 35 \\ \hline \end{array}$ | 3 | $\begin{array}{\|l\|l\|} \hline 63 \\ 51 \\ 33 \\ \hline \end{array}$ | C | $\begin{array}{\|c\|} \hline 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{\|l\|} \hline 123 \\ 83 \\ 53 \\ \hline \end{array}$ | c | 143 <br> 99 <br> 63 | s | +163 $\begin{array}{r}115 \\ 115 \\ 13 \\ 11\end{array}$ |
| 0100 | 4 |  | $\begin{array}{\|l\|} \hline 4 \\ 4 \\ 4 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 24 \\ 20 \\ 14 \\ \hline \end{array}$ | \$ | $\begin{array}{l\|} \hline 44 \\ 36 \\ 24 \end{array}$ | 4 | $\begin{aligned} & \hline 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\left\|\begin{array}{\|c\|} \hline 104 \\ 68 \\ 44 \end{array}\right\|$ | T | $\begin{array}{\|l\|} \hline 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{aligned} & 144 \\ & 190 \\ & 64 \end{aligned}$ | t | (164116 <br> 116 <br> 74 <br> 18 |
| 0101 | 5 |  | $\begin{array}{\|l\|} \hline 5 \\ 5 \\ 5 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 25 \\ 21 \\ 15 \\ \hline \end{array}$ | \% | $\begin{aligned} & \hline 45 \\ & 37 \\ & 35 \\ & 25 \end{aligned}$ | 5 | $\begin{array}{\|l\|l\|} \hline 65 \\ 53 \\ 35 \\ \hline \end{array}$ | E | $\begin{array}{\|l\|l\|} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\left.\begin{array}{\|c\|} \hline 125 \\ 85 \\ 55 \end{array} \right\rvert\,$ | e | $\begin{array}{\|c\|c\|} \hline 145 \\ 1151 \\ 65 \\ \hline \end{array}$ | $u$ | 165 <br> 117 <br> 75 <br> 15 |
| 0 1 1 0 | 6 |  | $\begin{array}{\|l\|l} \hline 6 \\ 6 \\ 6 \\ \hline \end{array}$ |  | $\begin{array}{\|l\|l} \hline 26 \\ 22 \\ 16 \\ \hline \end{array}$ | \& | $\begin{aligned} & \hline 46 \\ & \hline 38 \\ & 26 \end{aligned}$ | 6 | $\begin{array}{\|l\|l\|} \hline 66 \\ 54 \\ 36 \\ \hline \end{array}$ | F | $\begin{array}{\|l\|} \hline 106 \\ 70 \\ 46 \\ \hline \end{array}$ | v | $\begin{array}{\|l\|l\|} \hline 126 \\ 86 \\ 56 \\ 56 \end{array}$ | f | $\left.\begin{gathered} 146 \\ 102 \\ 66 \end{gathered} \right\rvert\,$ | $v$ | (166118 <br> 118 <br> 76 <br> 16 |
| 0 1 1 1 | , |  | $\begin{aligned} & 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ |  | $\begin{array}{\|c\|} \hline 27 \\ 23 \\ 17 \\ \hline \end{array}$ | , | $\left[\begin{array}{l} 47 \\ 39 \\ 27 \end{array}\right]$ | 7 | $\begin{array}{\|l\|l\|} \hline 67 \\ 55 \\ 37 \end{array}$ | G | $\begin{array}{\|c\|} \hline 107 \\ 71 \\ 47 \end{array}$ | W | $\begin{array}{\|c\|} \hline 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\left[\begin{array}{l} 147 \\ 103 \\ 67 \end{array}\right.$ | w | $\begin{array}{r}167 \\ 119 \\ 17 \\ 717 \\ \hline 18\end{array}$ |
| 1 0000 | 8 | BS | $\begin{array}{\|l\|} \hline 10 \\ 88 \\ 8 \\ \hline \end{array}$ | CAN | $\begin{array}{\|l\|l\|} \hline 30 \\ 24 \\ 18 \\ \hline \end{array}$ | 1 | $\begin{aligned} & \hline 50 \\ & \hline 40 \\ & 20 \\ & 28 \end{aligned}$ | 8 | $\begin{array}{\|l\|l\|} \hline 70 \\ 56 \\ 36 \\ \hline \end{array}$ | H | $\left\|\begin{array}{l} 110 \\ 12 \\ 48 \end{array}\right\|$ | X | $\left\|\begin{array}{\|c\|} \hline 130 \\ 88 \\ 58 \end{array}\right\|$ | h | $\begin{array}{\|l\|} \hline 150 \\ 150 \\ 68 \\ \hline \end{array}$ | x | 170 170 78 78 |
| 1) 001 | 9 | HT | $\begin{array}{\|c\|} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 31 \\ 25 \\ 19 \end{array}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 41 \\ & 29 \end{aligned}$ | 9 | $\begin{array}{\|l\|} \hline 11 \\ 57 \\ 39 \\ \hline \end{array}$ | 1 | $\left\|\begin{array}{\|c\|} \hline 11 \\ 73 \\ 49 \end{array}\right\|$ | Y | $\left\|\begin{array}{c\|} 131 \\ 89 \\ 59 \end{array}\right\|$ | i | $\begin{array}{\|c\|} \hline 151 \\ \hline 15 \\ 109 \\ \hline \end{array}$ | y | 171 <br> 121 <br> 79 <br> 12 |
| 1010 | 10 | LF | $\begin{array}{\|c} 12 \\ 10 \\ A \\ \hline \end{array}$ | SUB | $\begin{array}{\|l\|} \hline 32 \\ 26 \\ 1 A \\ \hline \end{array}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 42 \\ & 2 A \end{aligned}$ | : | $\begin{array}{\|l} \hline 72 \\ 58 \\ 3 A \\ \hline \end{array}$ | $J$ | $\left[\begin{array}{l} 112 \\ 74 \\ 4 A \\ \hline \end{array}\right.$ | Z | $\left[\begin{array}{c} 132 \\ 90 \\ 5 A \\ \hline \end{array}\right.$ | j | $\left\|\begin{array}{c\|} 152 \\ 106 \\ 6 A \end{array}\right\|$ | $z$ | 172 <br> 122 <br> 78 <br> 78 <br> 12 |
| 011 | ${ }^{\prime \prime}$ | VT | $\begin{array}{\|c\|} \hline 13 \\ 11 \\ 11 \\ \hline \end{array}$ | ESC | $\begin{array}{\|l} \hline 33 \\ 27 \\ 18 \\ \hline \end{array}$ | + | $\begin{array}{r} 53 \\ 43 \\ 48 \\ \hline \end{array}$ | ; | $\begin{array}{\|l\|l\|} \hline 73 \\ 59 \\ \hline 38 \\ \hline \end{array}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \\ & \hline 4 \end{aligned}$ | ¢ | $\begin{array}{\|} 133 \\ 91 \\ 58 \\ \hline \end{array}$ | k | $\begin{array}{\|c\|} \hline 153 \\ 101 \\ 68 \\ \hline \end{array}$ | a | $\begin{array}{r}173 \\ 123 \\ 78 \\ 78 \\ \hline 18\end{array}$ |
| 1 1 0 0 | 12 | FF | $\begin{array}{\|l\|l\|} \hline 14 \\ 12 \\ c \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 34 \\ 28 \\ 10 \\ \hline \end{array}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 24 \\ & 20 \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \end{aligned}$ | L | $\begin{array}{\|l\|} \hline 14 \\ 76 \\ 4 C \\ \hline \end{array}$ | ¢ | $\begin{array}{\|} 134 \\ 92 \\ 50 \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 60 \end{aligned}$ | ¢ | 174 1124 7124 71 |
| 1 101 | 13 | CR | $\begin{array}{\|c\|} \hline 15 \\ 13 \\ \hline \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \hline 35 \\ 29 \\ 10 \\ \hline \end{array}$ | - | $\begin{aligned} & 55 \\ & \hline 45 \\ & 45 \\ & \hline 20 \\ & \hline \end{aligned}$ | = | $\begin{array}{\|l\|} \hline 75 \\ 61 \\ 30 \\ \hline \end{array}$ | M | $\begin{array}{\|c} 115 \\ 77 \\ 40 \\ \hline \end{array}$ | ¢ | $\begin{array}{\|c} 135 \\ 93 \\ 90 \\ \hline \end{array}$ | m | $\begin{aligned} & 15 \\ & 159 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | u | 175 <br> 125 <br> 70 <br> 70 <br> 18 |
| 10 | 14 | so | $\begin{array}{\|l\|l\|} \hline 16 \\ 14 \\ \hline \\ \hline \end{array}$ |  | $\begin{array}{\|c\|} \hline 36 \\ 30 \\ 1 E \\ \hline \end{array}$ | - | $\begin{array}{\|l\|} \hline 56 \\ 46 \\ 46 \\ \hline \end{array}$ | > | $\begin{array}{\|l\|} \hline 76 \\ 62 \\ 62 \\ \hline 3 E \\ \hline \end{array}$ | N | $\begin{array}{\|c\|} \hline 16 \\ 78 \\ 48 \\ \hline \end{array}$ | 亿 | $\begin{array}{\|} 136 \\ 94 \\ 58 \\ 56 \end{array}$ | n | 156 <br> 110 <br> $6 E$ <br> 10 | $\stackrel{\sim}{4}$ | 176 <br> 126 <br> 71 <br> 76 <br> 122 |
| 1 1 1 | 15 | SI | $\begin{array}{\|c} 17 \\ 15 \\ 15 \\ \hline \end{array}$ |  | $\begin{aligned} & 37 \\ & 31 \\ & 17 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 57 \\ & 47 \\ & 47 \\ & \hline \end{aligned}$ | ? | 77 <br> 63 <br> $3 F$ | 0 | $\begin{array}{\|c\|} \hline 117 \\ 79 \\ 45 \\ \hline \end{array}$ | $\stackrel{\text { e }}{ }$ | $\begin{array}{\|} 137 \\ 95 \\ 5 F \\ \hline \end{array}$ | 0 | [1571 | DEL | 177 127 77 |



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Figure A-16 Swiss 7-Bit National Replacement Character Set

|  |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ROW | BITS <br> B4 B3 B2 B1 | $\begin{array}{\|llll} \hline 87 & 0 & & \\ 86 & & 0 & \\ 85 & & & 0 \end{array}$ |  | ${ }^{0} 0$, |  | $0_{1}$ |  |  |  |  |  |  |  |  |  | ${ }^{1} \times 1$. |  |
| 0 | 0000 | NUL | $\begin{array}{\|l\|} \hline 0 \\ 0 \\ 0 \\ \hline \end{array}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \\ & \hline \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \end{aligned}$ | $6$ | $\begin{array}{\|r\|} \hline 100 \\ 64 \\ 40 \\ \hline \end{array}$ | P | $\begin{array}{\|l} \hline 180 \\ 80 \\ 50 \\ \hline \end{array}$ | , | $\begin{array}{\|c} 140 \\ 96 \\ 60 \end{array}$ | p | 160 <br> 112 <br> 70 <br> 101 |
| 1 | $0 \quad 001$ |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | DC1 | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | ! | $\begin{aligned} & 41 \\ & 33 \\ & 21 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \\ & \hline \end{aligned}$ | A | $\begin{array}{\|r\|} \hline 101 \\ 65 \\ 41 \\ \hline \end{array}$ | Q | $\begin{array}{\|r} \hline 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{array}{\|r} 141 \\ 97 \\ 61 \\ \hline \end{array}$ | 9 | $\begin{array}{r}161 \\ 113 \\ 71 \\ \hline 18\end{array}$ |
| 2 | 00010 |  | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \\ & \hline \end{aligned}$ | 11 | $\begin{aligned} & 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{array}{\|c\|} \hline 102 \\ 66 \\ 42 \\ \hline \end{array}$ | R | $\begin{array}{\|c} 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{array}{\|r\|} \hline 142 \\ 98 \\ 62 \\ \hline \end{array}$ | r | $\begin{gathered} 162 \\ 114 \\ 72 \\ \hline \end{gathered}$ |
| 3 | 0011 |  | $\begin{array}{\|l} \hline 3 \\ 3 \\ 3 \\ \hline \end{array}$ | DC3 | $\begin{aligned} & 23 \\ & 19 \\ & 13 \\ & \hline \end{aligned}$ | $\pm$ | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \\ & \hline \end{aligned}$ | C | $\begin{array}{\|c\|} \hline 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{\|r\|} \hline 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{gathered} 193 \\ 99 \\ 63 \end{gathered}$ | S | $\begin{array}{r}163 \\ 115 \\ 73 \\ \hline 18\end{array}$ |
| 4 | 0100 |  | $\begin{aligned} & \hline 4 \\ & 4 \\ & 4 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \\ & \hline \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \end{aligned}$ | D | $\begin{array}{\|c\|} \hline 104 \\ 68 \\ 44 \\ \hline \end{array}$ | T | $\begin{array}{\|c} \hline 124 \\ 84 \\ 54 \\ \hline \end{array}$ | d | $\begin{array}{\|r\|} \hline 144 \\ 100 \\ 64 \\ \hline \end{array}$ | t | $\begin{gathered} 164 \\ 116 \\ 74 \end{gathered}$ |
| 5 | 0101 |  | $\begin{array}{\|l\|} \hline 5 \\ 5 \\ 5 \\ \hline \end{array}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 15 \\ & \hline \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \\ & \hline \end{aligned}$ | 5 | $\begin{aligned} & \hline 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{\|c\|} \hline 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{\|r\|} \hline 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{array}{\|l\|} \hline 145 \\ 101 \\ 65 \\ \hline \end{array}$ | u | 165 <br> 117 <br> 75 <br> 18 |
| 6 | 0110 |  | $\begin{array}{\|l\|} \hline 6 \\ 6 \\ 6 \\ \hline \end{array}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \end{aligned}$ | 8 | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \end{aligned}$ | F | $\begin{array}{\|r\|} \hline 106 \\ 70 \\ 46 \\ \hline \end{array}$ | V | $\left[\begin{array}{r} 126 \\ 86 \\ 56 \end{array}\right]$ | $f$ | $\begin{array}{\|c} 146 \\ 102 \\ 66 \\ \hline \end{array}$ | v | $\begin{array}{\|r} 166 \\ 118 \\ 76 \\ \hline \end{array}$ |
| 7 | 0111 |  | $\begin{aligned} & \hline 7 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{\|r\|} \hline 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{\|r\|} \hline 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{array}{\|r} 147 \\ 103 \\ 67 \end{array}$ | w | $\begin{aligned} & 167 \\ & 119 \\ & 77 \\ & \hline \end{aligned}$ |
| 8 | 1000 | BS | $\begin{array}{\|c} \hline 10 \\ 8 \\ 8 \\ \hline \end{array}$ | CAN | $\begin{aligned} & 30 \\ & 24 \\ & 18 \\ & \hline \end{aligned}$ | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \\ & \hline \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \\ & \hline \end{aligned}$ | H | $\begin{gathered} 110 \\ 72 \\ 48 \\ \hline \end{gathered}$ | X | $\begin{array}{\|r\|} \hline 130 \\ 88 \\ 58 \\ \hline \end{array}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 17\end{array}$ |
| 9 | 1001 | HT | $\begin{array}{\|r} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{aligned} & 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & \hline 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \\ & \hline \end{aligned}$ | I | $\begin{array}{\|l} \hline 11 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{\|r} 131 \\ 89 \\ 59 \\ \hline \end{array}$ | i | $\begin{array}{\|r\|} \hline 151 \\ 105 \\ 69 \\ \hline \end{array}$ | y | $\begin{array}{r}171 \\ 121 \\ 79 \\ \hline 172\end{array}$ |
| 10 | 1010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & A \\ & \hline \end{aligned}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 \mathrm{~A} \\ & \hline \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 A \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{array}{\|l} 112 \\ 74 \\ 4 \mathrm{~A} \\ \hline \end{array}$ | Z | $\begin{gathered} 132 \\ 90 \\ 5 A \\ \hline \end{gathered}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 A \end{aligned}$ | $z$ | $\begin{array}{r}172 \\ 122 \\ 74 \\ \hline 173\end{array}$ |
| 11 | 1011 | VT | $\begin{array}{\|c\|} \hline 13 \\ 11 \\ 8 \\ \hline \end{array}$ | ESC | $\begin{array}{l\|} 33 \\ 27 \\ 18 \\ \hline \end{array}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 28 \\ & \hline \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \\ & \hline \end{aligned}$ | K | $\begin{array}{\|c\|} \hline 113 \\ 75 \\ 48 \\ \hline \end{array}$ | İ | $\begin{array}{r} 133 \\ 91 \\ 58 \\ \hline \end{array}$ | k | $\begin{array}{r} 153 \\ 107 \\ 6 B \\ \hline \end{array}$ | 0 | $\begin{array}{r}173 \\ 123 \\ 78 \\ \hline\end{array}$ |
| 12 | 1100 | FF | $\begin{array}{\|c} \hline 14 \\ 12 \\ \mathrm{c} \\ \hline \end{array}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 10 \\ & \hline \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 20 \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \\ & \hline \end{aligned}$ | L | $\begin{array}{\|c\|} \hline 114 \\ 76 \\ 4 C \\ \hline \end{array}$ | N | $\begin{array}{\|r} 134 \\ 92 \\ 5 C \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 6 C \\ & - \end{aligned}$ | $\stackrel{n}{n}$ | $\begin{array}{r}174 \\ 124 \\ 76 \\ \hline 8\end{array}$ |
| 13 | 1101 | CR | $\begin{array}{\|c\|} \hline 15 \\ 13 \\ 0 \\ \hline \end{array}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | $=$ | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{array}{\|c\|} \hline 115 \\ 77 \\ 40 \\ \hline \end{array}$ | 2 | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{array}{r} 155 \\ 109 \\ 60 \\ \hline \end{array}$ | ¢ | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline\end{array}$ |
| 14 | 1110 | SO | $\begin{array}{\|c} \hline 16 \\ 14 \\ \mathrm{E} \\ \hline \end{array}$ |  | $\begin{aligned} & 36 \\ & 30 \\ & 1 E \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \\ & \hline \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 \mathrm{E} \end{aligned}$ | N | $\begin{array}{\|c\|} \hline 166 \\ 78 \\ 48 \\ \hline \end{array}$ | $\wedge$ | $\begin{array}{\|c} 136 \\ 94 \\ 5 E \\ \hline \end{array}$ | n | $\begin{array}{\|c} 156 \\ 110 \\ 66 \\ \hline \end{array}$ | $\sim$ | $\begin{array}{r}176 \\ 126 \\ 78 \\ \hline 178 \\ \hline\end{array}$ |
| 15 | 1111 | SI | $\begin{gathered} 17 \\ 15 \\ F \\ \hline \end{gathered}$ |  | $\begin{aligned} & 37 \\ & 31 \\ & 17 \\ & \hline \end{aligned}$ | / | $\begin{aligned} & 57 \\ & 47 \\ & 2 F \\ & \hline \end{aligned}$ | $?$ | 77 63 37 | 0 | $\begin{array}{\|c\|} \hline 117 \\ 79 \\ 45 \end{array}$ | - | $\left[\begin{array}{c} 137 \\ 95 \\ 55 \end{array}\right]$ | 0 | $\left[\begin{array}{c} 157 \\ 111 \\ 67 \end{array}\right.$ | DEL | $\begin{array}{r}177 \\ 127 \\ 7 \% \\ \hline\end{array}$ |

KEY

| ascil Character | ESC | $\begin{gathered} 111 \\ 33 \\ 27 \\ 18 \end{gathered}$ | column row octal <br> decimal <br> HEX |  | highlights differences <br> FROM ASCII |
| :---: | :---: | :---: | :---: | :---: | :---: |

LJ-1062

Figure A-17 Spanish 7-Bit National Replacement Character Set

|  |  | $\begin{gathered} \text { COLUMN } \\ 0 \end{gathered}$ |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ROW | BITS <br> B4 B3 B2 B1 | $\begin{array}{llll} 87 & 0 & \\ 86 & & 0 \\ 85 & & & 0 \end{array}$ |  | 0 |  | 0 |  | 0 |  | ${ }^{1} 0$ |  | 10 |  | ${ }^{1} 1$ |  | 1 , |  |
| 0 | 0000 | NUL | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 16 \\ & 10 \\ & \hline \end{aligned}$ | SP | $\begin{aligned} & 40 \\ & 32 \\ & 20 \end{aligned}$ | 0 | $\begin{aligned} & 60 \\ & 48 \\ & 30 \\ & \hline \end{aligned}$ | @ | $\begin{array}{r} 100 \\ 64 \\ 40 \\ \hline \end{array}$ | P | $\begin{array}{r} 120 \\ 80 \\ 50 \\ \hline \end{array}$ | , | $\begin{aligned} & 140 \\ & 96 \\ & 60 \\ & \hline \end{aligned}$ | p | 160 <br> 112 <br> 70 <br> 18 |
| 1 | 0001 |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { DC1 } \\ \text { (XON } \end{array}$ | $\begin{aligned} & 21 \\ & 17 \\ & 11 \\ & \hline \end{aligned}$ | ! | $\begin{aligned} & \hline 41 \\ & 33 \\ & 21 \\ & \hline \end{aligned}$ | 1 | $\begin{aligned} & 61 \\ & 49 \\ & 31 \\ & \hline \end{aligned}$ | A | $\begin{array}{r} 101 \\ 65 \\ 41 \\ \hline \end{array}$ | Q | $\begin{array}{r} 121 \\ 81 \\ 51 \\ \hline \end{array}$ | a | $\begin{array}{r} 141 \\ 97 \\ 61 \\ \hline \end{array}$ | 9 | $\begin{array}{r}161 \\ 113 \\ 71 \\ \hline 18\end{array}$ |
| 2 | 0010 |  | $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 22 \\ & 18 \\ & 12 \\ & \hline \end{aligned}$ | ' | $\begin{aligned} & 42 \\ & 34 \\ & 22 \\ & \hline \end{aligned}$ | 2 | $\begin{aligned} & 62 \\ & 50 \\ & 32 \\ & \hline \end{aligned}$ | B | $\begin{aligned} & 102 \\ & 66 \\ & 42 \end{aligned}$ | R | $\begin{array}{r} 122 \\ 82 \\ 52 \\ \hline \end{array}$ | b | $\begin{array}{r} 142 \\ 98 \\ 62 \end{array}$ | r | $\begin{array}{\|} 162 \\ 114 \\ 72 \end{array}$ |
| 3 | 0011 |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { DC3 } \\ & (\times O F) \end{aligned}$ | $\begin{aligned} & 23 \\ & 19 \\ & 13 \end{aligned}$ | ¢ | $\begin{aligned} & 43 \\ & 35 \\ & 23 \end{aligned}$ | 3 | $\begin{aligned} & 63 \\ & 51 \\ & 33 \end{aligned}$ | C | $\begin{array}{r} 103 \\ 67 \\ 43 \\ \hline \end{array}$ | S | $\begin{array}{r} 123 \\ 83 \\ 53 \\ \hline \end{array}$ | C | $\begin{array}{r} 143 \\ 99 \\ 63 \end{array}$ | S | $\begin{aligned} & 163 \\ & 115 \\ & 73 \end{aligned}$ |
| 4 | 0100 |  | $\begin{aligned} & 4 \\ & 4 \\ & 4 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 24 \\ & 20 \\ & 14 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 44 \\ & 36 \\ & 24 \\ & \hline \end{aligned}$ | 4 | $\begin{aligned} & 64 \\ & 52 \\ & 34 \\ & \hline \end{aligned}$ | D | $\begin{array}{r} 104 \\ 68 \\ 44 \end{array}$ | T | $\begin{array}{r} 124 \\ 84 \\ 54 \end{array}$ | d | $\begin{aligned} & 1944 \\ & 100 \\ & 64 \end{aligned}$ | t | $\begin{array}{r}164 \\ 116 \\ 74 \\ \hline 18\end{array}$ |
| 5 | 0101 |  | $\begin{aligned} & 5 \\ & 5 \\ & 5 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 25 \\ & 21 \\ & 15 \\ & \hline \end{aligned}$ | \% | $\begin{aligned} & 45 \\ & 37 \\ & 25 \\ & \hline \end{aligned}$ | 5 | $\begin{aligned} & 65 \\ & 53 \\ & 35 \\ & \hline \end{aligned}$ | E | $\begin{array}{r} 105 \\ 69 \\ 45 \\ \hline \end{array}$ | U | $\begin{array}{r} 125 \\ 85 \\ 55 \\ \hline \end{array}$ | e | $\begin{aligned} & 145 \\ & 101 \\ & 65 \\ & \hline \end{aligned}$ | u | $\begin{array}{\|l\|} \hline 165 \\ 117 \\ 75 \\ \hline \end{array}$ |
| 6 | 0110 |  | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \end{aligned}$ |  | $\begin{aligned} & 26 \\ & 22 \\ & 16 \\ & \hline \end{aligned}$ | \& | $\begin{aligned} & 46 \\ & 38 \\ & 26 \\ & \hline \end{aligned}$ | 6 | $\begin{aligned} & 66 \\ & 54 \\ & 36 \\ & \hline 36 \end{aligned}$ | F | $\begin{aligned} & 106 \\ & 70 \\ & 46 \\ & \hline \end{aligned}$ | V | $\begin{array}{r} 126 \\ 86 \\ 56 \\ \hline \end{array}$ | $f$ | $\begin{array}{r} 146 \\ 102 \\ 66 \\ \hline \end{array}$ | $v$ | $\begin{array}{\|c\|} \hline 166 \\ 118 \\ 76 \\ \hline \end{array}$ |
| 7 | 0111 |  | $\begin{array}{\|l} \hline 7 \\ 7 \\ 7 \\ \hline \end{array}$ |  | $\begin{aligned} & 27 \\ & 23 \\ & 17 \\ & \hline \end{aligned}$ | ' | $\begin{aligned} & 47 \\ & 39 \\ & 27 \\ & \hline \end{aligned}$ | 7 | $\begin{aligned} & 67 \\ & 55 \\ & 37 \\ & \hline \end{aligned}$ | G | $\begin{array}{r} 107 \\ 71 \\ 47 \\ \hline \end{array}$ | W | $\begin{array}{r} 127 \\ 87 \\ 57 \\ \hline \end{array}$ | g | $\begin{array}{r} 147 \\ 103 \\ 67 \\ \hline \end{array}$ | W | $\begin{array}{r}167 \\ 119 \\ 77 \\ \hline 17\end{array}$ |
| 8 | 1000 | BS | $\begin{gathered} \hline 10 \\ 8 \\ 8 \\ \hline \end{gathered}$ | CAN | 30 24 18 18 | $($ | $\begin{aligned} & 50 \\ & 40 \\ & 28 \end{aligned}$ | 8 | $\begin{aligned} & 70 \\ & 56 \\ & 38 \end{aligned}$ | H | $\begin{array}{r} 110 \\ 72 \\ 48 \\ \hline \end{array}$ | X | $\begin{gathered} 130 \\ 88 \\ 58 \end{gathered}$ | h | $\begin{aligned} & 150 \\ & 104 \\ & 68 \end{aligned}$ | X | $\begin{array}{r}170 \\ 120 \\ 78 \\ \hline 18\end{array}$ |
| 9 | 1001 | HT | $\begin{array}{\|c} \hline 11 \\ 9 \\ 9 \\ \hline \end{array}$ |  | $\begin{aligned} & \hline 31 \\ & 25 \\ & 19 \\ & \hline \end{aligned}$ | ) | $\begin{aligned} & 51 \\ & 41 \\ & 29 \\ & \hline \end{aligned}$ | 9 | $\begin{aligned} & 71 \\ & 57 \\ & 39 \\ & \hline \end{aligned}$ | 1 | $\begin{array}{r} 111 \\ 73 \\ 49 \\ \hline \end{array}$ | Y | $\begin{array}{r} 131 \\ 89 \\ 59 \\ \hline \end{array}$ | i | $\begin{aligned} & 151 \\ & 105 \\ & 69 \\ & \hline \end{aligned}$ | y | $\begin{array}{r}171 \\ 121 \\ 79 \\ \hline 172\end{array}$ |
| 10 | 1010 | LF | $\begin{aligned} & 12 \\ & 10 \\ & A \end{aligned}$ | SUB | $\begin{aligned} & 32 \\ & 26 \\ & 1 \mathrm{~A} \\ & \hline \end{aligned}$ | * | $\begin{aligned} & 52 \\ & 42 \\ & 2 \mathrm{~A} \\ & \hline \end{aligned}$ | : | $\begin{aligned} & 72 \\ & 58 \\ & 3 A \end{aligned}$ | J | $\begin{gathered} 112 \\ 74 \\ 4 \mathrm{~A} \end{gathered}$ | Z | $\begin{array}{r} 132 \\ 90 \\ 5 \mathrm{~A} \\ \hline \end{array}$ | j | $\begin{aligned} & 152 \\ & 106 \\ & 6 \mathrm{~A} \end{aligned}$ | z | $\begin{array}{r}172 \\ 122 \\ 74 \\ \hline 18\end{array}$ |
| 11 | 1011 | VT | $\begin{gathered} 13 \\ 11 \\ 8 \\ \hline \end{gathered}$ | ESC | $\begin{aligned} & 33 \\ & 27 \\ & 18 \end{aligned}$ | + | $\begin{aligned} & 53 \\ & 43 \\ & 2 B \end{aligned}$ | ; | $\begin{aligned} & 73 \\ & 59 \\ & 38 \end{aligned}$ | K | $\begin{aligned} & 113 \\ & 75 \\ & 48 \\ & 48 \end{aligned}$ | [ | $\begin{array}{r} 133 \\ 91 \\ 58 \\ \hline \end{array}$ | k | $\begin{aligned} & 153 \\ & 107 \\ & 68 \end{aligned}$ | $\{$ | $\begin{array}{r}173 \\ 123 \\ 78 \\ \hline 18 \\ \hline\end{array}$ |
| 12 | 1100 | FF | $\begin{aligned} & 14 \\ & 12 \\ & c \end{aligned}$ |  | $\begin{aligned} & 34 \\ & 28 \\ & 1 \mathrm{C} \end{aligned}$ | , | $\begin{aligned} & 54 \\ & 44 \\ & 2 \mathrm{C} \\ & \hline \end{aligned}$ | $<$ | $\begin{aligned} & 74 \\ & 60 \\ & 30 \end{aligned}$ | L | $\begin{aligned} & 114 \\ & 76 \\ & 4 C \end{aligned}$ | \} | $\begin{array}{r} 134 \\ 92 \\ 5 \mathrm{C} \\ \hline \end{array}$ | 1 | $\begin{aligned} & 154 \\ & 108 \\ & 6 \mathrm{C} \end{aligned}$ | 1 | 174 124 76 |
| 13 | 1101 | CR | $\begin{gathered} 15 \\ 13 \\ 0 \\ \hline \end{gathered}$ |  | $\begin{aligned} & 35 \\ & 29 \\ & 10 \end{aligned}$ | - | $\begin{aligned} & 55 \\ & 45 \\ & 20 \\ & \hline \end{aligned}$ | $=$ | $\begin{aligned} & 75 \\ & 61 \\ & 30 \\ & \hline \end{aligned}$ | M | $\begin{array}{r} 115 \\ 77 \\ 40 \\ \hline \end{array}$ | ] | $\begin{array}{r} 135 \\ 93 \\ 50 \\ \hline \end{array}$ | m | $\begin{aligned} & 155 \\ & 109 \\ & 60 \\ & \hline \end{aligned}$ | $\}$ | $\begin{array}{r}175 \\ 125 \\ 70 \\ \hline\end{array}$ |
| 14 | 1110 | SO | $\begin{gathered} 16 \\ 14 \\ \mathrm{E} \end{gathered}$ |  | $\begin{aligned} & 36 \\ & 30 \\ & 1 \mathrm{E} \end{aligned}$ | - | $\begin{aligned} & 56 \\ & 46 \\ & 2 E \\ & \hline \end{aligned}$ | $>$ | $\begin{aligned} & 76 \\ & 62 \\ & 3 E \\ & \hline \end{aligned}$ | N | $\begin{aligned} & 116 \\ & 78 \\ & 4 E \\ & \hline \end{aligned}$ | $\wedge$ | $\begin{aligned} & 136 \\ & 94 \\ & 5 \mathrm{E} \\ & \hline \end{aligned}$ | n | $\begin{aligned} & 156 \\ & 110 \\ & 6 \mathrm{E} \end{aligned}$ | $\sim$ | $\begin{array}{r}176 \\ 126 \\ 78 \\ \hline 77\end{array}$ |
| 15 | 1111 | SI | $\begin{gathered} 17 \\ 15 \\ F \\ \hline \end{gathered}$ |  | $\begin{aligned} & 37 \\ & 31 \\ & 1 F \end{aligned}$ | / | $\begin{aligned} & 57 \\ & 47 \\ & 2 \mathrm{~F} \\ & \hline \end{aligned}$ | $?$ | $\begin{aligned} & 77 \\ & 63 \\ & 3 F \end{aligned}$ | 0 | $\begin{array}{r} 117 \\ 79 \\ 48 \end{array}$ | - | $\begin{aligned} & 137 \\ & 95 \\ & 95 \end{aligned}$ | 0 | $\begin{aligned} & 117 \\ & 111 \\ & 6 \mathrm{~F} \\ & \hline \end{aligned}$ | DEL | 177 <br> 127 <br> $7 F$ |

KEY

| ASCII CHARACTER | ESC | $\begin{gathered} 1 / 11 \\ 33 \\ 27 \\ 18 \end{gathered}$ | column/Row octal <br> decimal hex | HIGHLIGHTS DIFFERENCES FROM ASCII |
| :---: | :---: | :---: | :---: | :---: |

LJ. 1066

Figure A-18 U.K. 7-Bit National Replacement Character Set

## B

## International Keyboards



Figure B-1 Canadian-English Keyboard



Figure B-2 Canadian-French Keyboard


Figure B-3 Danish Keyboard


Figure B-4 Finnish Keyboard

| 可回回回圂 | 7 | －n／ | T | 回回 |
| :---: | :---: | :---: | :---: | :---: |



LJ．0830
Figure B－5 French Keyboard


Figure B－6 German／Austrian Keyboard


Figure B-7 Italian Keyboard


Figure B-8 Norwegian Keyboard


Figure B－9 Spanish Keyboard

| 四回回可回 | 回回｜ | ｜ | V1， | 回 |
| :---: | :---: | :---: | :---: | :---: |



Figure B－10 Swedish Keyboard

| － |  | － | － | 回同同 |
| :---: | :---: | :---: | :---: | :---: |



Figure B－11 Swiss－French Keyboard


Figure B－12 Swiss－German Keyboard


RE2421
Figure B-13 US/UK Keyboard

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| Organization (structure of subject matter) | 5 | 4 | 3 | 2 | 1 |
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