

Keyboard Layouts

Operating System/2™  
Extended Edition  
Version 1.1

Programming Family

**First Edition (November 1988)**

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## About This Book

This book describes the arrangement of keys on the keyboards that can connect to the IBM Personal System/2, IBM Personal Computer AT, and IBM Personal Computer XT Model 286 computers. This book also describes the following keyboards and the functions that they provide for Communications Manager for 3270 terminal emulation and ASCII terminal emulation (VT100 or IBM 3101):

- IBM Personal Computer Enhanced keyboard 101
- IBM Personal Computer Enhanced keyboard 102
- IBM Personal Computer AT keyboard.

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## Who Should Read This Book

This book is useful to any user of the IBM Operating System/2 Extended Edition Version 1.1 operating system (referred to as the OS/2 program in the remainder of this book). It is a convenient aid to using the keyboard features of the base operating system in general and Communications Manager in particular.

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## How This Book Is Organized

This book contains the following chapters:

- Chapter 1, which shows the keyboards available worldwide for the IBM Personal System/2 personal computers, the IBM Personal Computer AT, and the IBM Personal Computer XT Model 286.
- Chapter 2, which discusses the alphanumeric, graphic, and control characters contained in the system code pages supported by DOS.
- Chapter 3, which discusses the accented characters obtainable with each keyboard and code page combination for the countries supported by the base operating system.
- Chapter 4, which describes the keyboard configurations provided by Communications Manager.

- Appendix A, which contains tables that explain how to perform a broad range of functions using the keyboard profiles available with Communications Manager.
- A glossary containing a list of the terms and definitions used throughout this book.
- An index is located at the back of this book.

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## List of Prerequisite Publications

*IBM Operating System/2 Extended Edition Version 1.1 Getting Started* (referred to as *Getting Started* in the remainder of this book) is the only prerequisite IBM publication for operations in this book. You must complete the tasks in *Getting Started* before using this book.

*Getting Started* contains:

- An introduction to the OS/2 program
- The steps and basic information needed to install the base operating system, Communications Manager, LAN Requester, and Database Manager, as well as how to use *Introducing OS/2*. It is also recommended that you view *Introducing OS/2* before continuing in this book to familiarize yourself with the OS/2 program and the way you interact with it.

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## List of Related Publications

The following are related publications that are included in the OS/2 Extended Edition library:

- *IBM Operating System/2 Extended Edition Version 1.1 User's Guide*
- *IBM Operating System/2 Extended Edition Version 1.1 Commands Reference*
- *IBM Operating System/2 Extended Edition Version 1.1 Structured Query Language (SQL) Concepts*
- *IBM Operating System/2 Extended Edition Version 1.1 System Editor Guide.*

The following is a related publication found in the Standard Edition library that you can purchase separately:

- *IBM Operating System/2 Standard Edition Version 1.1 Programmer's Toolkit*, (6280211).

The following are related publications for the Communications Manager component of the OS/2 Extended Edition library that you can purchase separately:

- *IBM Operating System/2 Extended Edition Version 1.1 System Administrator's Guide for Communications*, (90X7908)
- *IBM Operating System/2 Extended Edition Version 1.1 EHLLAPI Programming Reference*, (01F0252)
- *IBM Operating System/2 Extended Edition Version 1.1 Programming Services and Advanced Problem Determination for Communications*, (90X7906)
- *IBM Operating System/2 Extended Edition Version 1.1 ACDI Programming Reference*, (90X7911)
- *IBM Operating System/2 Extended Edition Version 1.1 APPC Programming Reference*, (90X7910)
- *IBM Operating System/2 Extended Edition Version 1.1 ECF Server-Requester (SRPI) Programming Reference*, (90X7909).

The following are related publications for the Database Manager component of the OS/2 Extended Edition library that you can purchase separately:

- *IBM Operating System/2 Extended Edition Version 1.1 Database Manager Programming Guide and Reference*, (90X7905)
- *IBM Operating System/2 Extended Edition Version 1.1 SQL Reference*, (90X7907).

The following is a related publication for the OS/2 program that you can purchase separately:

- *IBM Operating System/2 Extended Edition Version 1.1 Problem Determination Guide for the Service Coordinator*, (90X7904).



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## Chapter 1. Keyboard Layouts

This chapter describes the keyboards supported by the base operating system. You can use keyboard layouts to locate character positions on the keyboard after you have changed your keyboard layout with the **KEYB** command or in your **CONFIG.SYS** file. Different characters can appear in different positions, depending on the country language selected with **KEYB**. The function keys located across the top of the keyboard are not shown. Shaded areas show keys that are not available on some U.S. keyboards.

For keys with three or four characters shown, use the key combinations in the following table to produce the desired upper-right and lower-right characters. Lower-left characters require no additional keys. Use the shift key for upper-left characters. The Alternate Graphics (**AltGr**) key is an additional shift state found on your keyboard. Currently this shift state has no functions defined for it.

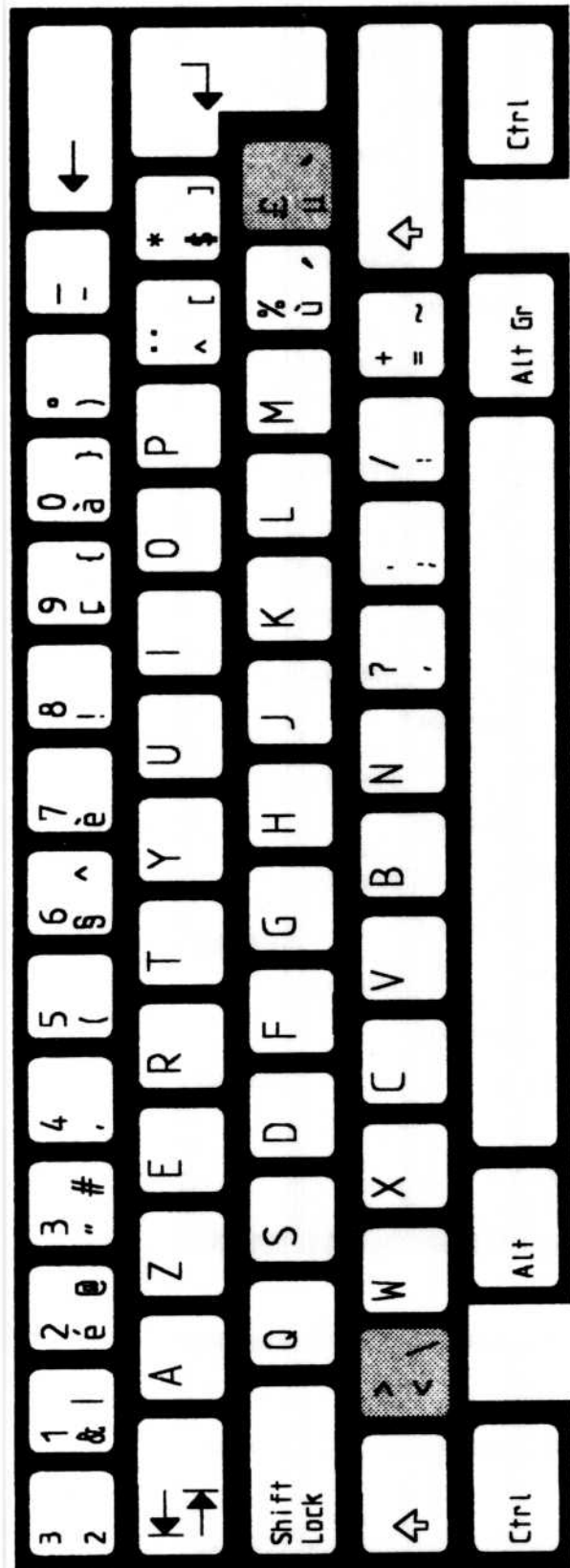
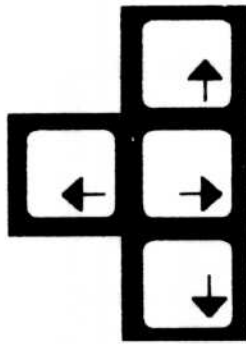
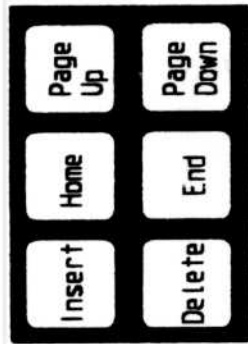
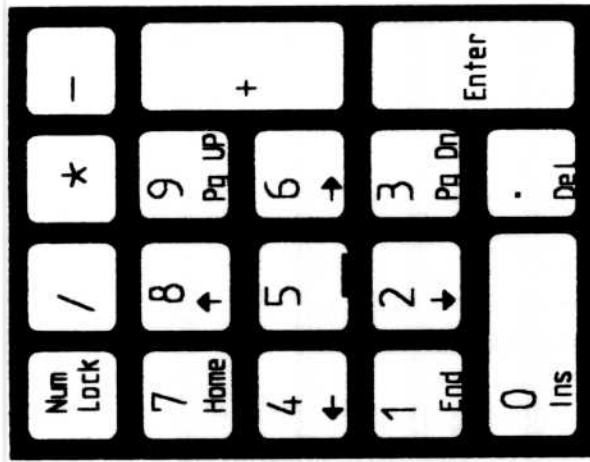
<b>Country</b>	<b>Lower right character except enhanced keyboard</b>	<b>Lower right character enhanced template</b>	<b>Upper right character all templates</b>
Canada (Fr.)	Alt+Shift keys	AltGr	None
Denmark	Alt	AltGr	Alt+Shift keys
Finland	Alt	AltGr	Alt+Shift keys
Norway	Alt	AltGr	Alt+Shift keys
Sweden	Alt	AltGr	Alt+Shift keys
All others	Alt+Ctrl keys	AltGr	None

Refer to Chapter 3 for allowable accent key and letter key combinations for each country keyboard and code page combination. Also, next to the enhanced PC keyboard layouts of France, Italy, and the United Kingdom, you will see a subcountry code. Since these countries have more than one enhanced keyboard, the subcountry code allows you to select the keyboard you want. If you do not specify the code when using the KEYB command, your system uses the default value.

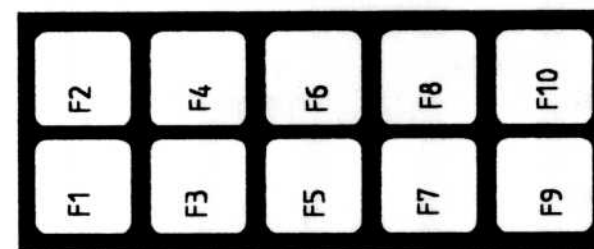
Refer to the KEYB command in the “Using the Base Operating System” section of the *IBM Operating System/2 Extended Edition Version 1.1 User's Guide* (referred to as the *User's Guide* in the remainder of this book) for information about which keyboard is used as the default keyboard.



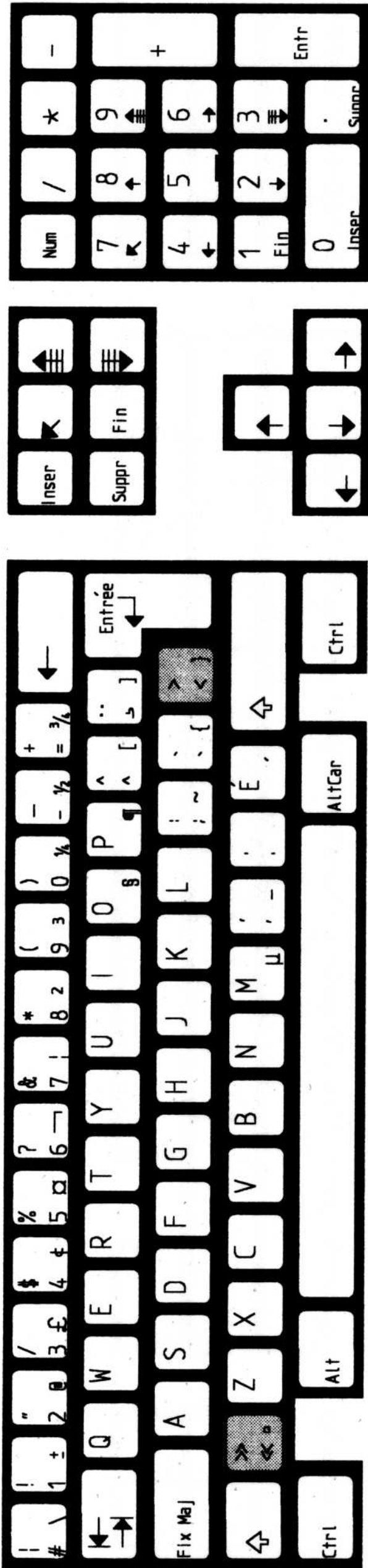
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### Belgium AT



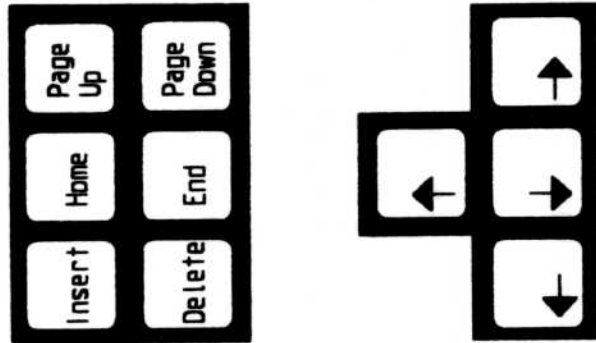
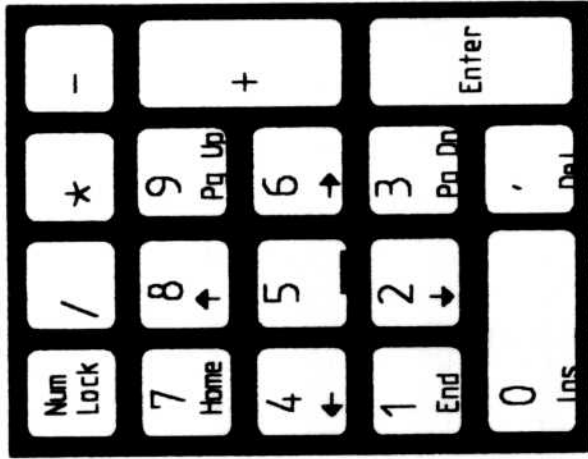
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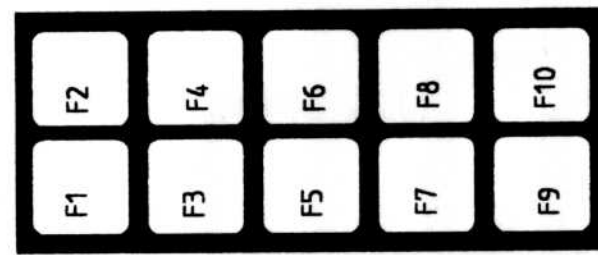
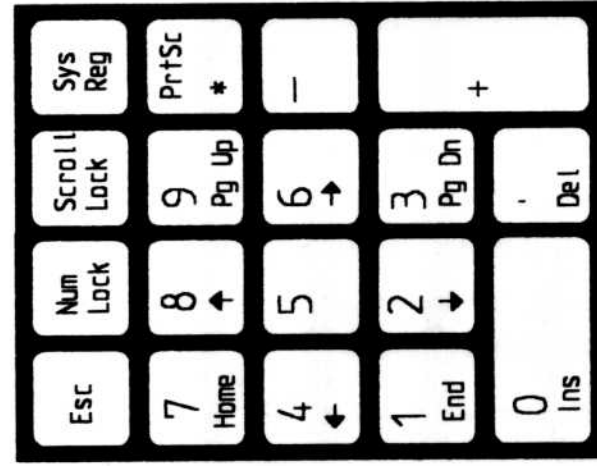
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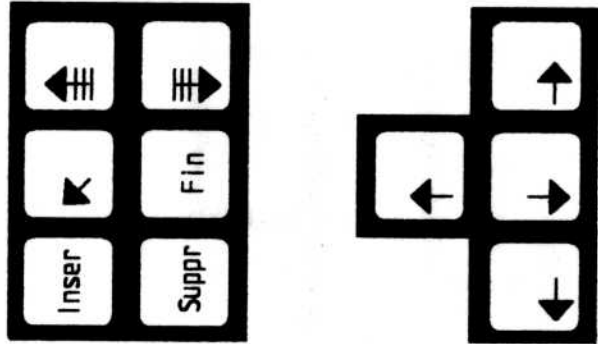
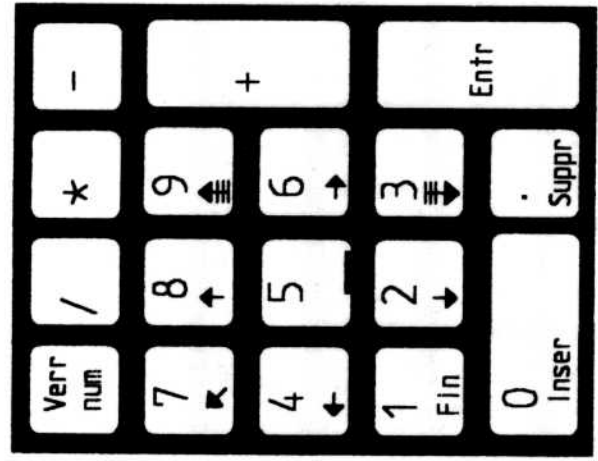
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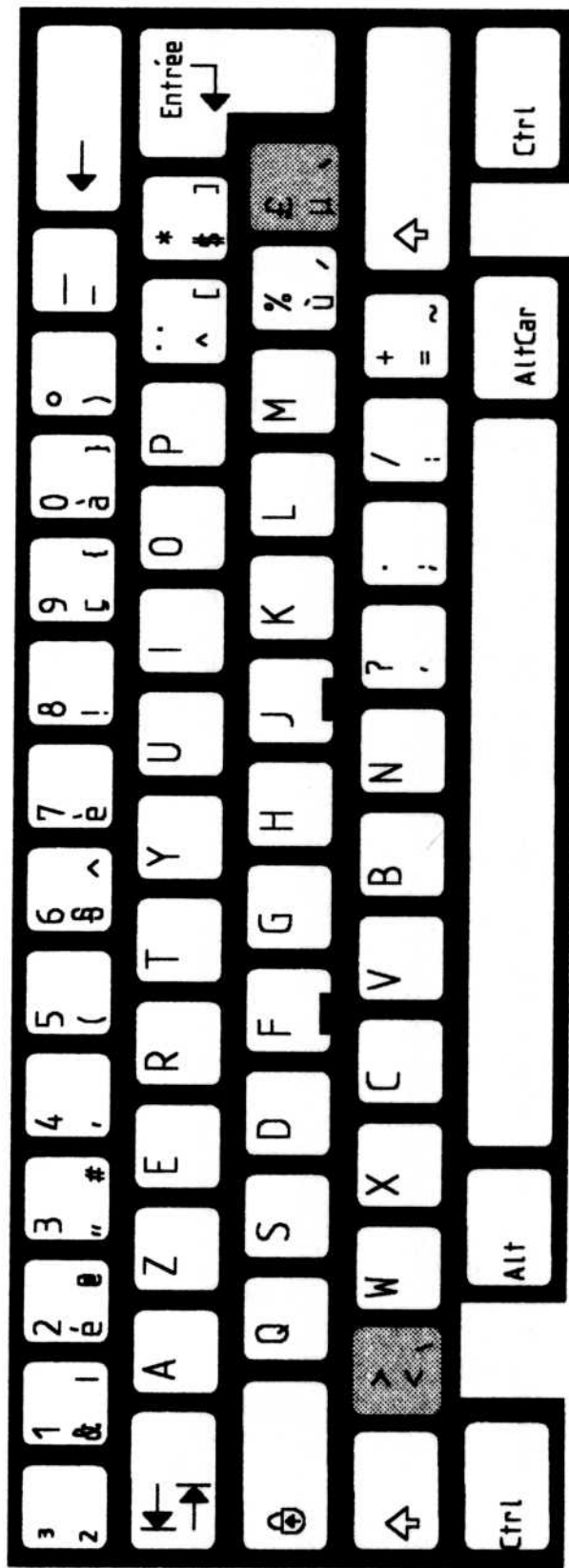
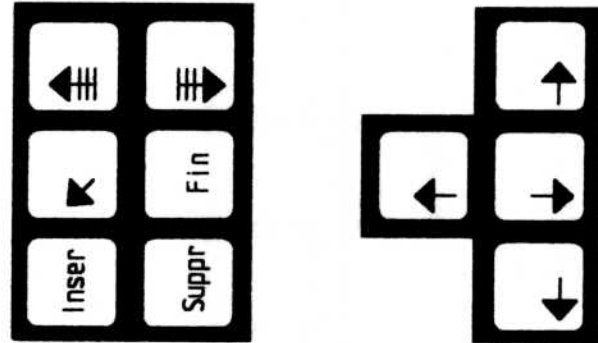
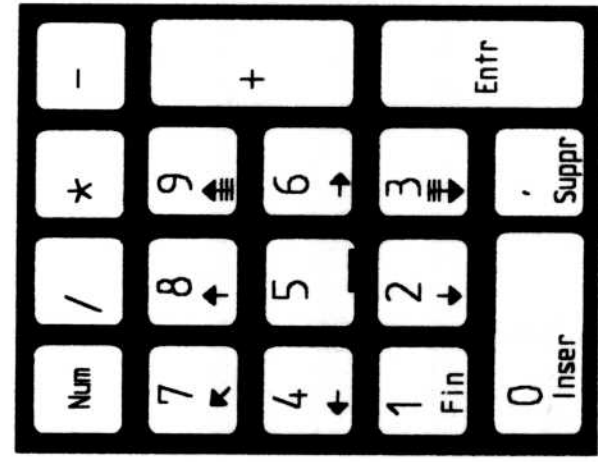
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**France Enhanced PC (189)**



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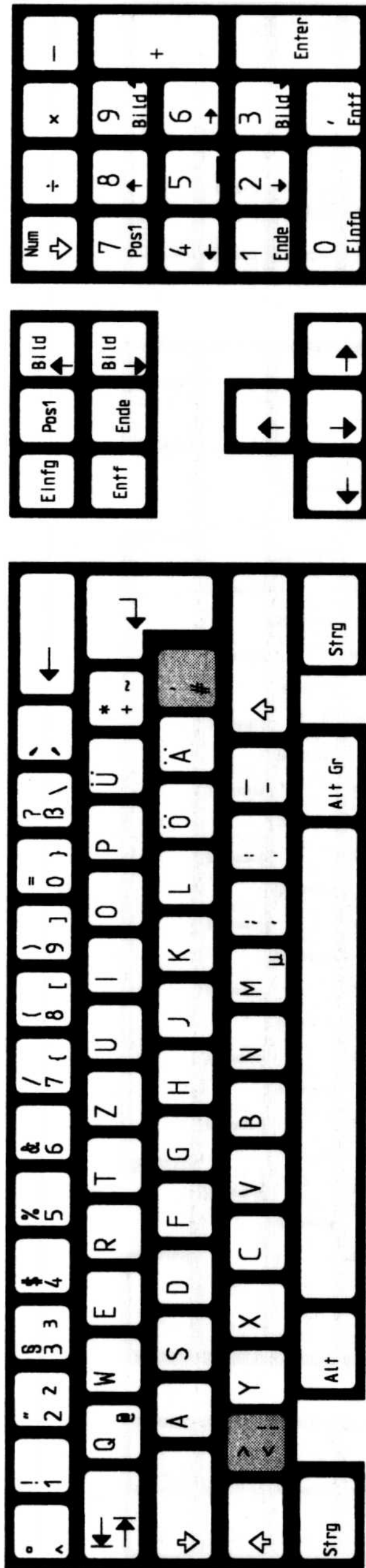




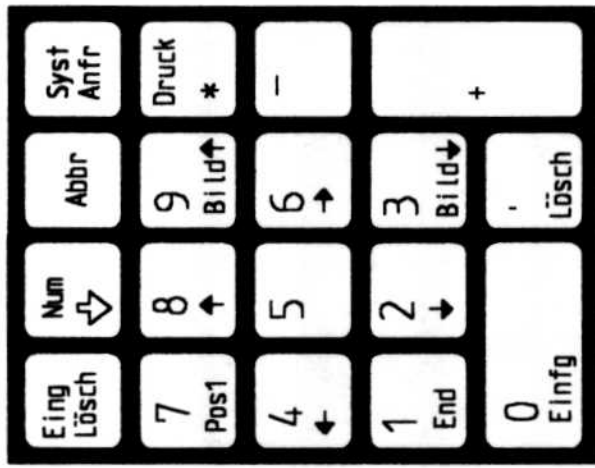
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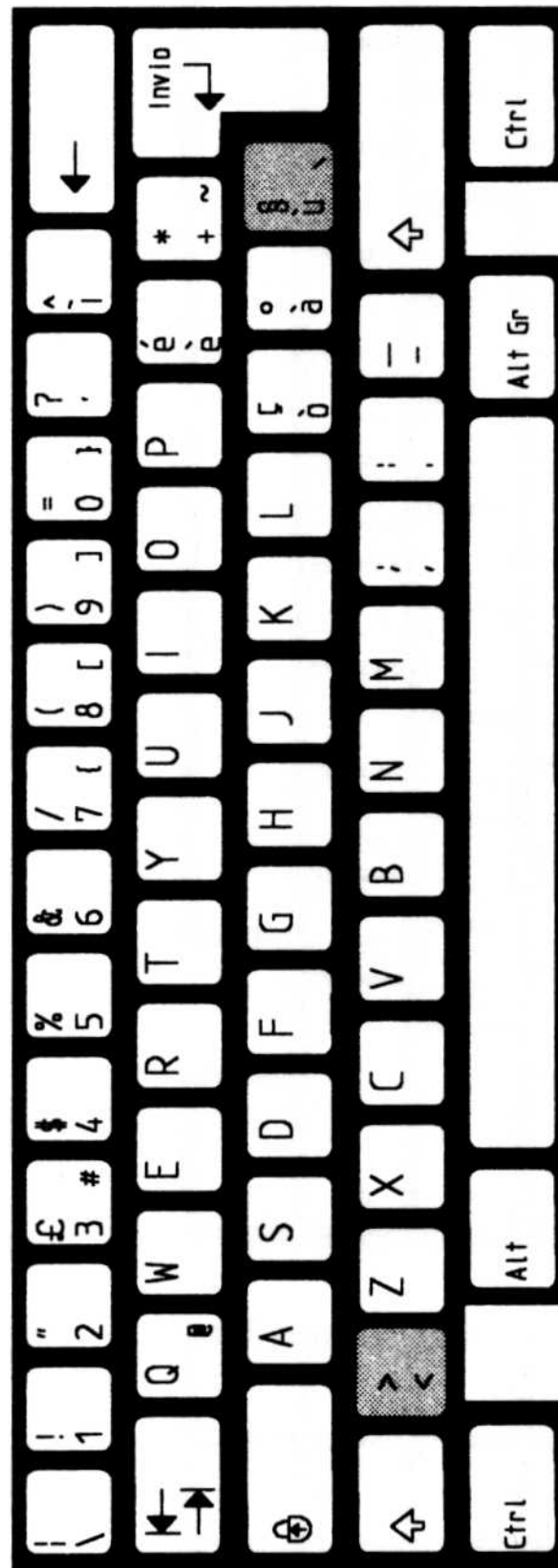
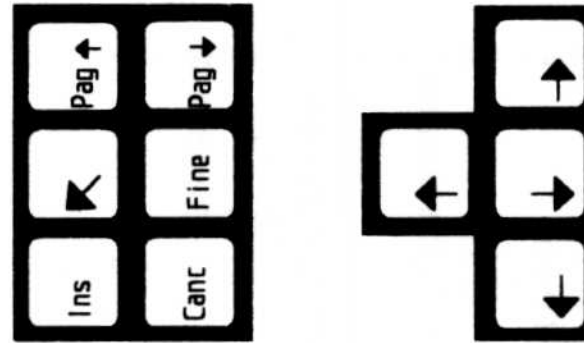
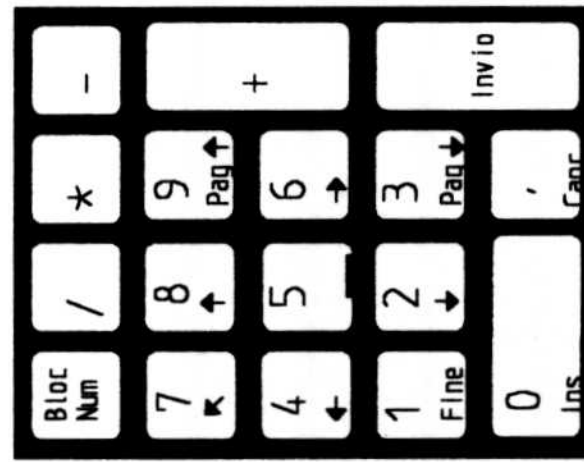
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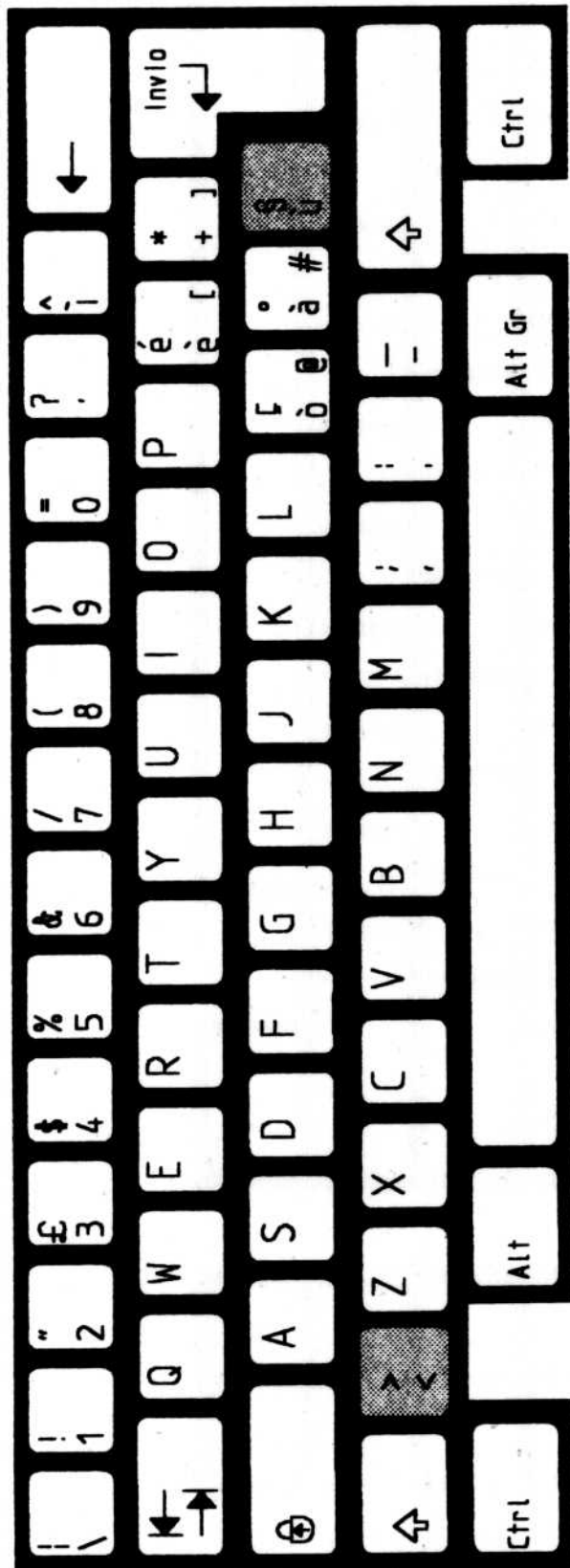
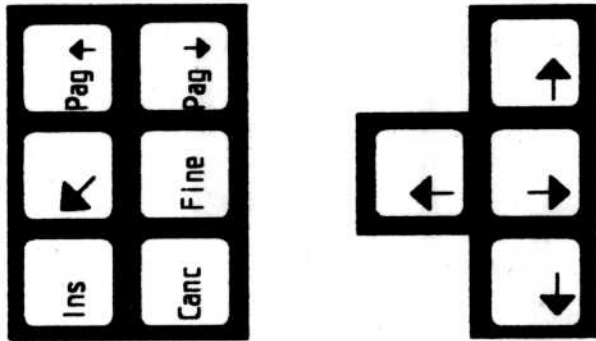
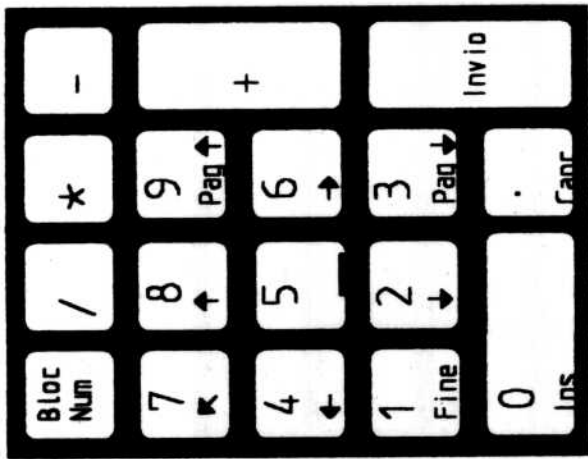
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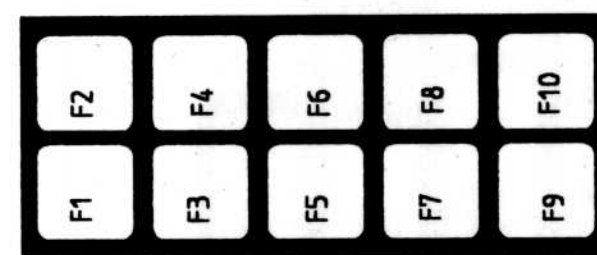
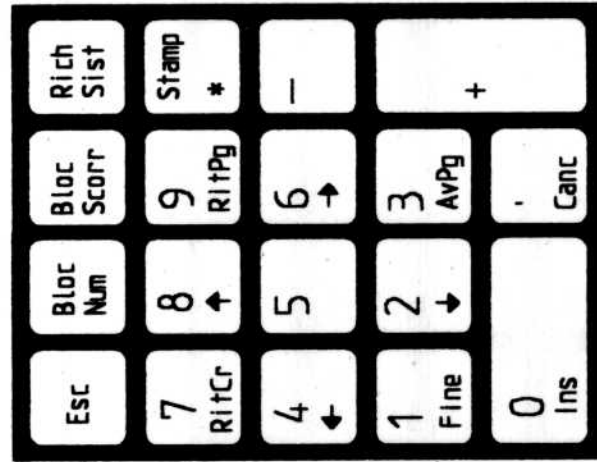
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### Italy Enhanced PC (141)



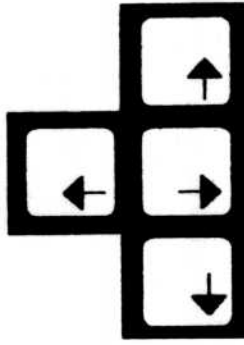
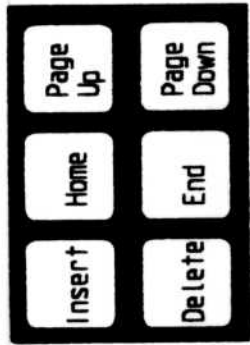
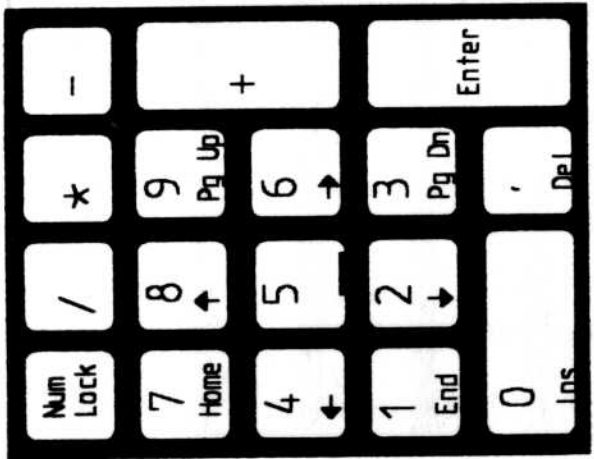
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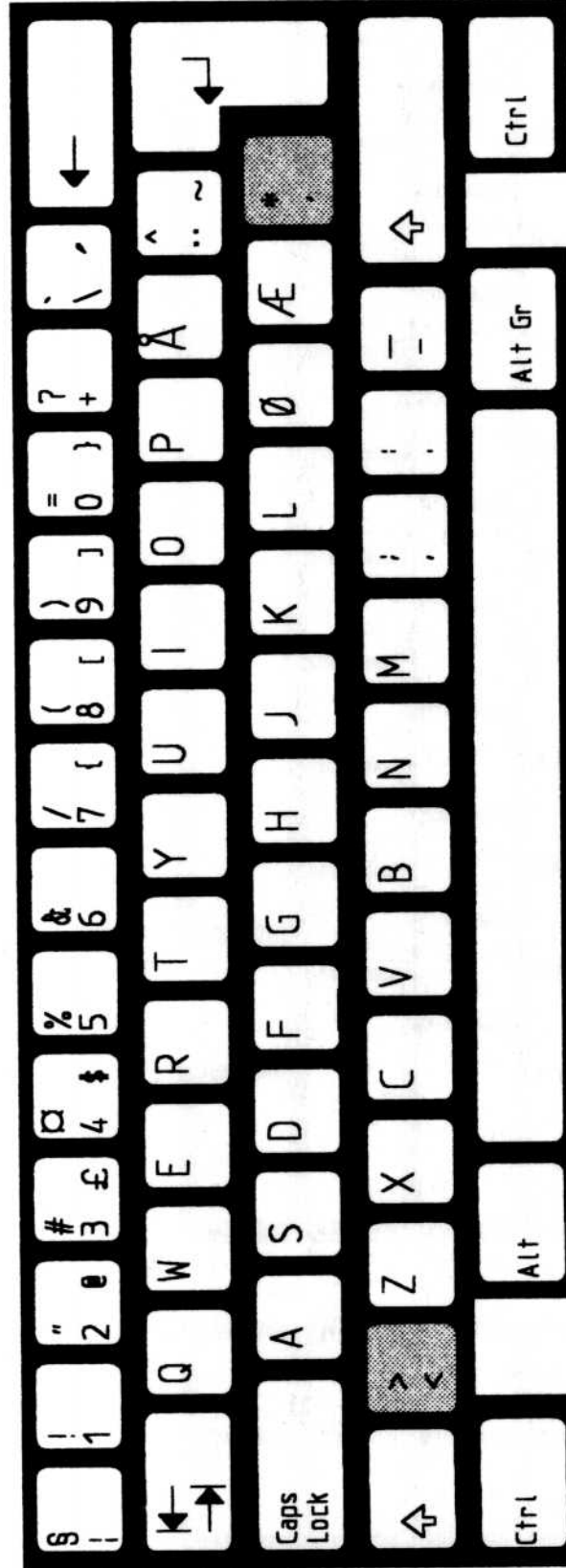
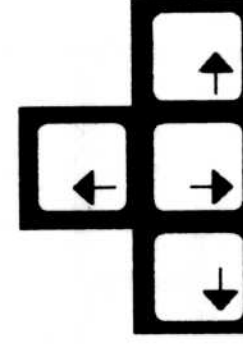
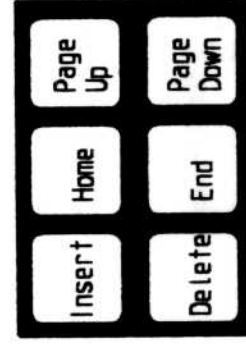
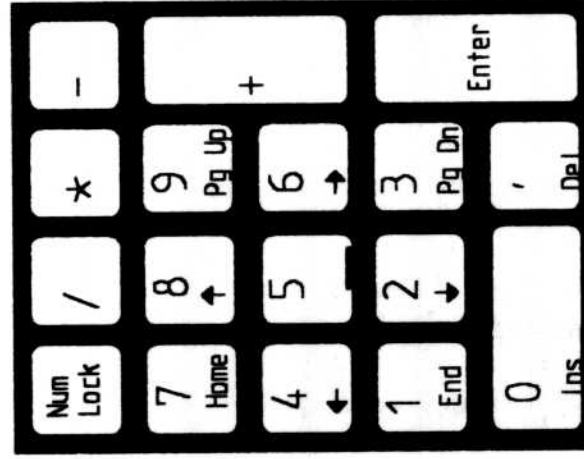




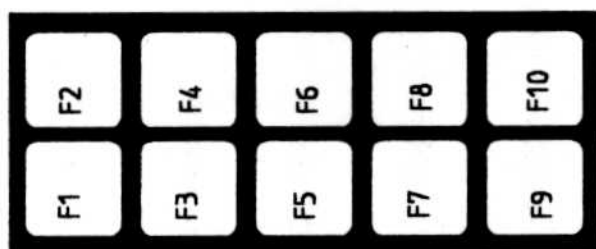
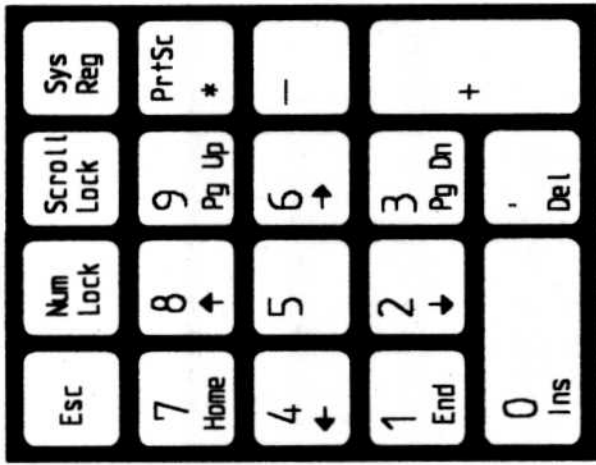
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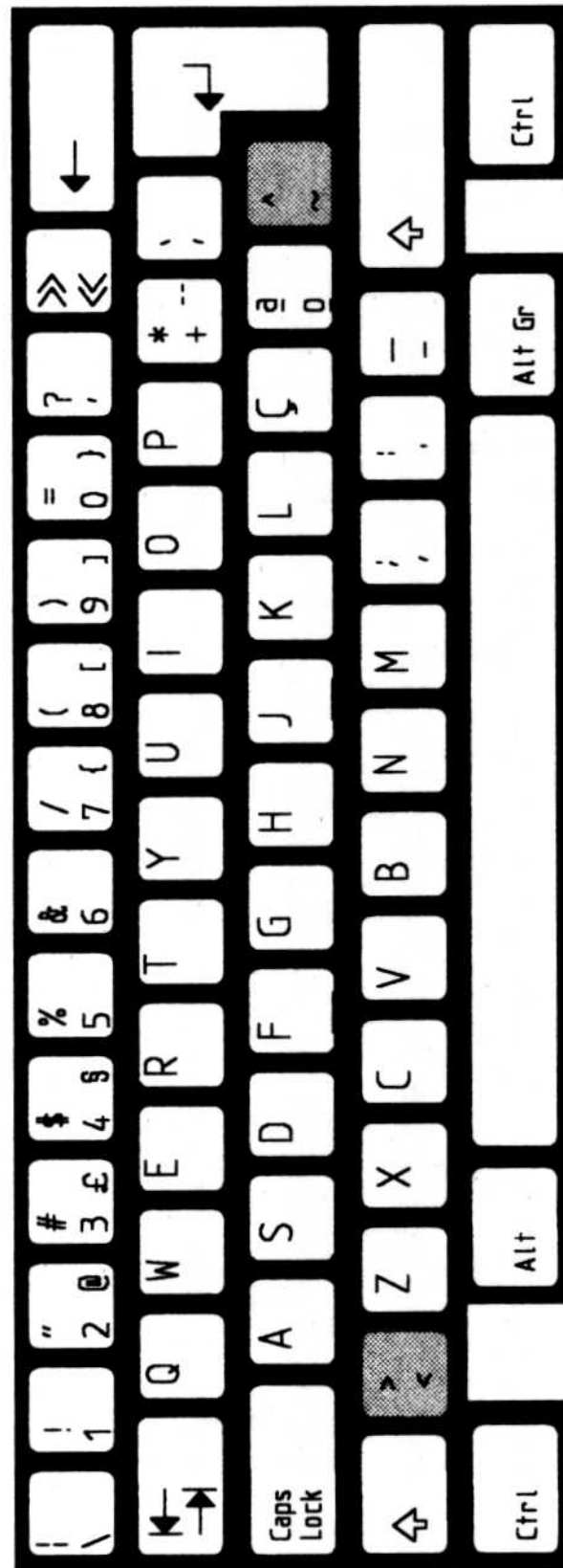
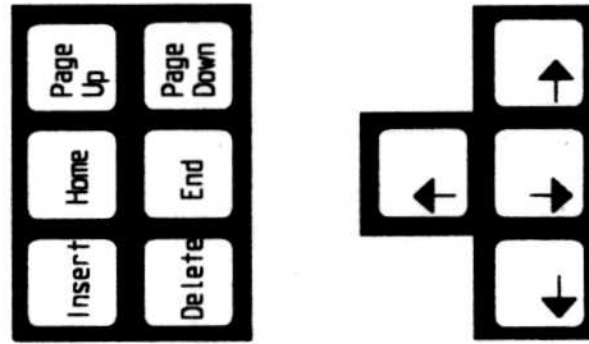
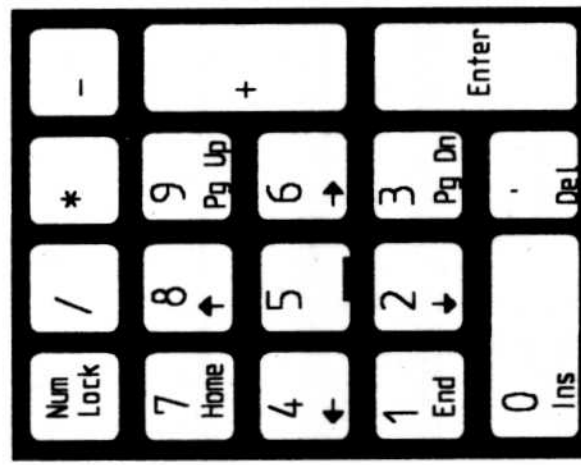
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## Norway AT

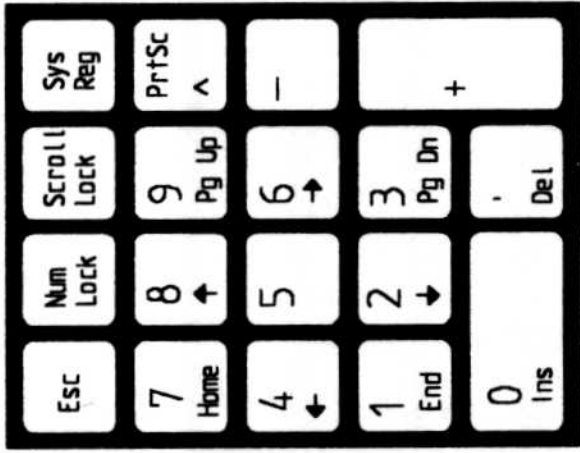


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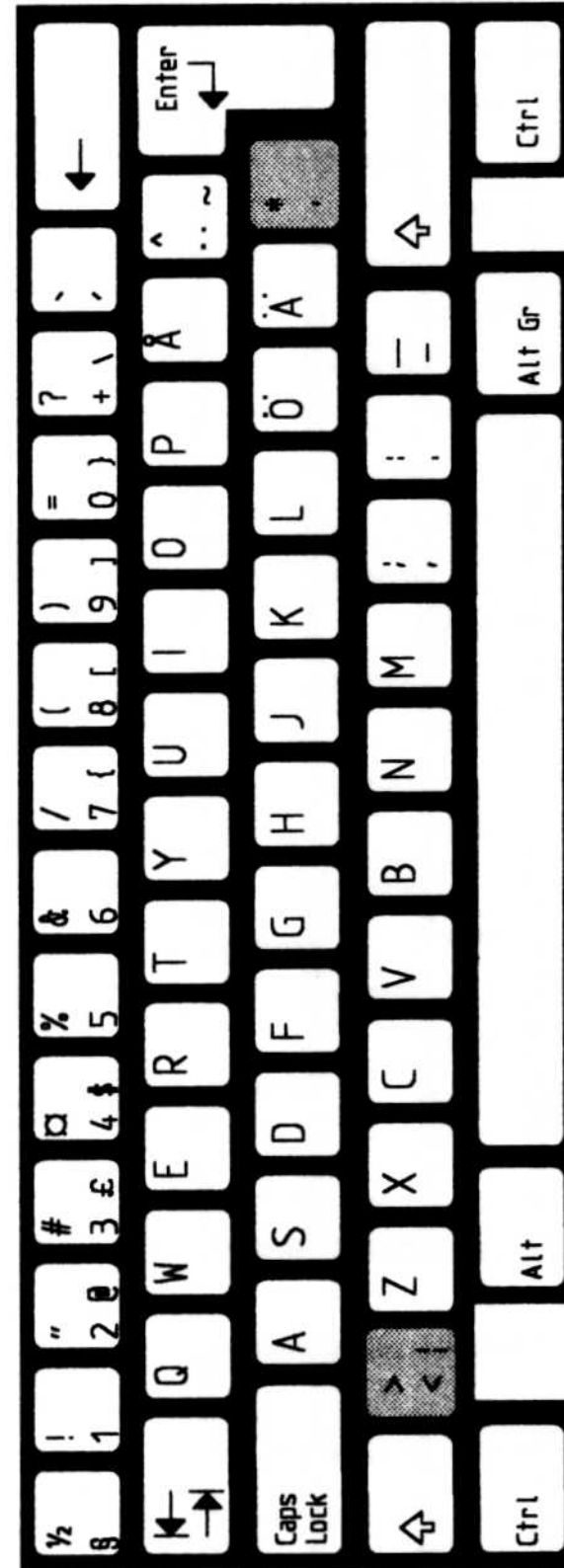
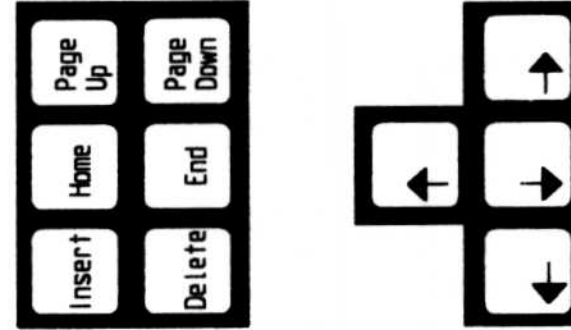
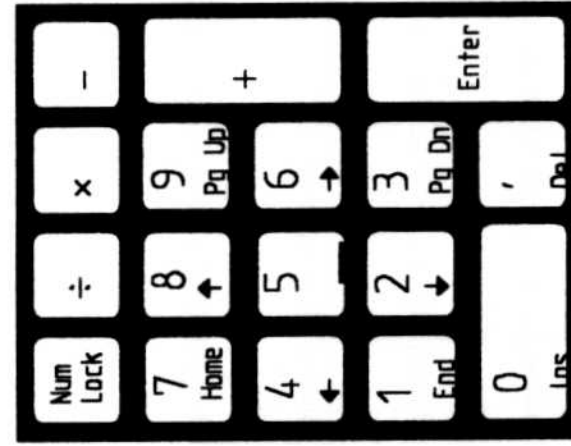




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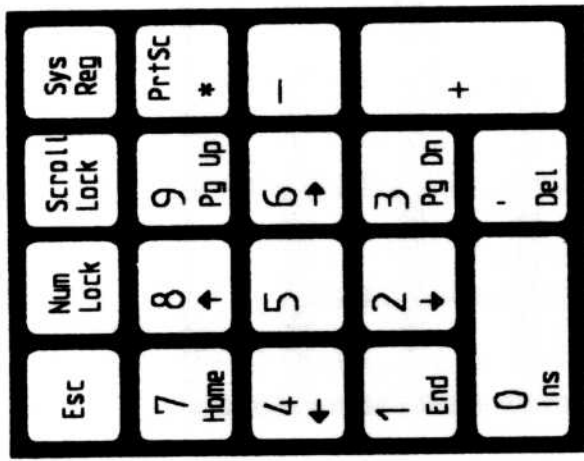


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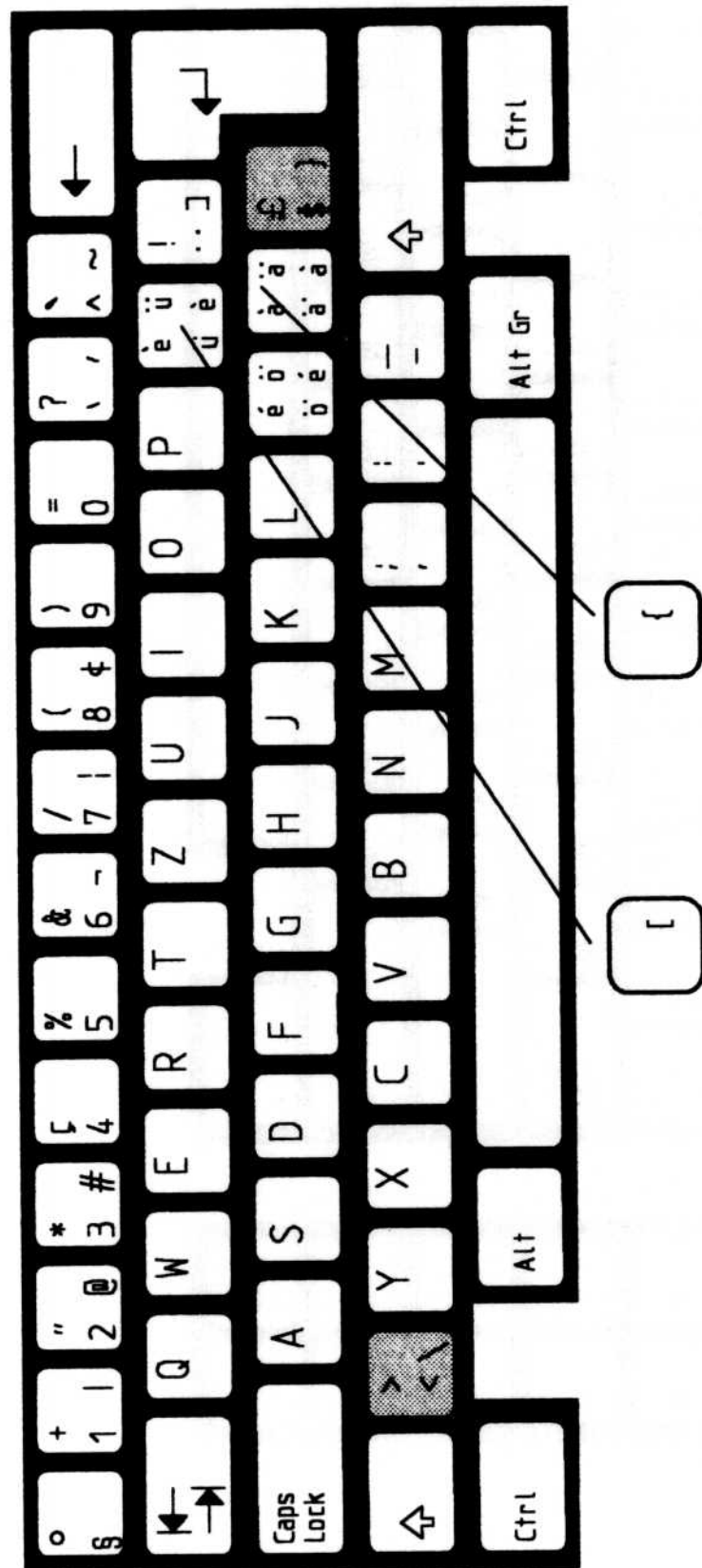
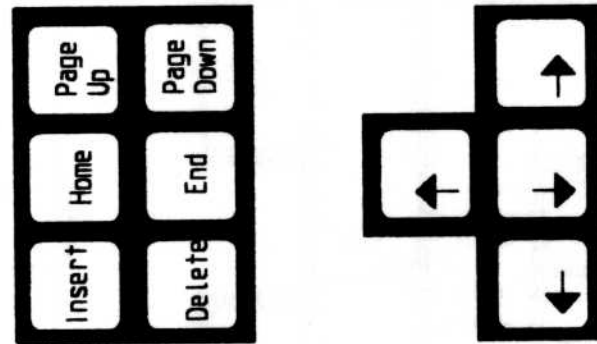
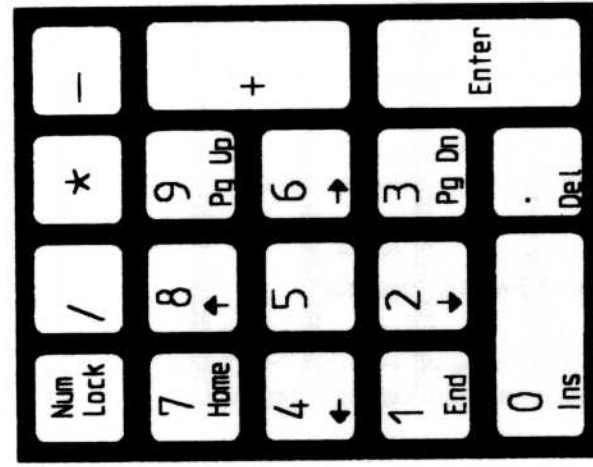




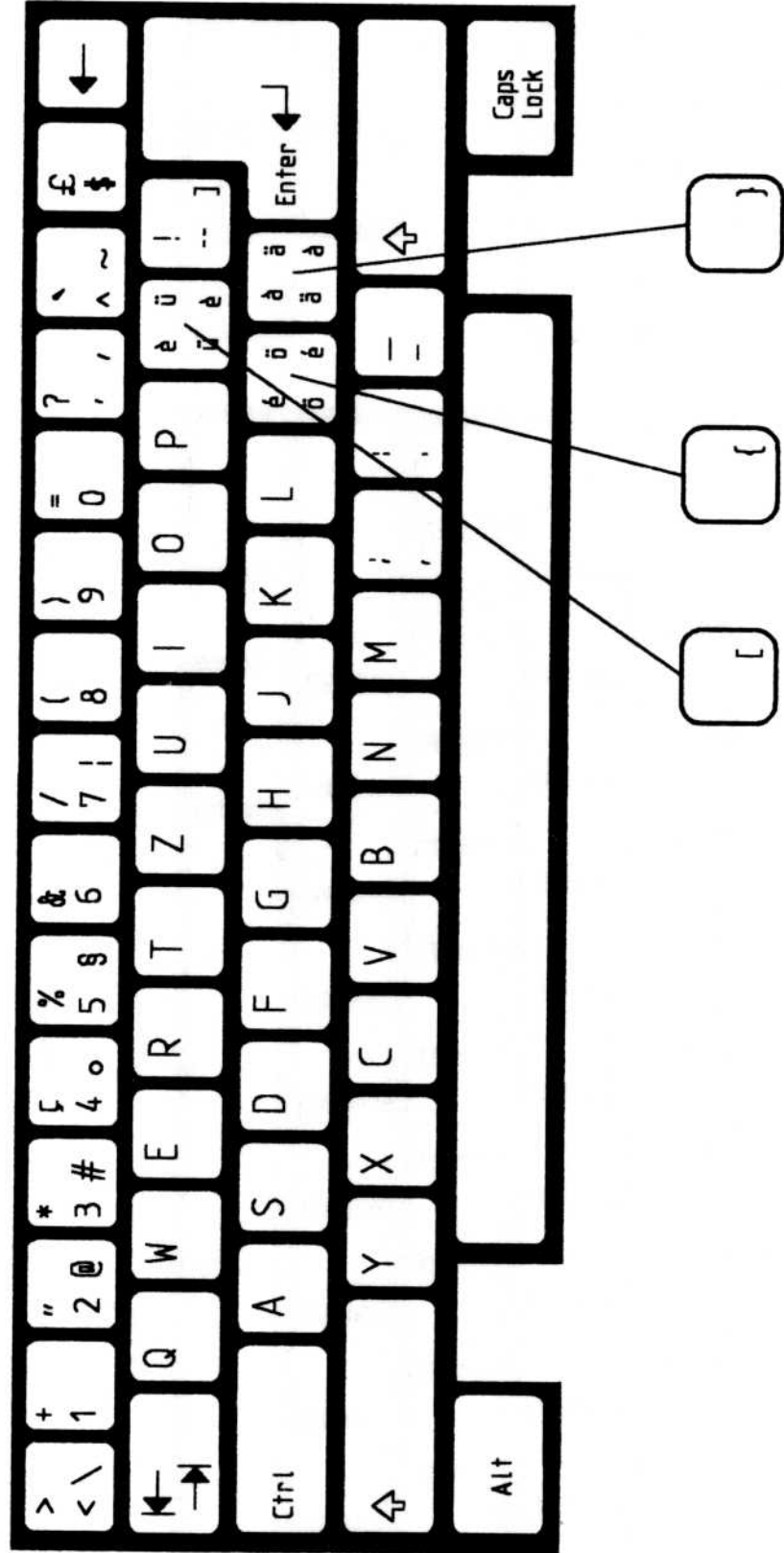
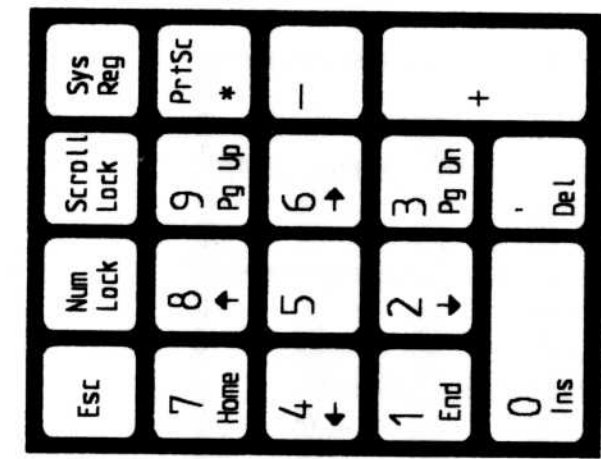
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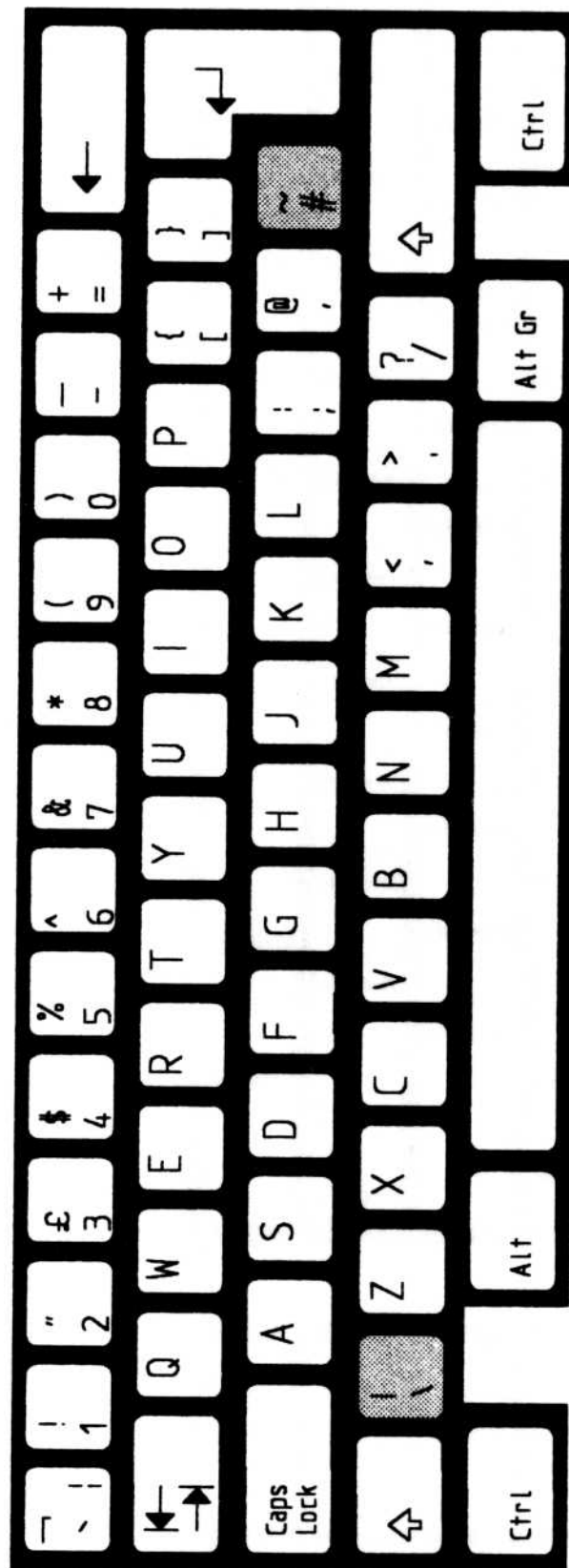
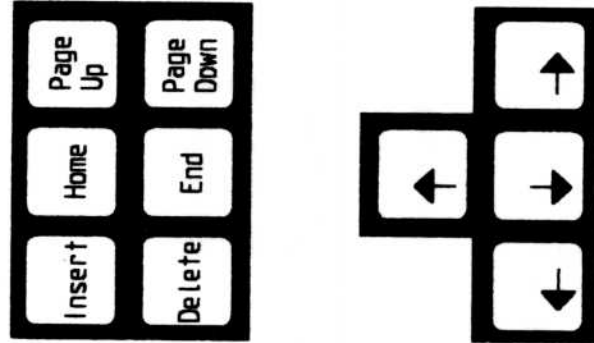
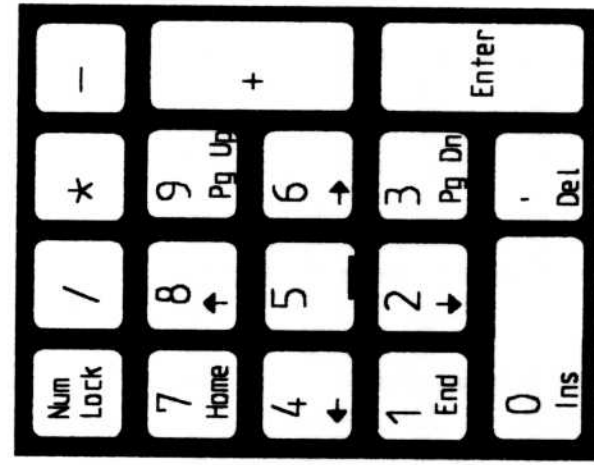
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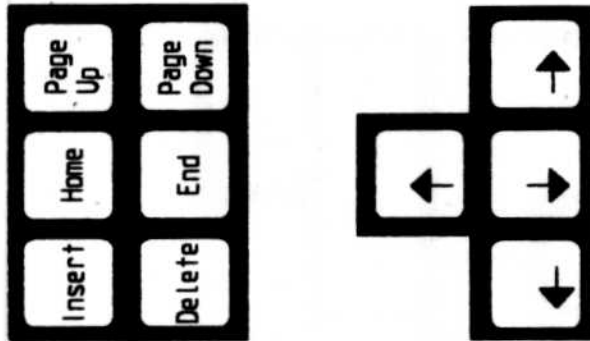
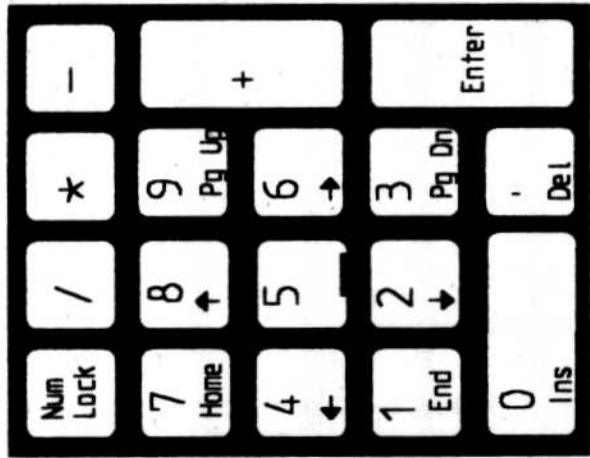
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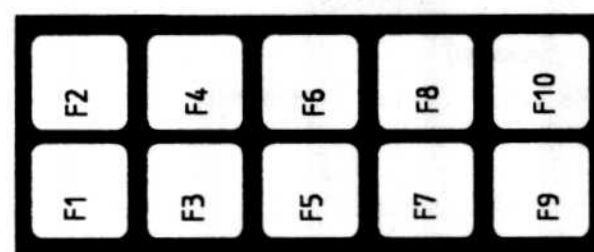
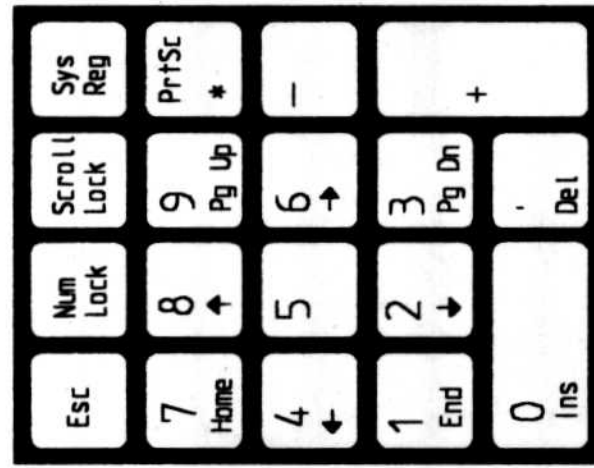
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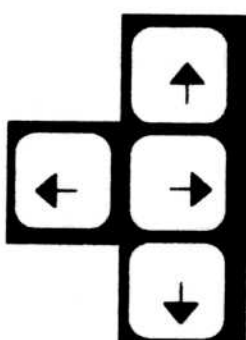
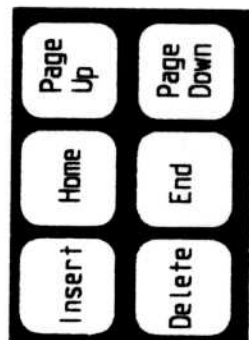
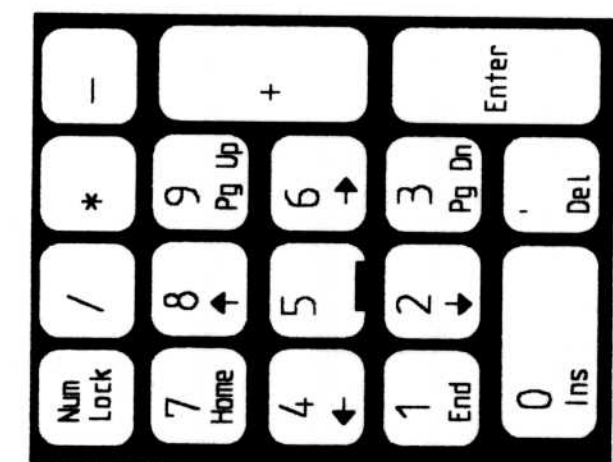
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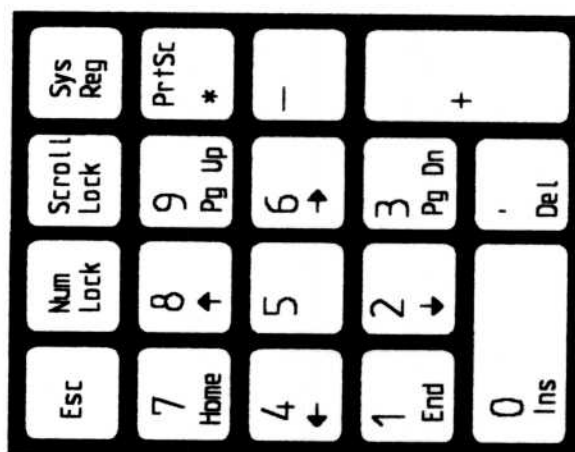
### U.K. AT



## United States Enhanced PC



## United States AT





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## Chapter 2. System Code Pages

The alphanumeric, graphic, and control characters contained in the system code pages supported by the base operating system are shown on the following pages. If your system has been set up for code page switching, you can switch to an alternate code page. For an explanation of code page switching, refer to Managing Country Information in the “Using the Base Operating System” section of the *User's Guide*.

**Note:** The following tables express the hexadecimal number of the characters in each code page. If you position the code page so that you can properly read the table, the top row of numbers shows the first digit of the hexadecimal number; the side column of numbers shows the second digit of the number. For example, to find the character 4D in code page 863 (Canadian-French), look for 4- in the top row and -D in the side column. The box where they meet is the character; in this case, an *M*.



## Code Page 850 (Multilingual)

1 2	1- 2	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
$\frac{1}{2}$ $\frac{2}{2}$	▲ ▼	☺ ☹ ♥ ♦ ♣ ♠ • ◼ ○ ◐ ♂ ♀ ♪ ♫ ☼	↗ ↘ ↕ ❗ ¶ § — ↕ ↑ ↓ → ← └ ↔ ▲ ▼	! " # \$ % & ' ( ) * + , - . /	0 1 2 3 4 5 6 7 8 9 : ; < = > ?	@ A B C D E F G H I J K L M N O	P Q R S T U V W X Y Z [ \ ] ^ _	' a b c d e f g h i j k l m n o	p q r s t u v w x y z {   } ~ △	Ç ü é â ä à á ç ê ë è ï î i Ä Å	É æ Æ ô ö ò û ù ÿ Ö Ü ø £ Ø x f	á í ó ú ñ Ñ ª º ¿ ® ¬ ½ ¼ i « »	⋯ ⋯ ⋯   └ Á Â À © ≡    ⊥ ∓ ≡ ≡ ≠ α	└ ┬ ┬ ┬ ┬ ┬ ā Ă Ā ℓ ℓ ≡ ≡ ≡ ≡ =	ð Ð Ê Ë È ı Í Î Ï └ └ ▀ ▀ ı ı ▀	Ó β Ô Ò ō Õ μ þ Ɔ Ú Û Ù ý Ý · ,	- ± = ¾ ¶ § ÷ , ° .. . ı ³ ² ■ ,

# Code Page 860 (Portuguese)

1 → 2 ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
		▶	!	0	@	P	`	p	Ç	É	á	⋮	L	⊥	α	≡
	☺	◀	"	1	A	Q	a	q	ü	À	í	▤	⊥	⊥	β	±
	☹	↕	#	2	B	R	b	r	é	È	ó	▨	⊥	⊥	Γ	≈
	♥	!!	\$	3	C	S	c	s	â	ô	ú		⊥	⊥	π	≤
	♦	¶	%	4	D	T	d	t	ã	õ	ñ	⊥	⊥	⊥	Σ	∫
	♣	§	&	5	E	U	e	u	à	ò	Ñ	⊥	⊥	⊥	σ	∫
	♠	—	'	6	F	V	f	v	Á	Ú	ª	⊥	⊥	⊥	μ	÷
	•	↕	(	7	G	W	g	w	ç	ù	º	⊥	⊥	⊥	τ	≈
	◼	↑	)	8	H	X	h	x	ê	ì	¿	⊥	⊥	⊥	Φ	°
	○	↓	*	9	I	Y	i	y	Ê	Õ	Ò	⊥	⊥	⊥	Θ	•
	◐	→	+	:	J	Z	j	z	è	Ü	∟	⊥	⊥	⊥	Ω	•
	♂	←	,	;	K	[	k	{	ì	ø	½	⊥	⊥	⊥	δ	√
	♀	⊥	,	<	L	\	l		Ô	£	¼	⊥	⊥	⊥	∞	n
	♪	↔	-	=	M	]	m	}	ì	Ù	ı	⊥	⊥	⊥	φ	2
	♫	▲	.	>	N	^	n	~	Ã	Pt	«	⊥	⊥	⊥	ε	■
	☀	▼	/	?	O	_	o	△	Â	Ó	»	⊥	⊥	⊥	∩	



# Code Page 863 (Canadian-French)

1 → 2 ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
		▲	!	0	@	P	`	p	Ç	É	¡	⋯	┌	⊥	α	≡
-1	☺	▼	"	1	A	Q	a	q	ü	È	'	▒	└	⊦	β	±
-2	☹	↕	#	2	B	R	b	r	é	Ê	ó	⋈	┘	⊥	Γ	≈
-3	♥	!!	\$	3	C	S	c	s	â	ô	ú		└	⊥	π	≤
-4	♦	¶	%	4	D	T	d	t	Â	Ë	¨	└	├	⊥	Σ	ƒ
-5	♣	§	&	5	E	U	e	u	à	Ï	·	⊥	├	⊥	σ	∫
-6	♠	—	'	6	F	V	f	v	¶	ù	³	⊥	⊥	⊥	μ	÷
-7	•	↕	(	7	G	W	g	w	ç	ù	-	⊥	⊥	⊥	τ	≈
-8	◼	↑	)	8	H	X	h	x	ê	œ	î	⊥	⊥	⊥	Φ	°
-9	○	↓	*	9	I	Y	i	y	ë	Ô	Γ	⊥	⊥	⊥	Θ	•
-A	◼	→	+	:	J	Z	j	z	è	Û	⌋		⊥	⊥	Ω	•
-B	♂	←	,	;	K	[	k	{	ï	ø	½	⊥	⊥	■	δ	√
-C	♀	└	.	<	L	\	l		î	£	¼	⊥	⊥	■	∞	ⁿ
-D	♪	↔	-	=	M	]	m	}	=	Ù	¾	⊥	⊥	■	φ	²
-E	♫	▲	.	>	N	^	n	~	À	Û	«	⊥	⊥	■	ε	■
-F	☼	▼	/	?	O	_	o	△	§	ƒ	»	⌋	⊥	■	∩	



---

## Chapter 3. Accented Characters

This chapter shows you the accented characters obtainable with each keyboard and code page combination for the countries supported by the base operating system.

---

### Nonescaping Key Combinations

You can get accented characters with the use of nonescaping key combinations (*dead keys*); that is, keys that do not produce characters unless they are used in combination with another key. To *build* an accented character, press and release the accent key and then press the appropriate letter key. To use the accent character by itself, press the accent key; then press the Spacebar.

The following is a listing by country of allowable nonescaping key combinations. Italy, the United Kingdom, and the United States do not have accented characters available from the keyboard.

#### France (AT and Enhanced Keyboards)

437: äÄëïöÛüÿ âêîôû  
850: äÄëËïÏöÛüÿ âÂêÎôÔûÛ

#### Germany (AT and Enhanced Keyboards)

437: áéÉíóú àèìòù  
850: áÁéÉíÍóÓúÚ àÀèÈìÌòÒùÙ

#### Spain (AT and Enhanced Keyboards)

850: áÁéÉíÍóÓúÚ àÀèÈìÌòÒùÙ äÄëËïÏöÛüÿ âÂêÊîÎôÔûÛ

#### Belgium (AT Keyboards: See France)

#### Belgium (Enhanced Keyboard)

437: áéÉíóú àèìòù äÄëïöÛüÿ âêîôû ñÑ  
850: áÁéÉíÍóÓúÚ àÀèÈìÌòÒùÙ äÄëËïÏöÛüÿ âÂêÊîÎôÔûÛ ñÑãÃõÕ

#### Norway and Denmark (AT Keyboard)

865: áéÉíóú àèìòù äÄëïöÛüÿ âêîôû  
850: áÁéÉíÍóÓúÚ àÀèÈìÌòÒùÙ äÄëËïÏöÛüÿ âÂêÊîÎôÔûÛ

### **Norway and Denmark (Enhanced Keyboard)**

865: Same combinations as AT keyboard plus ñÑ  
850: Same combinations as AT keyboard plus ñÑãÃõÕ

### **Finland and Sweden (AT Keyboard)**

437: áéÉíóú àèìòù äÄëïöÏüÿ âêîôû  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ âÂêÊîÎôÔûÛ

### **Finland and Sweden (Enhanced Keyboard)**

437: Same combinations as AT keyboard plus ñÑ  
850: Same combinations as AT keyboard plus ñÑ

### **Portugal (AT keyboard: Uses U.S. AT Keyboard)**

#### **Portugal (Enhanced Keyboard)**

860: áÁéÉíÍóÓúÚ àÀèÈìÌòÒùÙ üÛ âÂêÊôÔ ãÃõÕñÑ  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ âÂêÊîÎôÔûÛ ãÃõÕñÑ

### **Canadian French (AT and Enhanced Keyboards)**

863: éÉóú àÀèÈù ìÿ äÄëËïÏüÿ âÂêÊîÎôÔûÛ çÇ  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ âÂêÊîÎôÔûÛ çÇ

### **Swiss French and Swiss German (AT and Enhanced Keyboards)**

437: áéÉíóú àèìòù äÄëïöÏüÿ âêîôû ñÑ  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ ãÃõÕñÑ

### **Latin America (AT keyboard: See Spain)**

#### **Latin America (Enhanced Keyboard)**

437: áéÉíóú àèìòù äÄëïöÏüÿ âêîôû  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ âÂêÊîÎôÔûÛ

### **Netherlands (AT keyboard: Uses U.S. AT Keyboard)**

#### **Netherlands (Enhanced Keyboard)**

437: áéÉíóú àèìòù äÄïöÏüÿ âêîôû ñÑ çÇ  
850: áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïÏöÏüÿ âÂêÊîÎôÔûÛ ãÃõÕñÑ çÇ



## IBM 3270 Terminal Emulation

The following is a listing by country of allowable non-escaping key combinations for IBM 3270 terminal emulation. The default profiles for the United Kingdom and the United States do not have accented characters available from the keyboard. The default profiles for Italy has accented characters available only through dead keys. The default profiles for Netherlands and Portugal Personal Computer AT keyboards do not support dead keys.

### Belgium (Enhanced Keyboard)

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

The circumflex character (^) on key 7 is not a dead key.

### Belgium (AT Keyboard)

äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ

### Canada (bilingual) (Enhanced Keyboard)

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ çÇ

The circumflex character (^) on key 40 is not a dead key.

### Canada (bilingual) (AT Keyboard)

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ çÇ ãÃñÑõÕ

### Denmark (AT and Enhanced Keyboards)

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

### Finland/Sweden (AT and Enhanced Keyboards)

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

### **France (Enhanced Keyboard, layout 120)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

The circumflex character (^) on key 7 is not a dead key.

### **France (Enhanced Keyboard, layout 189)**

àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

The circumflex character (^) on key 10 is not a dead key.

### **France (AT Keyboard)**

äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ

### **Germany/Austria (Enhanced Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ âÂêÊîÎôÔûÛ ãÃñÑõÕ

### **Germany/Austria (AT Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ âÂêÊîÎôÔûÛ

### **Italy (Enhanced Keyboard, layout 141)**

âÂêÊîÎôÔûÛ

### **Italy (Enhanced Keyboard, layout 142)**

àÀèÈìÌòÒùÙ âÂêÊîÎôÔûÛ

### **Italy (AT Keyboard)**

áÁéÉíÍóÓúÚýÝ âÂêÊîÎôÔûÛ

### **Latin America (Enhanced Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

**Latin America (AT Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ

**Netherlands (Enhanced Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ çÇ ãÃñÑõÕ

**Norway (Enhanced and AT Keyboards)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

**Portugal (Enhanced Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

**Spain (Enhanced Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ

**Spain (AT Keyboard)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ

**Switzerland (French/German) (Enhanced and AT Keyboards)**

áÁéÉíÍóÓúÚýÝ àÀèÈìÌòÒùÙ äÄëËïïöÖüÛÿ âÂêÊîÎôÔûÛ ãÃñÑõÕ



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## Chapter 4. Communications Manager Keyboard Layouts for Terminal Emulation

You can use three different keyboards with Communications Manager:

- IBM Personal Computer Enhanced keyboard 101
- IBM Personal Computer Enhanced keyboard 102
- IBM Personal Computer AT keyboard.

Using any of these keyboards, you can also emulate keyboards for the following terminal emulation sessions:

- 3270 terminal emulation
- ASCII terminal emulation, including:
  - IBM 3101
  - DEC VT100.

The following pages contain illustrations of each of these US keyboards. For information about customizing or remapping these keyboards, refer to *Changing Keys and Keyboards (Keyboard Remapping)* in the “Using Communications Manager” section of the *User’s Guide*.

You will also find blank layouts of each keyboard that you can use for remapping your keyboard. In addition, the Alternate Graphics position or shift state (the AltGr key) exists but is not shown on the following keyboards. You can use the AltGr key, for example, through your keyboard by remapping the keyboard and assigning a key to the AltGr position or shift state.

If you need a non-US keyboard profile for use with either 3270 terminal emulation or ASCII terminal emulation, refer to Copying Keyboard Profiles in the “Using Communications Manager” section of the *User's Guide* for steps to tell you how to copy a non-US keyboard profile from the configuration profile ACSCFG.CFG. ACSCFG.CFG is a configuration file containing all supported IBM keyboard profiles for both US and non-US languages.

**Note:** The keyboard layouts for 3101 ASCII terminal emulation represent the default values shipped with the Communications Manager keyboard profiles. If you are communicating through a protocol converter, these values may be different. See your system administrator or contact your host personnel for more information.



# IBM Personal Computer Enhanced Keyboard 101 for 3270 Emulation - Left-Hand Side

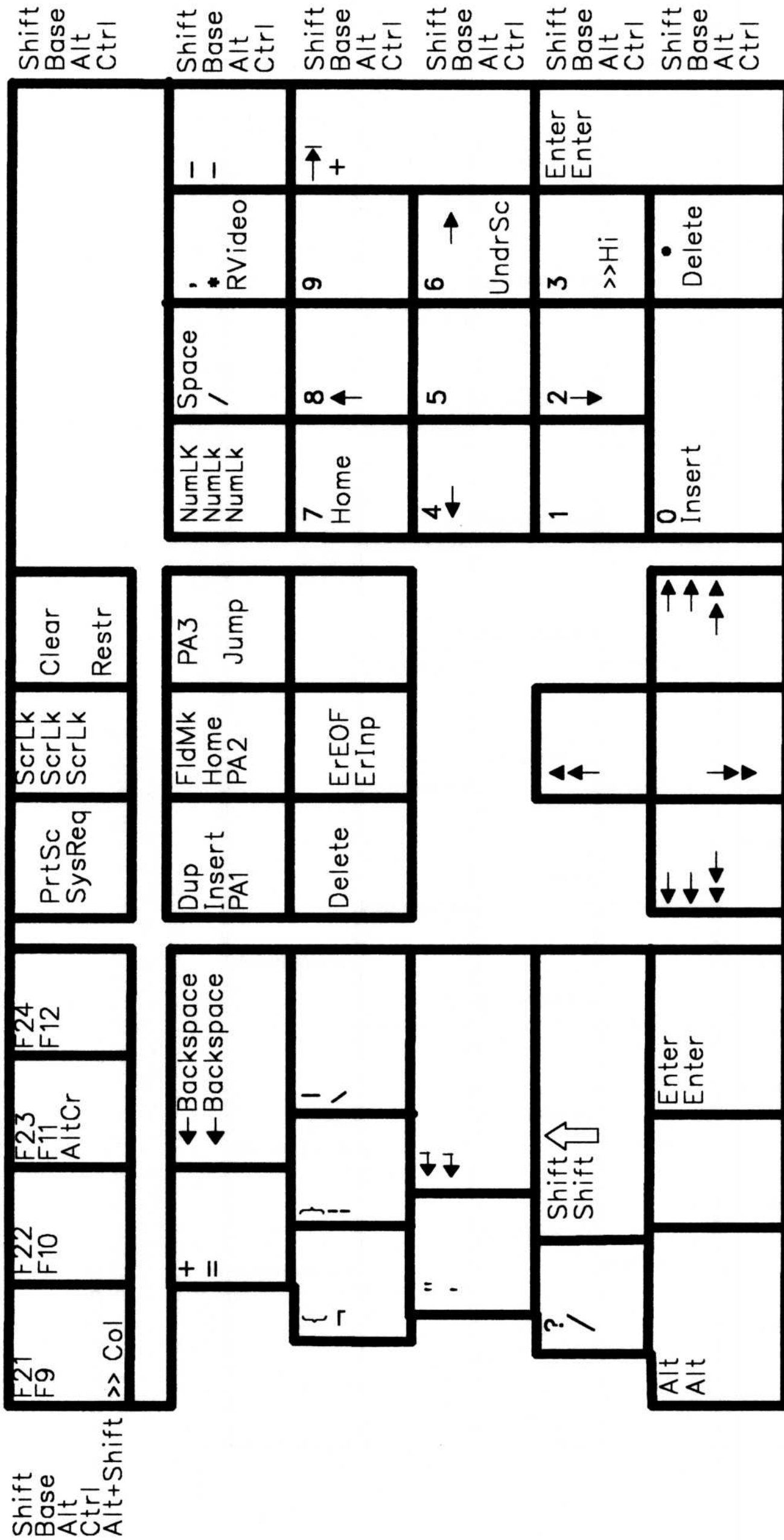
Shift Base Alt Ctrl	Attn NxtTsk TskMgr	F13 F1	F14 F2	F15 F3	F16 F4 CrSel	F17 F5	F18 F6	F19 F7	F20 F8	Shift Base Alt Ctrl Alt+Shift
Shift Base Alt Ctrl	~ ,	! 1	# 3	\$ 4	% 5	& 7	* 8	( 9	) 0	=
Shift Base Alt Ctrl	Tab ← →	Q q	W w	E e	R r	T t	U u	I i	O o	P p
Shift Base Alt Ctrl	Caps Lock Caps Lock Caps Lock	A a	S s	D d	F f	G g	J j	K k	L l	:::
Shift Base Alt Ctrl	Shift ↑ Shift	Z z	X x	C c	V v	B b	N n	M m	< ,	> .
Shift Base Alt Ctrl	Reset/Ctrl Reset/Ctrl		Alt Alt							Space Space

Note: Only the F keys have the Alt+Shift state.

The Control/Reset key works as follows:

1. Both functions are on the unshifted position.
2. Control - if pressed (and held down) with any other key.
3. Reset - if pressed and released without any intervening key depressions.

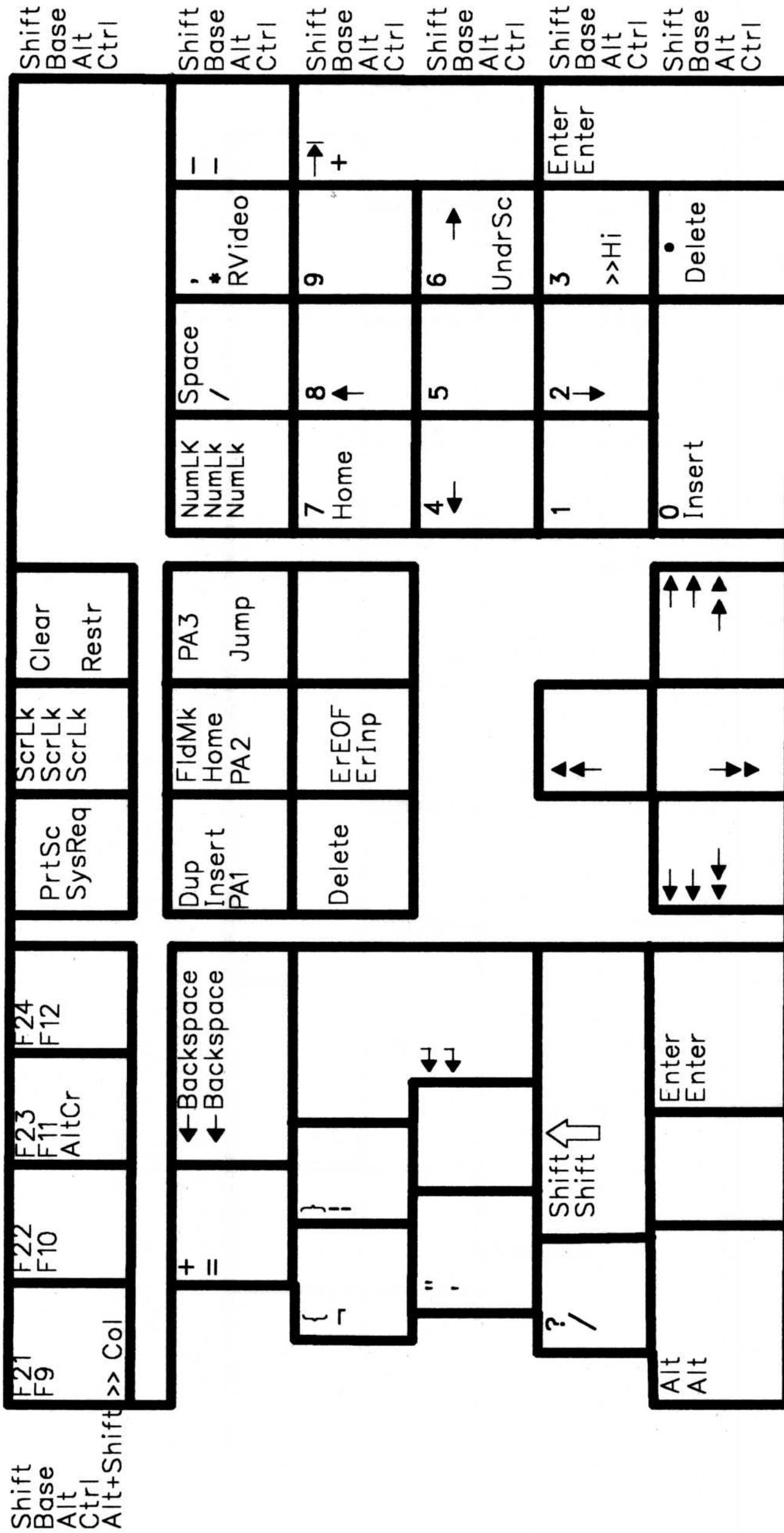
# IBM Personal Computer Enhanced Keyboard 101 for 3270 Emulation - Right-Hand Side



Note: Only the F keys have the Alt+Shift state.



# IBM Personal Computer Enhanced Keyboard 102 for 3270 Emulation - Right-Hand Side



Note: Only the F keys have the Alt+Shift state.

The Control/Reset key works as follows:

1. Both functions are on the unshifted position.
2. Control - if pressed (and held down) with any other key.
3. Reset - if pressed and released without any intervening key depressions.

# IBM Personal Computer AT Keyboard for 3270 Emulation - Left-Hand Side

Shift Base Alt Ctrl	F11 F1 Attn		~ ,	! 1	● 2	# 3	\$ 4	% 5	€ 6	& 7	# 8
Shift Base Alt Ctrl	F12 F2 Clear Restr	← →	Q q	W w	E e	R r	T t	Y y	U u		
Shift Base Alt Ctrl	F13 F3 CrSel		A a	S s	D d	F f	G g	H h	J j		
Shift Base Alt Ctrl	F14 F4		Ctrl Ctrl	Z z	X x	C c	V v	B b	N n		
Shift Base Alt Ctrl	F15 F5		Shift Shift								
Shift Base Alt Ctrl	F16 F6 ErEOF		Alt Alt								Space Space
Shift Base Alt Ctrl	F17 F7										
Shift Base Alt Ctrl	F18 F8 Dup										
Shift Base Alt Ctrl	F19 F9 Jump										
Shift Base Alt Ctrl	F20 F10 Reset										





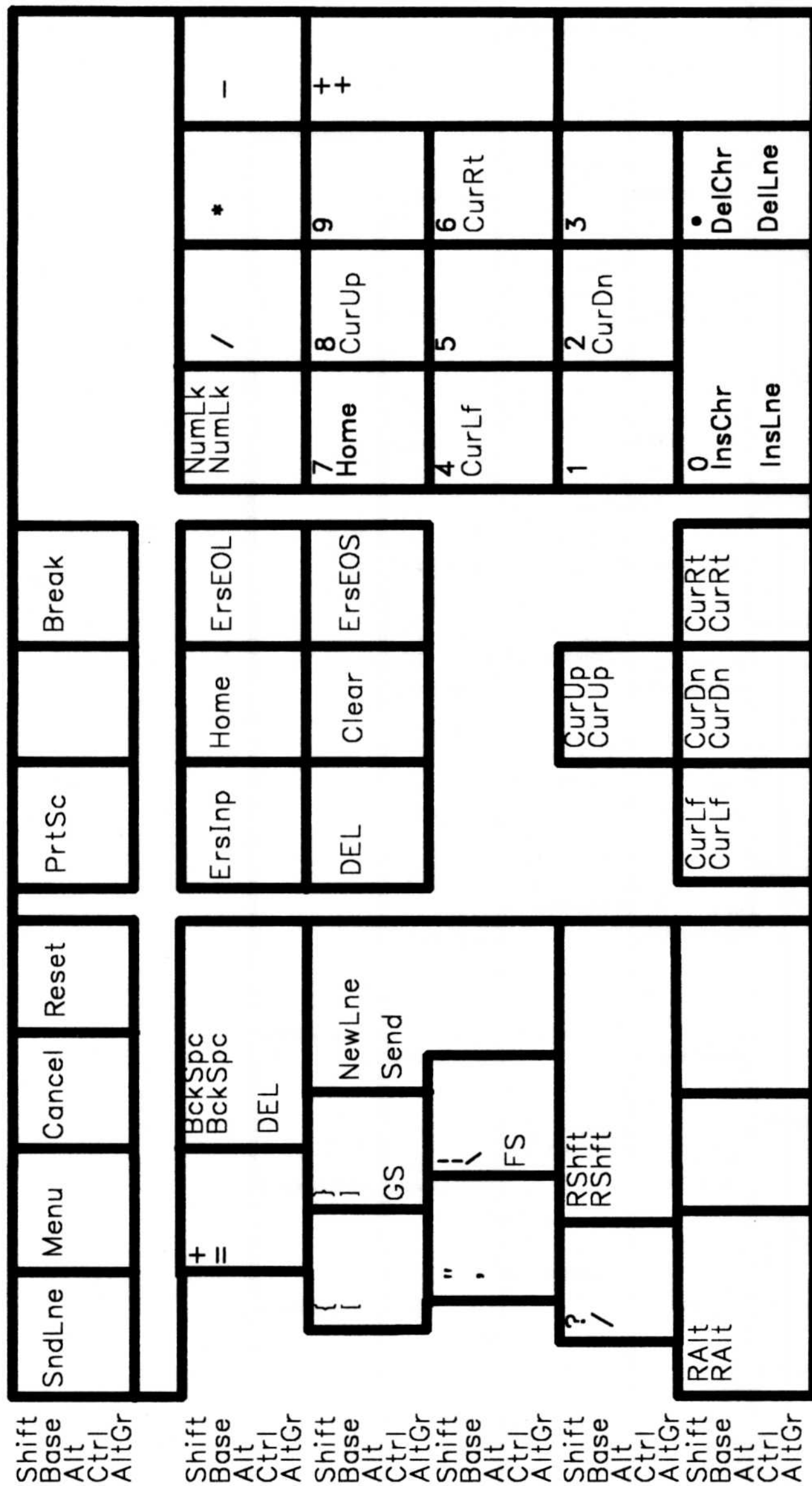




# IBM Personal Computer Enhanced Keyboard 102 for 3101 Emulation - Left-Hand Side

Shift Base Alt Ctrl AltGr	Escape Escape NxtTsk TskMgr	F1	F2	F3	F4	F5	F6	F7 Skip	F8	
Shift Base Alt Ctrl AltGr	~ , 1	! 1	@ 2 NUL	# 3	\$ 4	% 5	^ 6 RS	& 7	( 9 0	_ - US
Shift Base Alt Ctrl AltGr	BckTab Tab	Q q DC1	W w ETB	E e ENQ	R r DC2	T t DC4	Y y EM	U u NAK	O o SI	P p DLE
Shift Base Alt Ctrl AltGr	ShftLk ShftLk	A a SOH	S s DC3	D d EOT	F f ACK	G g BEL	H h BS	J j LF	K k VT	L l FF
Shift Base Alt Ctrl AltGr	LShft LShft	Z z SUB	X x CAN	V v SYN	B b STX	N n SO	M m CR	< ;	> .	
Shift Base Alt Ctrl AltGr	LCtrl LCtrl	LAlt LAlt	Space Space	Space Space	Space Space	Space Space	Space Space	Space Space	Space Space	

# IBM Personal Computer Enhanced Keyboard 102 for 3101 Emulation - Right-Hand Side





# IBM Personal Computer AT Keyboard for 3101 Emulation - Left-Hand Side

F1	F2		~ \	! 1	Ⓜ 2 NUL	# 3	\$ 4	% 5	^ 6 RS	& 7	* 8
Shift Base Alt Ctrl AltGr			BckTab Tab	Q q DC1	W w ETB	E e ENQ	R r DC2	T t DC4	Y y EM	U u NAK	
F3	F4		LCtrl LCtrl AltGr	A a SOH	S s DC3	D d EOT	F f ACK	G g BEL	H h BS	J j LF	
F5	F6		LShft LShft	Z z SUB	X x CAN	V v SYN	C c ETX	B b STX	N n SO		
F7 Skip	F8		LAlt LAlt								
Break	Menu		AltGr								
Cancel	Cancel										















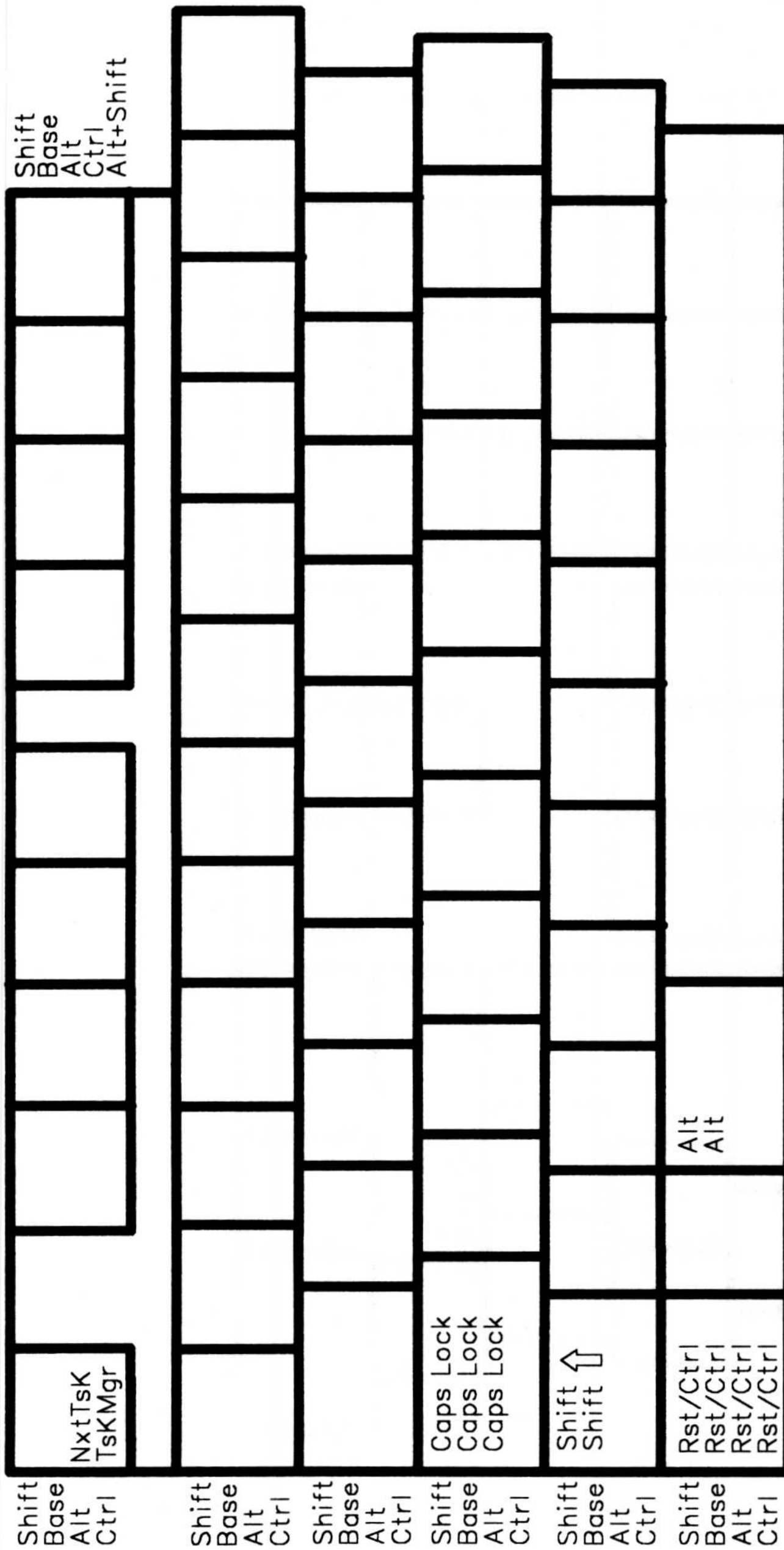






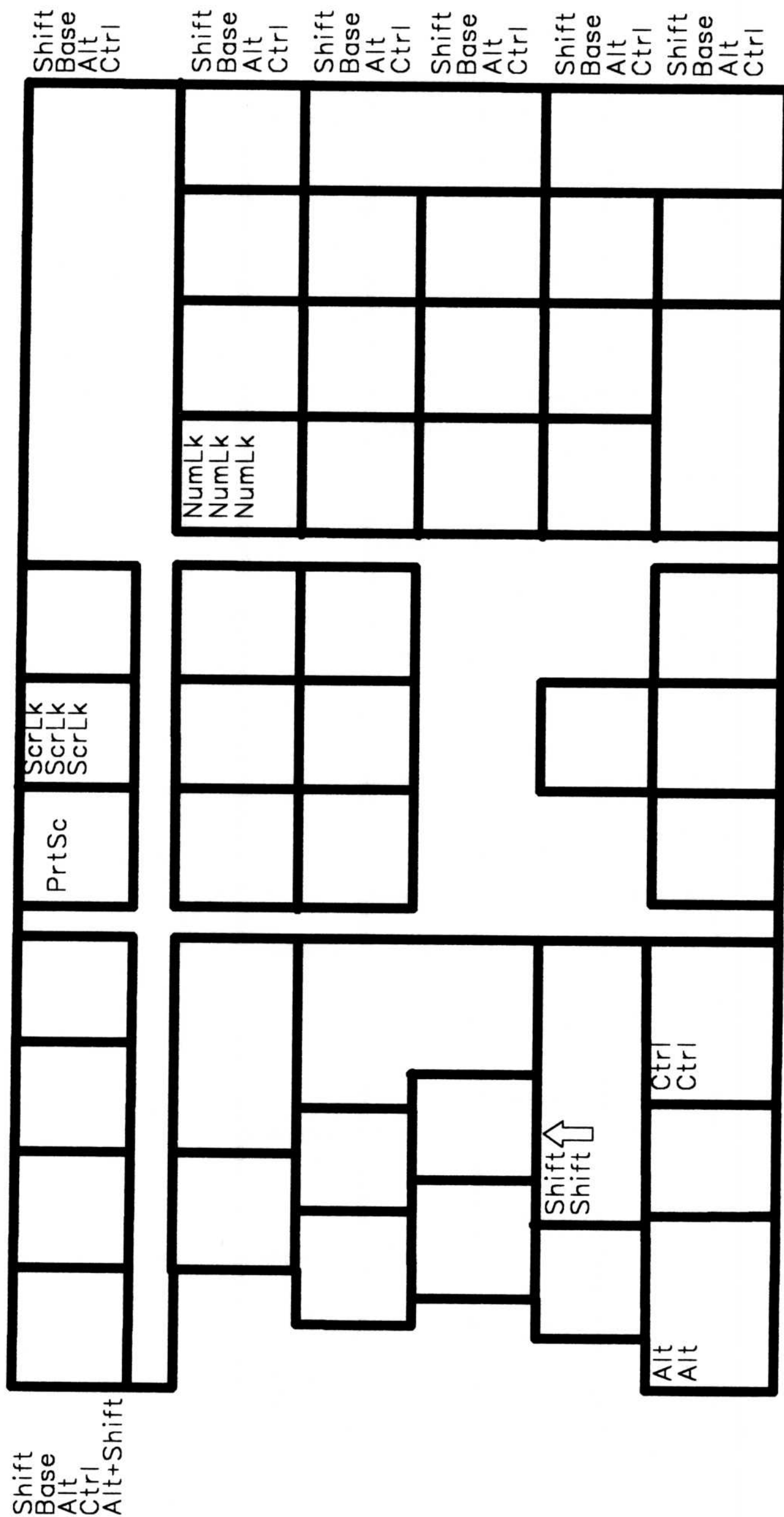


# IBM Personal Computer Enhanced Keyboard 102 for 3270 Emulation - Left-Hand Side



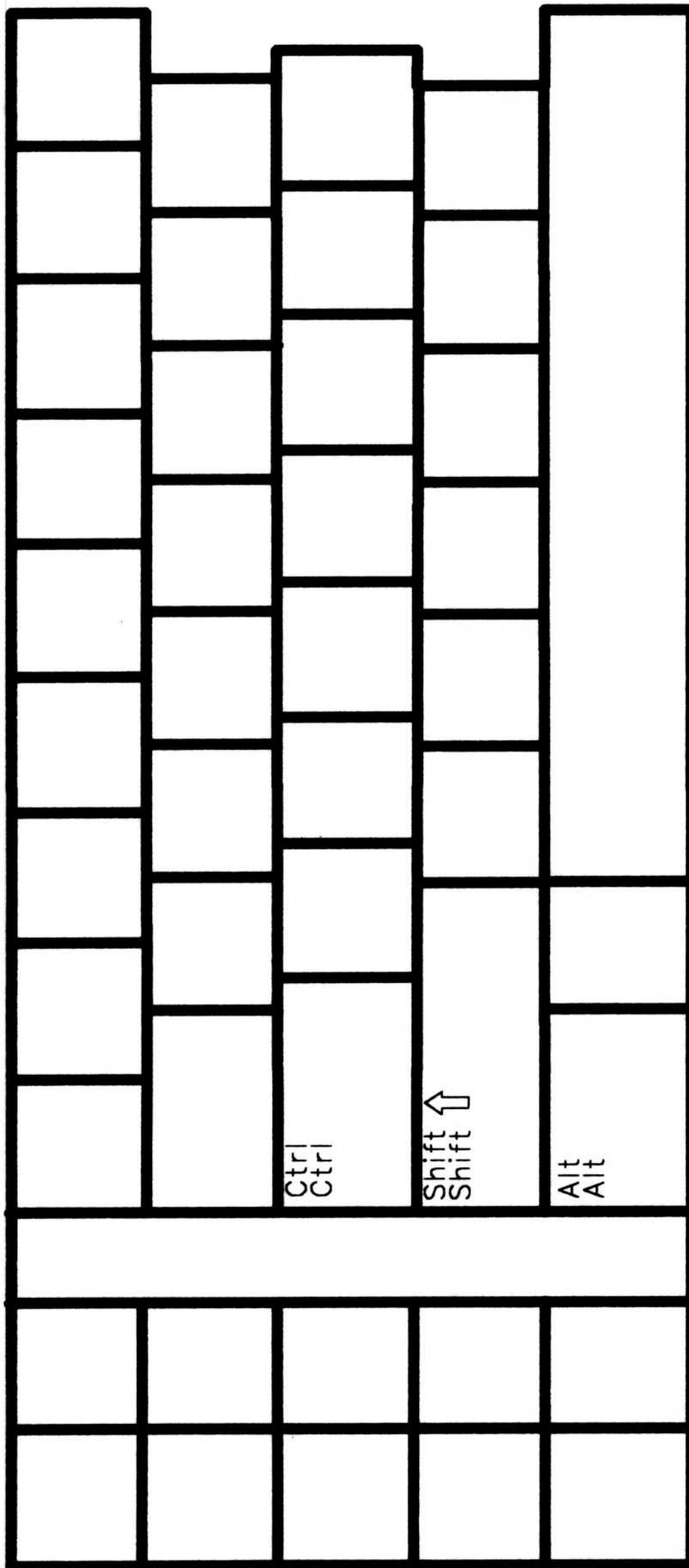
Note: Only the F keys have the Alt+Shift state.

# IBM Personal Computer Enhanced Keyboard 102 for 3270 Emulation - Right-Hand Side



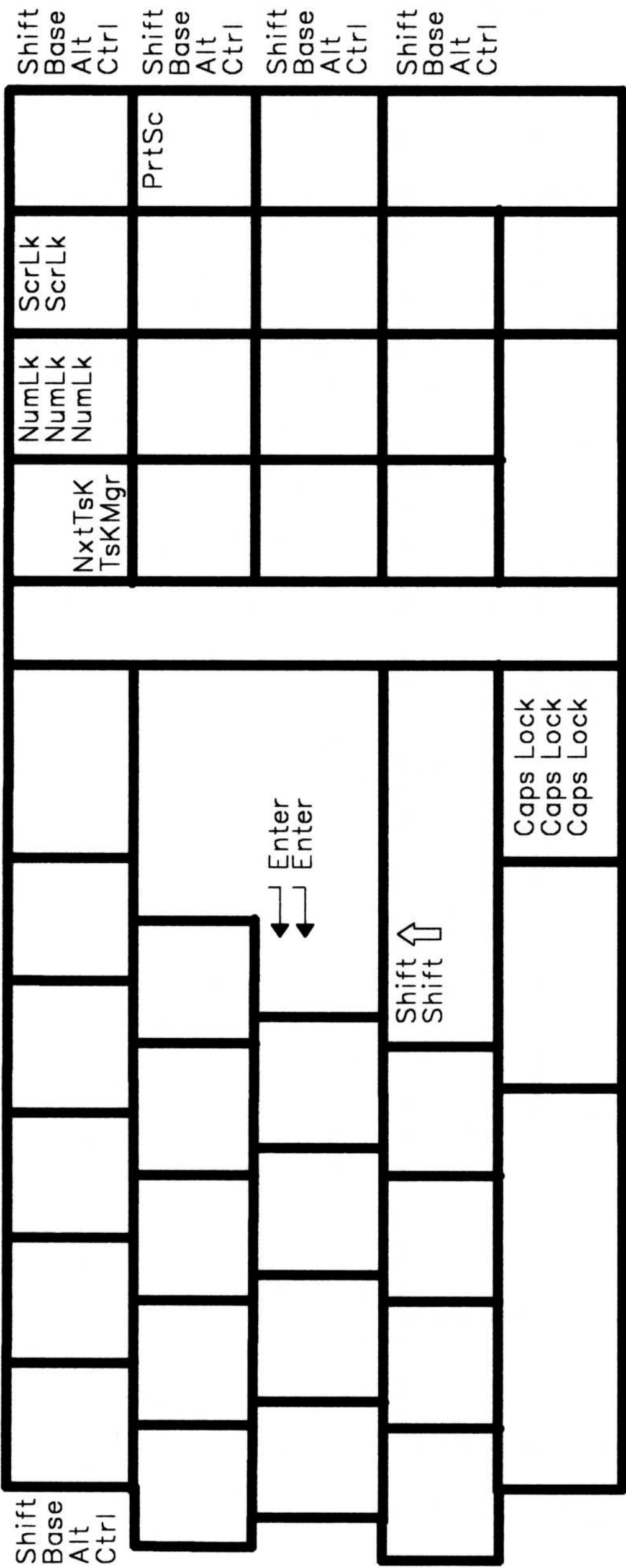
Note: Only the F keys have the Alt+Shift state.

**IBM Personal Computer AT Keyboard for 3270 Emulation - Left-Hand Side**



Shift  
Base  
Alt  
Ctrl  
Alt  
Shift  
Base  
Alt  
Ctrl  
Alt  
Shift  
Base  
Alt  
Ctrl  
Alt  
Shift  
Base  
Alt  
Ctrl  
Alt

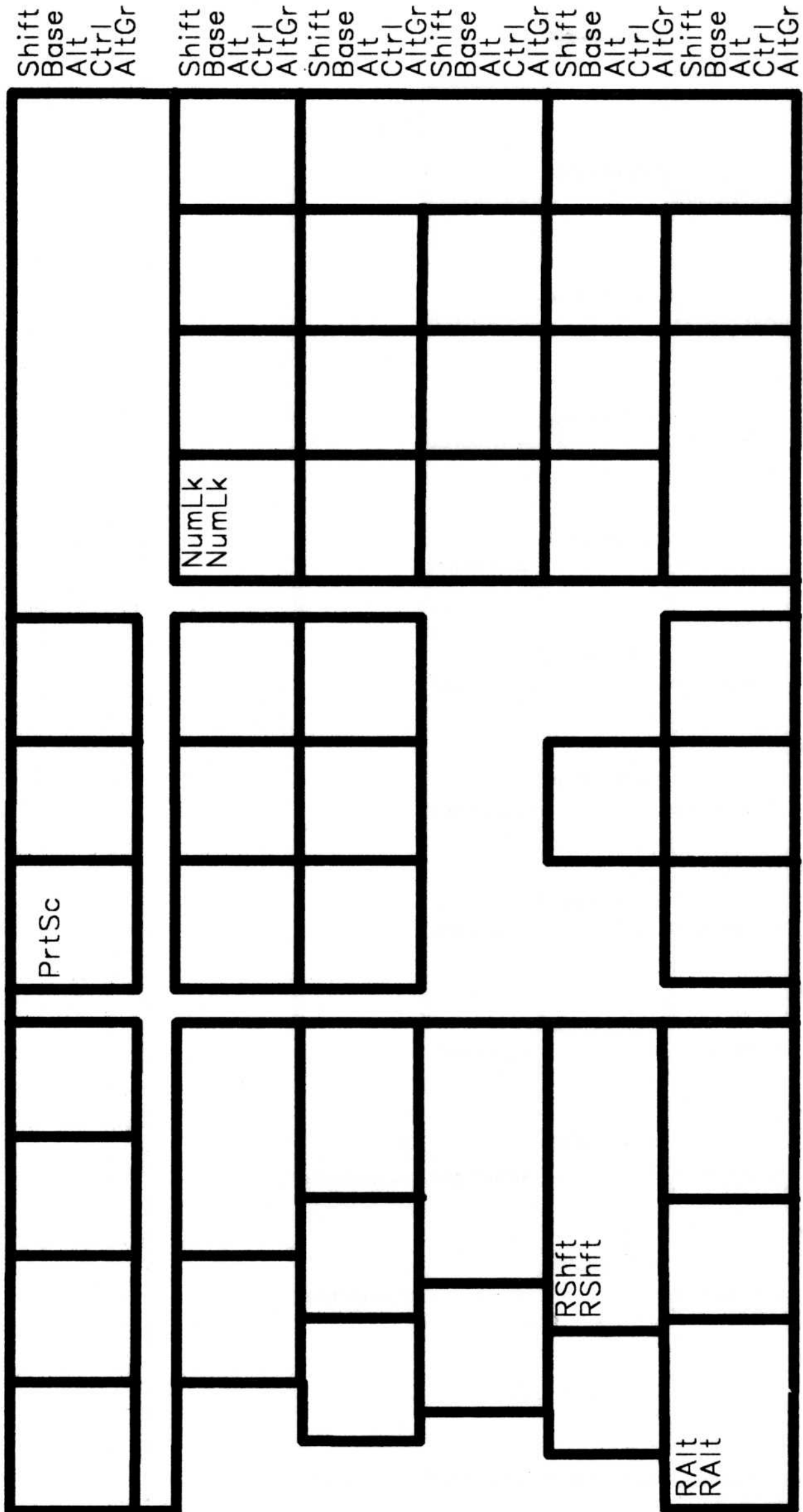
# IBM Personal Computer AT Keyboard for 3270 Emulation - Right-Hand Side





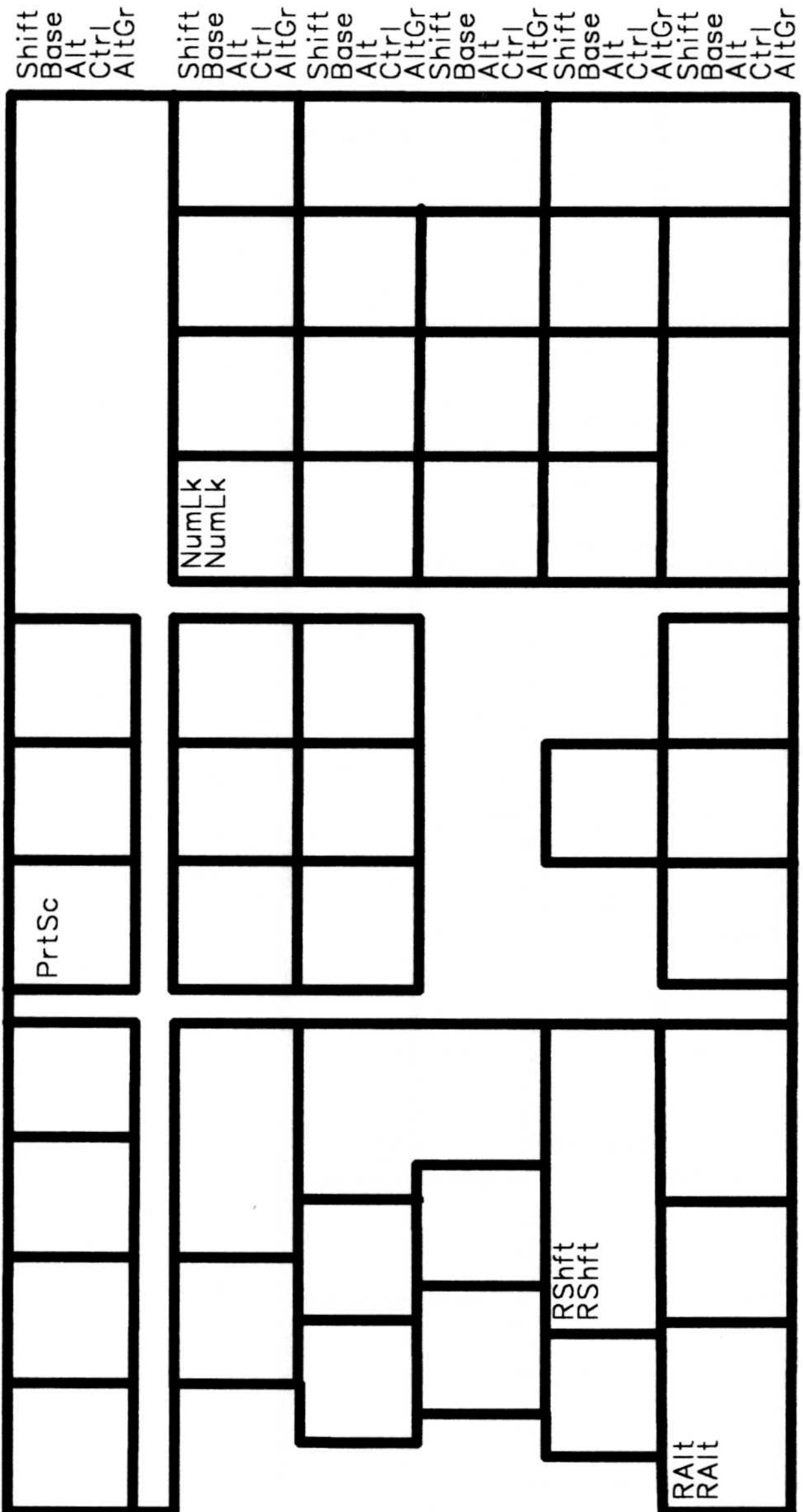


# IBM Personal Computer Enhanced Keyboard 101 for 3101 Emulation - Right-Hand Side





# IBM Personal Computer Enhanced Keyboard 102 for 3101 Emulation - Right-Hand Side

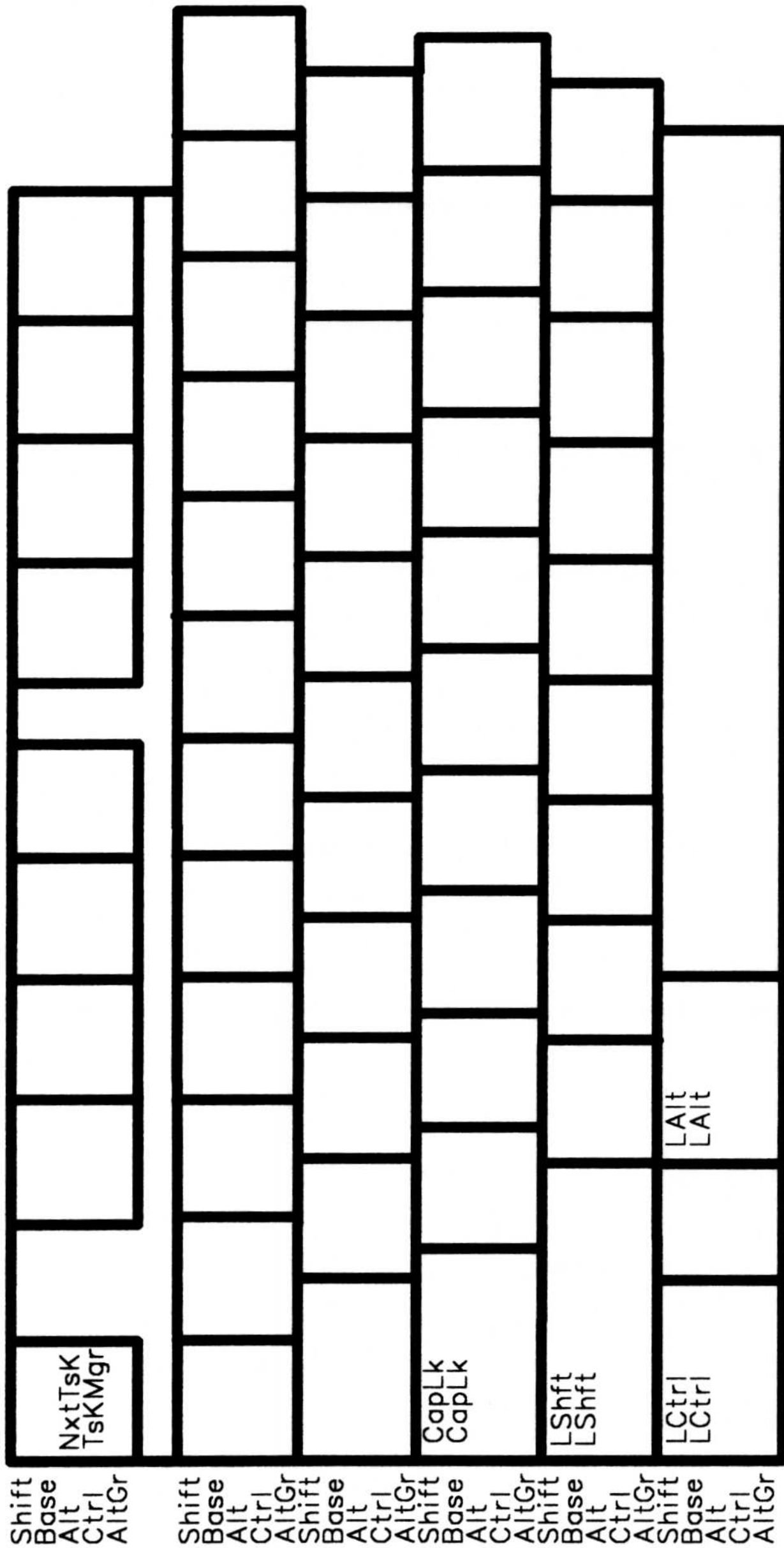




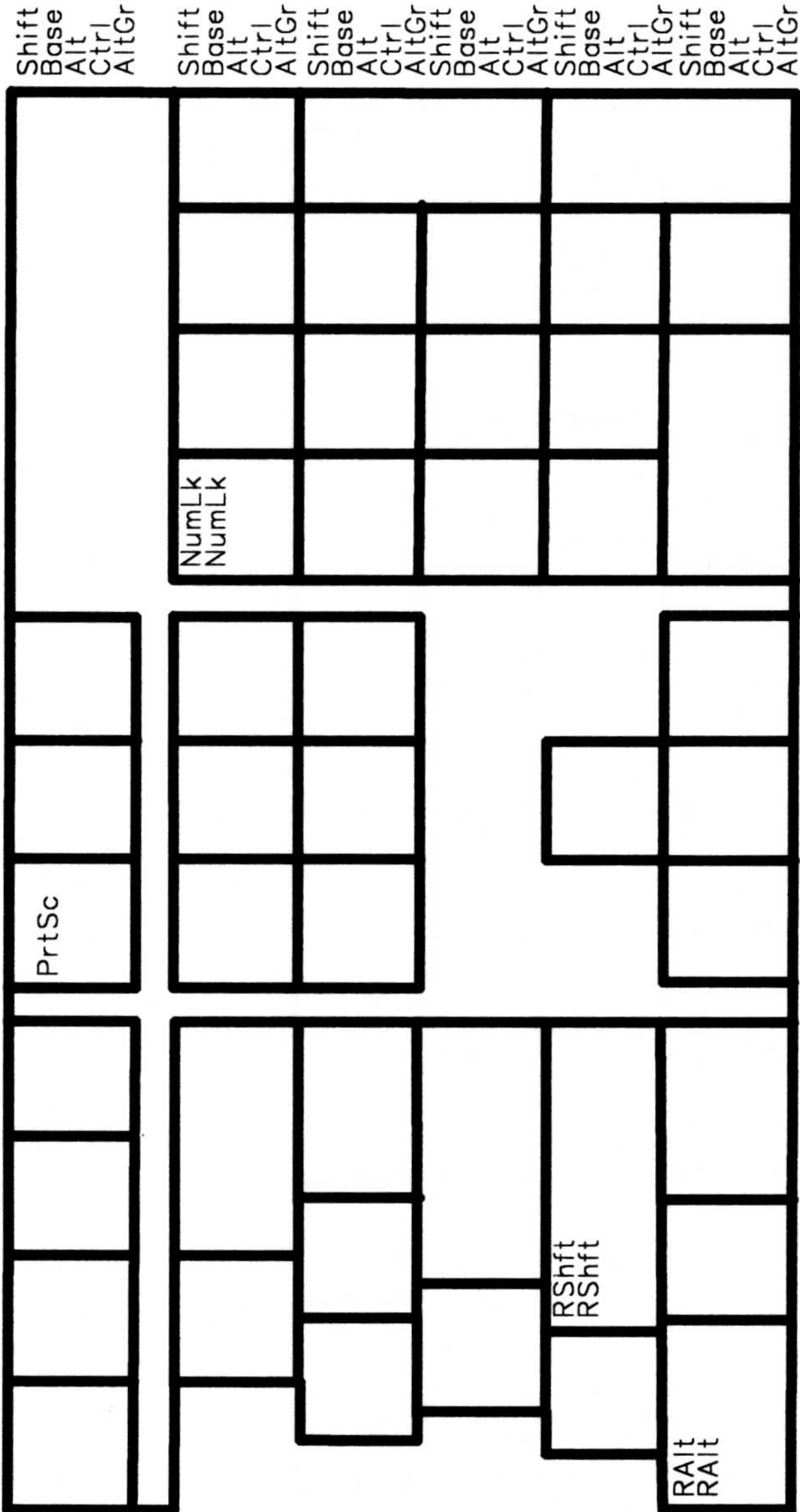




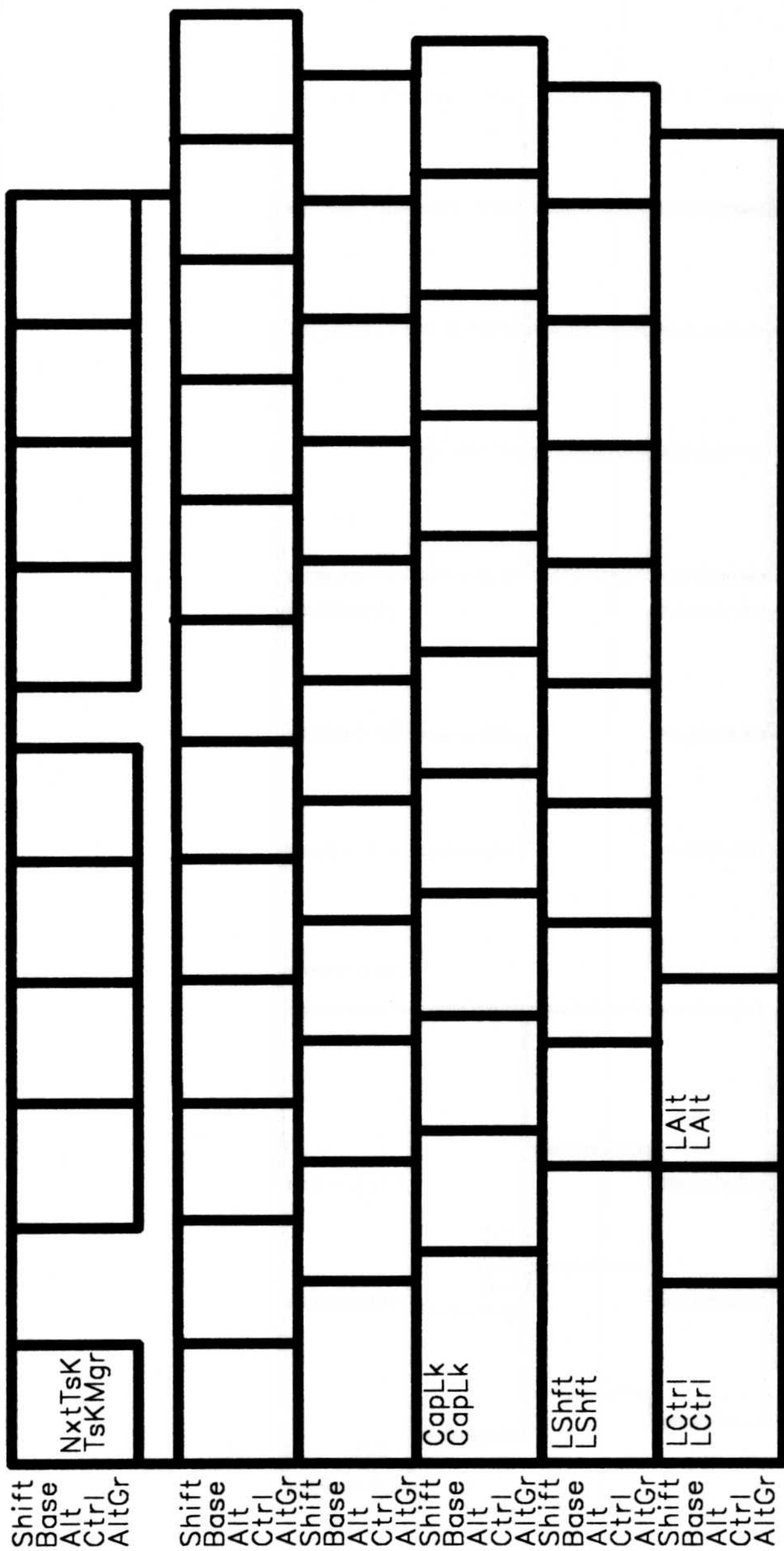
**IBM Personal Computer Enhanced Keyboard 101 for  
DEC VT100 Terminal Emulation - Left-Hand Side**



**IBM Personal Computer Enhanced Keyboard 101 for DEC VT100 Terminal Emulation - Right-Hand Side**



**IBM Personal Computer Enhanced Keyboard 102 for  
DEC VT100 Terminal Emulation - Left-Hand Side**



Shift  
Base  
Alt  
Ctrl  
AltGr

Shift  
Base  
Alt  
Ctrl  
AltGr

Shift  
Base  
Alt  
Ctrl  
AltGr

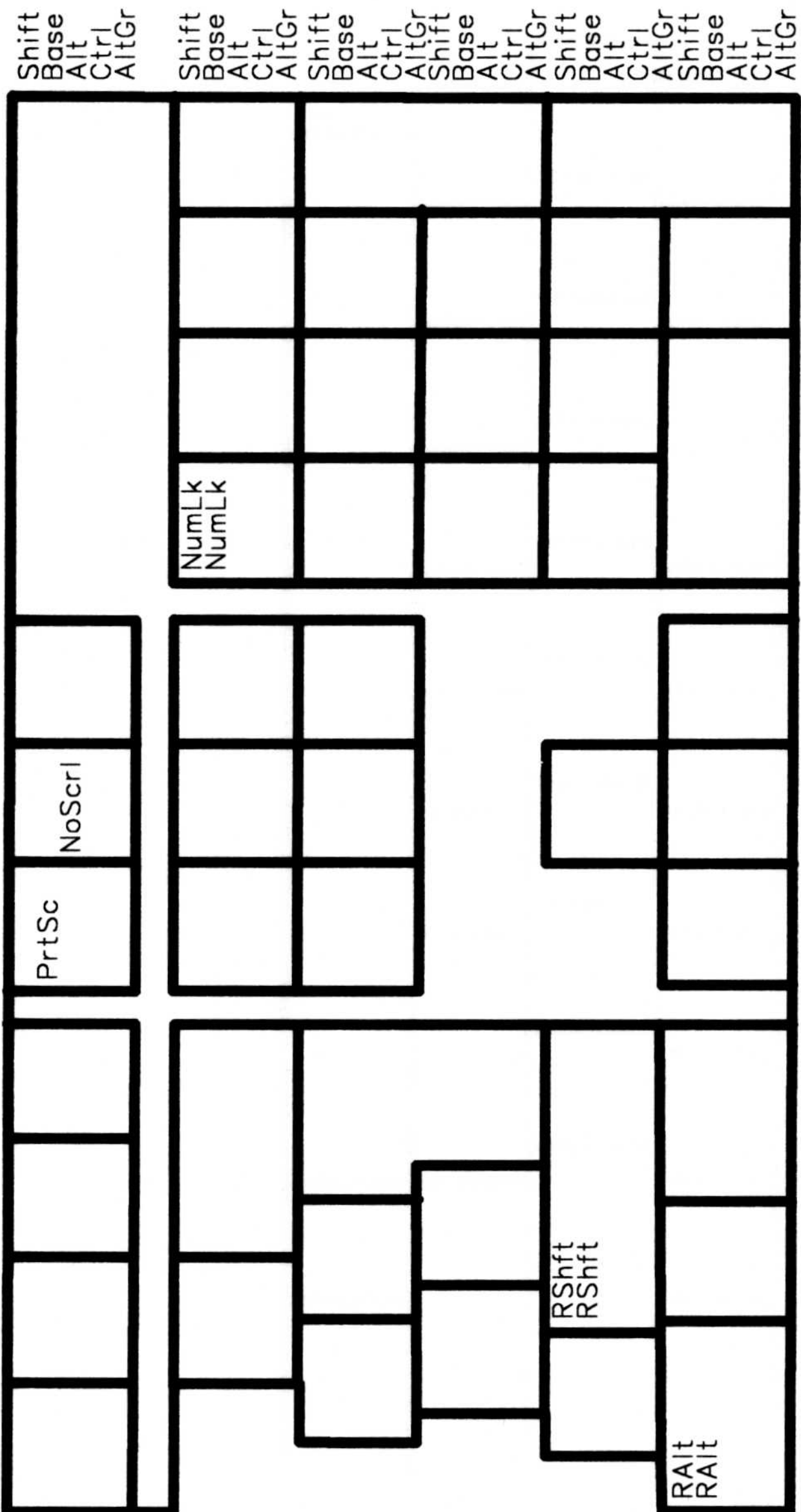
CapLk  
CapLk

LShift  
LShift

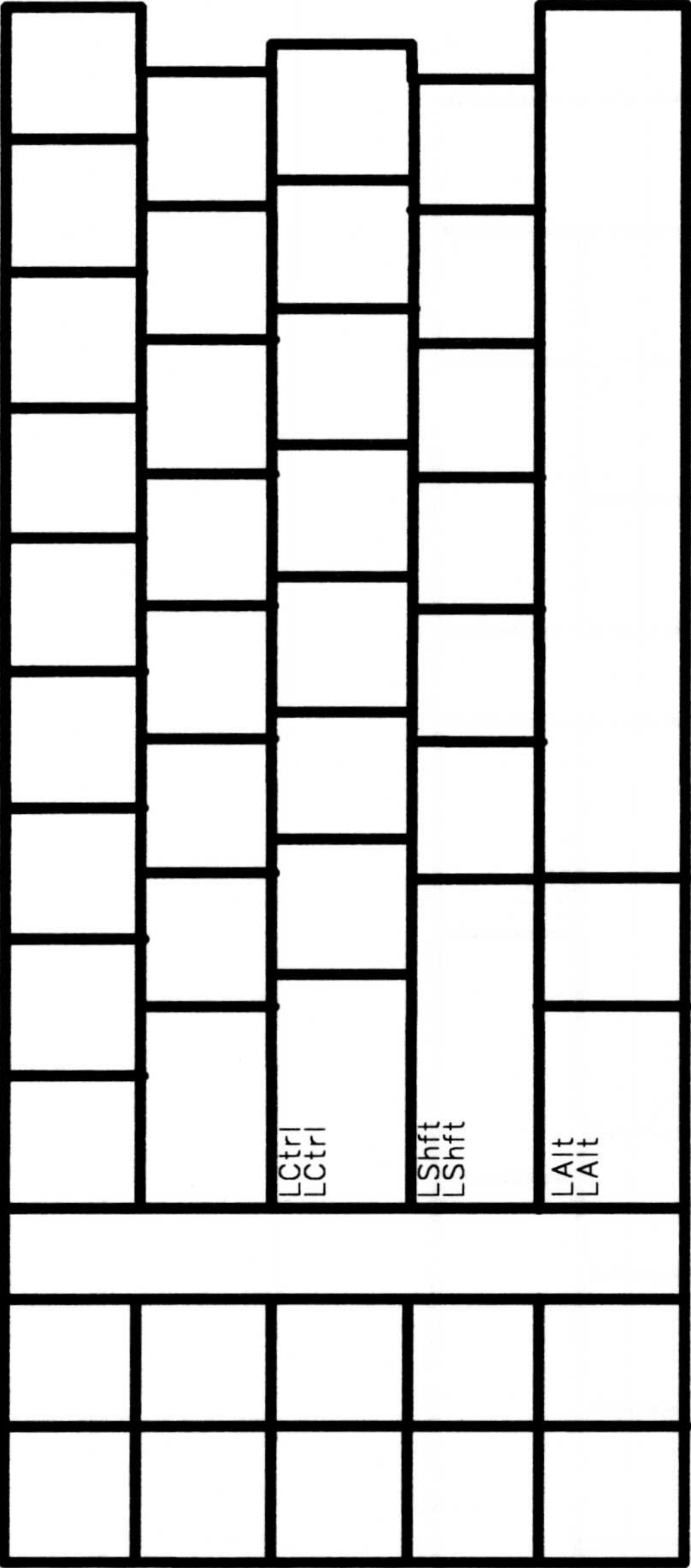
LCtrl  
LCtrl

LAlt  
LAlt

# IBM Personal Computer Enhanced Keyboard 102 for DEC VT100 Terminal Emulation - Right-Hand Side



**IBM Personal Computer AT Keyboard for  
DEC VT100 Terminal Emulation - Left-Hand Side**

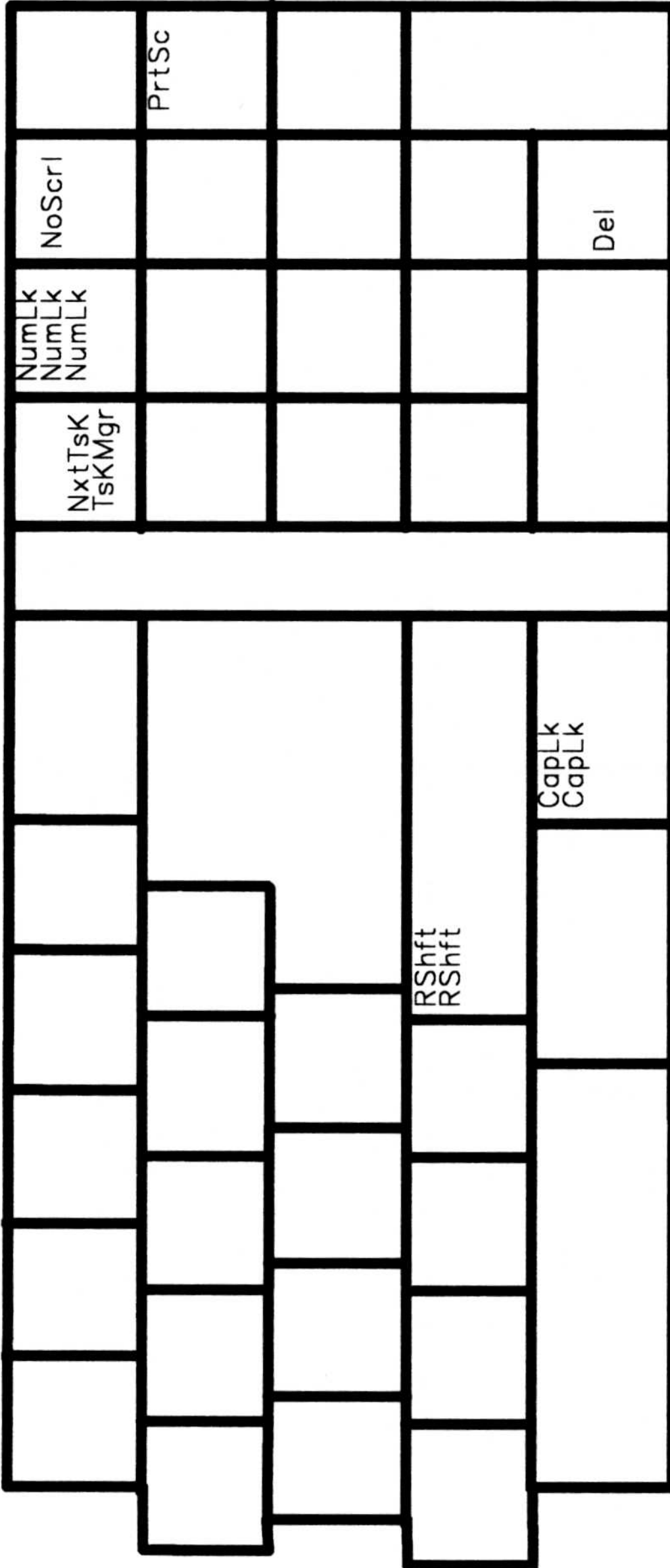


Base Shift AltGr Ctrl Alt Base Shift AltGr Ctrl Alt Base Shift AltGr Ctrl Alt Base Shift AltGr Ctrl Alt Base Shift AltGr Ctrl Alt



# IBM Personal Computer AT Keyboard for DEC VT100 Terminal Emulation - Right-Hand Side

Shift Base Alt Ctrl AltGr Shift Base Alt Ctrl AltGr Shift Base Alt Ctrl AltGr Shift Base Alt Ctrl AltGr



---

## Appendix A. Default Key Mappings

The following tables explain how to perform a broad range of functions using the keyboard profiles available with Communications Manager:

- The functions are organized in alphabetic order in the first column.
- In the second column is a brief description of each function.
- After the description, the keystrokes required to perform the function are presented:
  - Third column: Enhanced Keyboard
  - Fourth column: Personal Computer AT Keyboard.

**Note:** These keystrokes may differ if your keyboard is customized or remapped.

You may want to consult the keyboard layouts in Chapter 4 as you review these tables.

---

### Default 3270 Terminal Emulation Keyboard Mappings

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Alternate Cursor (AltCr)	Alternates the cursor between the underscore and the block cursor  Resets the keyboard after Input Inhibited	Alt + F11	Keypad 1

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Alternate, Left (LAlt)	Uses the alternate state position on a key	Alt + any key with an alternate function	Alt + any key with an alternate function
Alternate, Right (AltGr)	Uses the alternate graphics state position on a key  Uses the alternate state position on a key	AltGr + any key with an alternate graphics function  Alt + any key with an alternate function	Alt + Ctrl or Ctrl + Alt
Attention (Attn)	Signals a host application program	Esc	Alt + F1
Backspace (BackSp)	Moves cursor to the left  Resets the keyboard after Input Inhibited	← Backspace	← (Backspace)
Caps Lock (CapLk)	Makes all alphabetic characters typed become uppercase  Switches Caps Lock on/off	Caps Lock	Caps Lock
Caps Lock Release	Releases Caps Lock	Caps Lock	Caps Lock

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Clear	Clears the host session	Pause	Alt + F2
Color, Base	Uses the base colors for typing text	Shift + Alt + F9	Function not supported
Color (Blue) Selection	Types text in blue	Shift + Alt + F5	Function not supported
Color (Green) Selection	Types text in green	Shift + Alt + F3	Function not supported
Color (Pink) Selection	Types text in pink	Shift + Alt + F2	Function not supported
Color (Red) Selection	Types text in red	Shift + Alt + F1	Function not supported
Color (Turquoise) Selection	Types text in turquoise	Shift + Alt + F6	Function not supported
Color (White) Selection	Types text in white	Shift + Alt + F7	Function not supported
Color (Yellow) Selection	Types text in yellow	Shift + Alt + F4	Function not supported
Cursor Select (CrSel)	Selects option at current cursor position	Alt + F4	Alt + F3
Control (Ctrl)	Uses the control state position on a key	Ctrl	Ctrl

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Cursor Movement, Down Cursor (Down)	Moves the cursor down  Resets the keyboard after Input Inhibited	↓ or Keypad 2 ↓	Keypad 2 ↓
Cursor Movement, Home (Home)	Moves the cursor to the upper left corner  Resets the keyboard after Input Inhibited	Home	Keypad 7 Home
Cursor Movement, Left Cursor (Left)  (FLeft)	Moves the cursor to the left  Resets the keyboard after Input Inhibited	← or Keypad 4 ←	Keypad 4 ←
	Moves the cursor quickly to the left  Resets the keyboard after Input Inhibit.	Alt + ←	Alt + Keypad 4 ←



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Cursor Movement, Left Tab (BTab)	Moves the cursor to the last typing area  Resets the keyboard after Input Inhibited	Shift + Tab	Shift + Tab
Cursor Movement, Right Cursor (Right)  (FRight)	Moves the cursor to the right  Resets the keyboard after Input Inhibited	→ or Keypad 6 →	Keypad 6 →
	Moves the cursor quickly to the right  Resets the keyboard after Input Inhibit.	Alt + →	Alt + Keypad 6 →
Cursor Movement, Tab (Tab)	Moves the cursor to the next typing area on the panel  Resets the keyboard after Input Inhibited	Tab or Shift + (Numpad +)	Tab

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Cursor Movement, Up Cursor (Up)	Moves the cursor up  Resets the keyboard after Input Inhibited	↑ or Keypad 8 ↑	Keypad 8 ↑
Delete (Del)	Erases the character at the cursor (text to the right moves left to close up)  Resets the keyboard after Input Inhibited	Delete or Keypad . Del	Keypad . Del
Duplicate (Dup)	Duplicates the line previously entered	Shift + Insert	Alt + F8
Enter	Enters what you have typed on the panel	Right Ctrl or Keypad Enter	Keypad +

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Erase End of Field (ErEOF)	Erases everything from the cursor to the end of an input field  Resets keyboard after Input Inhibited	End	Alt + F6
Erase Input (ErInp)	Erases all the input fields  Resets keyboard after Input Inhibited	Alt + End	Alt + Keypad 9 PgUp
Field Mark (FldMk)	Signals a host application program	Shift + Home	Alt + Scroll Lock
Highlighted Text, Off (>>Hi)	Stops typing highlighted text	Alt + Keypad 3 PgDn	Alt + Keypad 3 PgDn
Highlighted Text, Reverse Video (RVideo)	Types text in reverse video	Alt + Keypad .	Alt + Keypad -
Highlighted Text, Underlined (UndrSc)	Types underlined text	Alt + Keypad 6 →	Alt + Keypad 2 ↓

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Insert	Inserts a character at the cursor (text to the right of the cursor moves right to make room)	Insert or Keypad 0 Ins	Keypad 0 Ins
Jump	Switches to the next host session	Alt + Page Up	Alt + F9
New Line (NewLne) (↵)	Moves the cursor to the beginning of the next line  Resets the keyboard after Input Inhibited	↵ Enter	Enter ↵
Next Task (NxtTsk)	Switches to the next task.	Alt + Esc	Alt + Esc
Numbers and Symbols, Keypad Asterisk (*)	Types an asterisk (*)	*	Keypad PrtSc *
Numbers and Symbols, Comma (,) Keypad	Types a comma (,)	Shift + (*)	Not supported on the numeric keypad
Numbers and Symbols, Decimal Point (.) Keypad	Types a decimal point (.)	Num Lock, then (. Del)	Num Lock, then (. Del)

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Numbers and Symbols, Minus Sign (–) Keypad	Types a minus sign (–)	Keypad –	Shift or Num Lock + (–)
Numbers and Symbols, Plus Sign (+) Keypad	Types a plus sign (+)	Keypad +	Function not supported
Number Lock (NumLk)	Toggles the numeric keypad on and off	Num Lock	Num Lock
PA1	Signals a host program	Ctrl + Insert (non-Keypad)	Ctrl + Keypad Home
PA2	Signals a host program	Ctrl + Home (non-Keypad)	Ctrl + Keypad ↑
PA3	Signals a host program	Ctrl + Page Up	Ctrl + Keypad PageUp
Print Screen (PrtSc)	Prints what is displayed in a user session window on your PC-attached printer	Print Screen	Shift + Keypad * (PrtSc)
Program Function Keys, F1 - F10	Signals a host application program	F1 - F10	F1 - F10
Program Function Keys, F11 - F20	Signals a host application program	F11, F12 and Shift + F1 - F8	Shift + F1 - F10



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Program Function Keys, F21 - F24	Signals a host application program	Shift + F9 - F12	Function not supported
Reset	Unlocks the keyboard after an Input Inhibited symbol is displayed  Turns off insert mode	Left Ctrl, when you press the key and release it with no intervening keystroke.	Alt + F10
Restart Host (Restr)	Restarts all host sessions. Useful if you want to switch coaxial cables without losing other user sessions	Ctrl + Pause	Ctrl + F2
Scroll Lock (ScrLk)	Switches Scroll Presentation Space on/off	Scroll Lock	Scroll Lock
Shift Function (LShft or Rshft)	Use the shift state position on the key	Shift	Shift
Shift Lock (ShftLk)	Lock the keyboard in the shifted state	Caps Lock	Caps Lock

<b>Function</b>	<b>Description</b>	<b>Keystrokes</b>	
		<b>Enhanced Keyboard</b>	<b>AT Keyboard</b>
<b>Shift Lock Release</b>	<b>Release the Shift Lock</b>	<b>Shift</b>	<b>Shift</b>
<b>Space</b>	<b>Types a blank space in text</b>	<b>Spacebar or Shift + Keypad /</b>	<b>Spacebar</b>
<b>System Request (SysReq)</b>	<b>Signals the host</b>	<b>Alt + Print Screen</b>	<b>Sys Req</b>
<b>Task Manager (TskMgr)</b>	<b>Switches to the Task Manager.</b>	<b>Ctrl + Esc</b>	<b>Ctrl + Esc</b>

## Default IBM 3101 Terminal Emulation Keyboard Mappings

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
ACK	Acknowledges	Ctrl + F	Ctrl + F
Backspace (BckSpc)	Backspaces	Backspace	Backspace
BackTab (BckTab)	Backtabs	Shift + Tab	Shift + (Tab Forward)
BEL	Sounds bell tone from keyboard	Ctrl + G	Ctrl + G
Break	Break	Pause	F9
BS	Moves cursor to left one character position, unless it is at the left margin, in which case, no action occurs	Ctrl + H	Ctrl + H
CAN	If sent during a control sequence, sequence is immediately terminated and not executed	Ctrl + X	Ctrl + X
Cancel	Ends data transfer to host	F11	Ctrl + F10

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Clear (Clear)	Clears All	End	Ctrl + Keypad 7 Home
Cursor Down (CurDn)	Moves cursor down	↓ or Keypad 2	Keypad 2 ↓
Cursor Left (CurLf)	Moves cursor left		
CR	Moves cursor to left margin on current line	Ctrl + M	Ctrl + M
		←	Keypad 4
Cursor Right (CurRt)	Moves cursor right	→	Keypad 6
Cursor Up (CurUp)	Moves cursor up	↑	Keypad 8 ↑
DC1 (XON)	Device Control 1	Ctrl + Q	Ctrl + Q
DC2	Device Control 2	Ctrl + R	Ctrl + R
DC3	Device Control 3 (XOFF)	Ctrl + S	Ctrl + S
DC4	Device Control 4	Ctrl + T	Ctrl + T
Delete (Delete)	Sends DEL control sequence	Delete Ctrl + Backspace	Keypad . Del Ctrl + Backspace
Delete Character (DelChr)	Deletes character	Keypad . Del	Keypad . Del
Delete Line (DelLne)	Deletes line	Ctrl + Keypad . Del	Ctrl + Keypad . Del

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
DLE	Data Link Escape	Ctrl + P	Ctrl + P
EM	End of Medium	Ctrl + Y	Ctrl + Y
ENQ	Transmit answer-back message	Ctrl + E	Ctrl + E
EOT	End of Transmission	Ctrl + D	Ctrl + D
Erase End of Line (ErsEOL)	Erases from cursor to end of line	Page Up	Ctrl + Keypad 1 End
Erase End of Screen (ErsEOS)	Erases from cursor to end of screen	Page Down	Ctrl + Keypad 3 Pg Dn
Erase Input (ErsInp)	Erase all input fields	Insert	Ctrl + Keypad 9 Pg Up
ESC	Introduces a control sequence	Ctrl + [ (left bracket)	Ctrl + [ (left bracket)
Escape	Introduces a control sequence	Esc	Keypad Esc Shift or Num Lock + Keypad Esc
ETB	End of Block	Ctrl + W	Ctrl + W
ETX	End of Text	Ctrl + C	Ctrl + C
FF	Same as LF	Ctrl + L	Ctrl + L
FS	File separator	Ctrl + \	Ctrl + \



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
GS	Group separator	Ctrl + ] (right bracket)	Ctrl + ] (right bracket)
Home (Home)	Moves cursor home	Home	Keypad 7
HT	Moves cursor to next tab stop, or to the right margin if no further tab stops are present on the line	Ctrl + I	Ctrl + I
Insert Character (InsChr)	Inserts character	Keypad 0 Ins	Keypad 0 Ins
Insert Line (InsLne)	Inserts line	Ctrl + Keypad 0 Ins	Ctrl + Keypad 0 Ins
LF	Causes a line feed or new line operation	Ctrl + J	Ctrl + J
Line feed (LneFed)	Line feed	Enter	Enter
Menu	Brings up ASCII Terminal Emulation Operations Menu	F10	F10
NAK	Negative Acknowledge	Ctrl + U	Ctrl + U



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Newline (NewLne)	Carriage Return	Shift + Enter	Shift + Enter
Next Task (NxtTsk)	Switches to the next task.	Alt + Esc	Alt + Esc
No Scroll (NoScrl)	No Scroll	Scroll Lock	Scroll Lock
NUL	Null Control Sequence	Ctrl + 2 (not on the keypad)	Ctrl + 2 (not on the keypad)
PF1	PF1	Function not supported	Function not supported
PF2	PF2	Function not supported	Function not supported
PF3	PF3	Function not supported	Function not supported
PF4	PF4	Function not supported	Function not supported
PF5	PF5	Function not supported	Function not supported
PF6	PF6	Function not supported	Function not supported
PF8	PF8	Function not supported	Function not supported
Reset	Unlocks the keyboard, clears the message from operator information area, and resets the error status	F12	Sys Req

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
RS	Record separator	Ctrl + 6 (not on the keypad)	Ctrl + 6 (not on the keypad)
Send	Send block	Ctrl + Enter	Ctrl + Enter
Send Line (SndLne)	Send line	F9	Keypad 1 End
SI	Shift In	Ctrl + O	Ctrl + O
Skip	Skip to unprotected field	Ctrl + F7	Ctrl + F7
SO	Shift Out	Ctrl + N	Ctrl + N
SOH	Start of Header	Ctrl + A	Ctrl + A
Space	Space	Spacebar	Spacebar
STX	Start of Text	Ctrl + B	Ctrl + B
SUB	Same as CAN	Ctrl + Z	Ctrl + Z
SYN	Synchronous	Ctrl + V	Ctrl + V
Tab	Tab	Tab	(Tab Forward)
Task Manager (TskMgr)	Switches to the Task Manager	Ctrl + Esc	Ctrl + Esc
US	Unit separator	Ctrl + -	Ctrl + -
VT	Same as LF	Ctrl + K	Ctrl + K

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Wait	Capability for user to specify 'wait for return character from host' within keyboard strings	Function applicable to strings only	Function applicable to strings only

## Default VT100 Keyboard Mappings

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
ACK	Acknowledges	Ctrl + F	Ctrl + F
Backspace (BckSpc)	Backspaces	Backspace	(Backspace)
BEL	Sounds bell tone from keyboard	Ctrl + G	Ctrl + G
Break	Breaks	Pause	F9
BS	Moves cursor to the left one character position, unless it is at the left margin, in which case, no action occurs	Ctrl + H	Ctrl + H
CAN	If sent during a control sequence, sequence is immediately terminated and not executed	Ctrl + X	Ctrl + X
Cancel	Ends data transfer to host	F11	Ctrl + F10

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
CR	Moves cursor to the left margin on the current line	Ctrl + M	Ctrl + M
Cursor Up (CurUp)	Moves cursor up	↑	Keypad 8
Cursor Down (CurDn)	Moves cursor down	↓	Keypad 2
Cursor Forward (CurRt)	Moves cursor right	→	Keypad 6
Cursor Backward (CurLf)	Moves cursor left	←	Keypad 4
DC1	Device Control 1 (XON)	Ctrl + Q	Ctrl + Q
DC2	Device Control 2	Ctrl + R	Ctrl + R
DC3	Device Control 3 (XOFF)	Ctrl + S	Ctrl + S
DC4	Device Control 4	Ctrl + T	Ctrl + T
Delete (Delete)	Sends DEL control	Delete Ctrl + Backspace	Keypad . Del Ctrl + Backspace
DLE	Data Link Escape	Ctrl + P	Ctrl + P
EM	End of Medium	Ctrl + Y	Ctrl + Y



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
ENQ	Transmit answer-back message	Ctrl + E	Ctrl + E
EOT	End of Transmission	Ctrl + D	Ctrl + D
ESC	Introduces a control sequence	Ctrl + [ (left bracket)	Ctrl + [ (left bracket)
Escape (Esc)	Introduces a control sequence	Esc	Shift + Esc
ETB	End of Block	Ctrl + W	Ctrl + W
ETX	End of Text	Ctrl + C	Ctrl + C
FF	Form Feed	Ctrl + L	Ctrl + L
FS	File separator	Ctrl + backslash	Ctrl + backslash
GS	Group separator	Ctrl + ] (right bracket)	Ctrl + ] (right bracket)
HT	Moves cursor to next tab stop or to the right margin if no further tab stops are present on the line	Ctrl + I	Ctrl + I
Keypad Enter (KpEntr)	Same as Return	Keypad Enter	Shift or Num Lock + Keypad +



Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Keypad Minus (KpMins)	Keypad Minus	Keypad –	Shift or Num Lock + Keypad –
Keypad Period (KpPeri)	Keypad Period	Keypad .	Shift or Num Lock + Keypad . Del
Keypad 0 (Kp0)	Keypad 0	Keypad 0	Shift or Num Lock + Keypad 0
Keypad 1 (Kp1)	Keypad 1	Keypad 1	Shift or Num Lock + Keypad 1
Keypad 2 (Kp2)	Keypad 2	Keypad 2	Shift or Num Lock + Keypad 2
Keypad 3 (Kp3)	Keypad 3	Keypad 3	Shift or Num Lock + Keypad 3
Keypad 4 (Kp4)	Keypad 4	Keypad 4	Shift or Num Lock + Keypad 4
Keypad 5 (Kp5)	Keypad 5	Keypad 5	Shift or Num Lock + Keypad 5
Keypad 6 (Kp6)	Keypad 6	Keypad 6	Shift or Num Lock + Keypad 6
Keypad 7 (Kp7)	Keypad 7	Keypad 7	Shift or Num Lock + Keypad 7
Keypad 8 (Kp8)	Keypad 8	Keypad 8	Shift or Num Lock + Keypad 8

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Keypad 9 (Kp9)	Keypad 9	Keypad 9	Shift or Num Lock + Keypad 9
Keypad Comma (KpComa)	Keypad Comma	Keypad +	Keypad * PrtSc
LF	Causes a line feed or new line operation	Ctrl + J	Ctrl + J
Line feed (LneFed)	Line feed	Ctrl + Enter	Ctrl + Enter
Menu	Brings up the ASCII Terminal Emulations Operations Menu	F10	F10
NAK	Negative Acknowledge	Ctrl + U	Ctrl + U
Next Task (NxtTsk)	Switches to the next task.	Alt + Esc	Alt + Esc
No Scroll (NoScrl)	No Scroll	Scroll Lock	Scroll Lock
NUL	Null Control Sequence	Ctrl + 2 (not on the keypad)	Ctrl + 2 (not on the keypad)
PF1	PF1	F1	F1
PF2	PF2	F2	F2
PF3	PF3	F3	F3
PF4	PF4	F4	F4

Function	Description	Keystrokes	
		Enhanced Keyboard	AT Keyboard
Reset	Unlocks the keyboard, clears the message from operator information area, and resets the error status	F12	Sys Req
Return	Carriage Return	Enter	Enter
RS	Record separator	Ctrl + 6 (not on the keypad)	Ctrl + 6 (not on the keypad)
SI	Shift In	Ctrl + O	Ctrl + O
SO	Shift Out	Ctrl + N	Ctrl + N
SOH	Start of Header	Ctrl + A	Ctrl + A
Space	Space	Spacebar	Spacebar
STX	Start of Text	Ctrl + B	Ctrl + B
SUB	Same as CAN	Ctrl + Z	Ctrl + Z
SYN	Synchronous	Ctrl + V	Ctrl + V
Tab	Tab	Tab	(Tab Forward)
Task Manager (TskMgr)	Switches to the Task Manager.	Ctrl + Esc	Ctrl + Esc
US	Unit separator	Ctrl + -	Ctrl + -
VT	Vertical Tab	Ctrl + K	Ctrl + K

<b>Function</b>	<b>Description</b>	<b>Keystrokes</b>	
		<b>Enhanced Keyboard</b>	<b>AT Keyboard</b>
<b>Wait</b>	Capability for user to specify 'wait for return character from host' within keyboard strings	Function applicable to strings only	Function applicable to strings only





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# Glossary

## A

**accented character.** See *special character*.

**alternate code page.** In the OS/2 program, the code page that replaces the primary code page when the user or program switches code pages.

**Alternate (Alt) mode.** A mode that is obtained by pressing and holding the Alt key. Pressing and holding the Alt key places the keyboard in a special or alternate mode, where pressing a second key gives predefined functions.

**American National Standard Code for Information Interchange (ASCII).** The standard code with a coded character set consisting of 7-bit coded characters (8 bits including parity check), used for information interchange among data processing systems, and data communication systems. The ASCII set consists of control characters and graphic characters.

**ASCII.** See *American National Standard Code for Information Interchange*.

**ASCII Terminal Emulation.** A feature of Communications Manager that emulates the function of an asynchronous terminal.

## B

**backspace (character backspace).** A typing action that deletes the character to the left of the cursor and then shifts to the left all the characters remaining the field or line.

**backtab.** A typing action that moves the cursor to the previous field.

**base operating system.** IBM Operating System/2.

## C

**Caps Lock.** A typing action resulting from pressing the Caps Lock key that causes the character keys to produce uppercase letters. The keyboard remains in Caps Lock mode until the user presses the Caps Lock key again.

**carriage return.** An operation that prepares for the next character or cursor to be printed or displayed at the specified first position on the next line.

**character.** A letter, digit, or other symbol that is used as part of the organization, control, or representation of data.

**character set.** A group of characters used for a specific reason; for example, the set of characters a printer can print or a keyboard can support.

**code page.** (1) A table that defines a coded character set by assignment of a character meaning to each code point in the table for a language or country. (2) A mapping between characters and their internal (binary) representation.

**Communications Manager.** A component of OS/2 Extended Edition that lets a workstation connect to a host computer and use the host resources as well as the resources of other personal computers to which the workstation is attached, either directly or through a host. Communications Manager provides API's so users can develop their own applications.

**component.** A functional part of an operating system or program.

**country code.** A 3-digit number specifying a country and that country's preferred formats for date and time values, currency, and numeric data.

**cursor.** A symbol displayed on the screen and associated with an input device, used to indicate where input from the device will be placed.

## D

**dead key.** See *nonescaping key*.

**default.** An attribute, value or option assumed when none is explicitly specified.

**disk operating system (DOS).** An operating system for computer

systems that use disks and diskettes for auxiliary storage of programs and data.

**DOS.** See *disk operating system*.

## E

**EBCDIC.** See *Extended Binary-Coded Decimal Interchange Code*.

**Extended Binary-Coded Decimal Interchange Code (EBCDIC).** A coded character set consisting of 8-bit coded characters used by host computers.

## F

**function key.** A key that causes a specified sequence of operations to be performed when it is pressed.

## I

**IBM Operating System/2 Extended Edition.** A program that contains the features of OS/2 Standard Edition 1.1. It also contains an advanced relational Database Manager, a Communications Manager which provides intersystems communications, improved connectivity, and terminal emulation, and the LAN Requester.

**insert mode.** An entry mode obtained by pressing the Insert key, and is used for adding information between characters without deleting what is already there.

## K

**keyboard.** A systematic arrangement of keys by which a machine is operated or by which data is entered.

**keyboard mapping.** A table or profile containing the definitions assigned to keys on a keyboard for use in terminal emulation.

**keyboard remapping.** A Communications Manager facility that allows users to change the key assignments on the keyboard they are using in terminal emulation.

## L

**line feed.** An ASCII character that causes an output device to move forward one line.

## M

**multilingual code page.** The code page that contains the alphanumeric and special symbols used in most European, North American, and South American countries. In the OS/2 program, this is code page 850.

## N

**national language code page.** A code page that contains the alphanumeric and special symbols used in a particular language.

**nonescaping key.** A key that allows a character to be typed without the print position being changed.

**Num Lock.** A typing action that puts the keyboard into Num Lock mode. As a result, the numeric keypad keys produce numbers when pressed rather than their base value. The keyboard remains in Num Lock mode until the user presses the Num Lock key a second time.

**Num Lock mode.** A typing mode in which a dual-purpose numeric keypad on the keyboard is locked in the secondary purpose of inserting a number for each key depression.

## O

**operating system.** The software that controls the running of programs. An operating system may provide services such as resource allocation, scheduling, input/output control, and data management.

**OS/2.** See *IBM Operating System/2 Extended Edition*.

## P

**profile.** (1) An object that contains information about the characteristics of a computer system. (2) In Communications Manager, a part of a configuration file.

## S

**special character.** A graphic character that is not a letter, digit, or blank character, and usually not an ideogram, for example, a punctuation mark, general currency symbol, percent sign, or a language account character.

# Numerics

**3270 Terminal Emulation.** A program installed into a personal computer to allow it to emulate a 3270 workstation.



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