

There are several special-function keys that do not generate ASCII codes. For example, you cannot read the Control, Shift, and Caps Lock keys directly, but pressing one of these keys alters the character codes produced by the other keys.

Extended keyboard IIe

As a result of the single-wire Shift-key mod, the Shift key *can* be read directly in the extended keyboard IIe.

Another key that doesn't generate a code is Reset, located at the upper-right corner of the keyboard; it is connected directly to the Apple IIe's circuits. Pressing Reset with Control depressed normally causes the system to stop whatever program it's running and restart itself. This restarting process is called the *reset routine*.

The reset routine is described in Chapter 4.

Two more special keys are the Apple keys, Open Apple and Solid Apple, located on either side of the Space bar. These keys are connected to the one-bit game inputs, which are described later in this chapter in the section "Switch Inputs." Pressing them in combination with the Control and Reset keys causes the built-in firmware to perform special reset and self-test cycles, described with the reset routine in Chapter 4.

Extended keyboard IIe

The Open Apple and Option keys are both located on the left side of the Space bar on the extended keyboard IIe. See Figure 2-2 for a diagram of the keyboard layout for the extended keyboard IIe.

Table 2-2
Keys and ASCII codes

Key	Normal		Control		Shift		Both	
	Code	Char	Code	Char	Code	Char	Code	Char
Delete	7F	DEL	7F	DEL	7F	DEL	7F	DEL
Left Arrow	08	BS	08	BS	08	BS	08	BS
Tab	09	HT	09	HT	09	HT	09	HT
Down Arrow	0A	LF	0A	LF	0A	LF	0A	LF
Up Arrow	0B	VT	0B	VT	0B	VT	0B	VT
Return	0D	CR	0D	CR	0D	CR	0D	CR
Right Arrow	15	NAK	15	NAK	15	NAK	15	NAK
Escape	1B	ESC	1B	ESC	1B	ESC	1B	ESC
Space	20	SP	20	SP	20	SP	20	SP
' "	27	'	27	'	22	"	22	"
, <	2C	,	2C	,	3C	<	3C	<