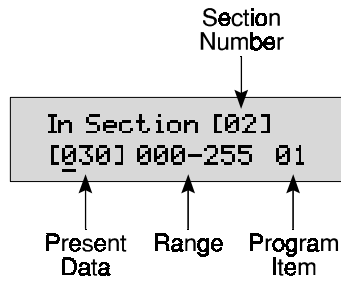

ENTERING PROGRAMMING DATA

Programming Data Entry Sections



For sections that require a number value to be entered, a message similar to the one shown here will be displayed.

Section Number indicates which Section is being programmed.

Present Data displays the data presently programmed.

Range indicates the range of valid entries.

Program Item indicates the current program item.

A cursor will appear under the first digit; enter the new data or press the ∇ -NO Key. When the new data is entered, the display will advance to the next program item.

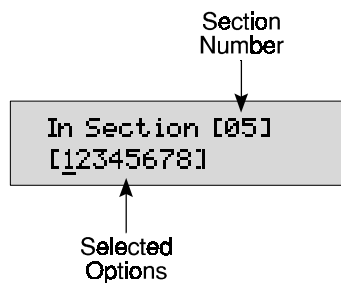
To scroll through the items in a Section, press the ∇ -NO Key. To enter data, scroll to the desired item with the ∇ -NO Key and then enter the data with the number keys.



Note that three digits must be entered to program an item; if the ∇ -NO or [#] Keys are pressed before all three digits are entered, the data will not be programmed and the item will remain unchanged.

To exit, press the [#] Key to return to the "Enter Program Section" message.

Programming System Option Sections



System Option Code Programming Sections are used to enable or disable various system functions. When a System Option Code Section is entered, a message similar to the one shown here will be displayed.

Section Number indicates which Section is being programmed.

Selected Options indicated which options have been enabled or disabled by displaying the numbers 1 through 8.

Refer to the "Programming Sections" and the "Programming Worksheets" for information on the features programmed in each System Option Code Programming Section. To enable or disable functions, enter a number from 1 to 8; the number will either be added to or removed from the display.

To add all numbers to the display, press [9]. To clear all numbers from the display, press [0]. Be sure to refer to the Programming Sections and Work Sheets to determine the status of each feature when its number is displayed or not displayed.

To exit, press the [#] Key to return to the "Enter Program Section" message.

Entering Hexadecimal Digits

Some Programming Sections require that hexadecimal ("hex") digits be programmed. To enter the hexadecimal digits A through F, first press the [*****] Key and then enter a number from 1 through 6 as shown here:

| For Hexadecimal... | Enter... |
|---------------------------|-----------------|
| A | [*][1] |
| B | [*][2] |
| C | [*][3] |
| D | [*][4] |
| E | [*][5] |
| F | [*][6] |

HEX Data
Indicator



In Section [35] *
[C1] Ref. Code 01

Note that whenever a hexadecimal digit is required, the [*****] Key must be pressed before the number key; if the [*****] Key is not pressed, a decimal number will be entered. When the [*****] Key is pressed to enter a hex digit, an asterisk will appear on the display to indicate that a hex number is to be entered. The keypad display will be similar to the example shown here:

CHAPTER 8. SYSTEM PROGRAMMING SECTIONS

[01] Zone Definitions **Page 30**

Default

00 [Item 01]: Zone 1
00 [Item 02]: Zone 2
00 [Item 03]: Zone 3
00 [Item 04]: Zone 4
00 [Item 05]: Zone 5
00 [Item 06]: Zone 6
00 [Item 07]: Zone 7
00 [Item 08]: Zone 8
00 [Item 09]: Zone 9
00 [Item 10]: Zone 10

First Digit

0 Audible, Steady Alarm
1 Audible, Pulsed Alarm
2 Silent

Second Digit

0 Delay 1
1 Delay 2
2 Instant
3 Interior
4 24-hour Zone
5 24-hour Buzzer
6 **For Future Use**
7 **For Future Use**
8 Keyswitch Arm
9 Fire

**Do not enter 6 or 7 as the
second digit in Zone
Definitions**

[02] System Times **Page 32**

Default

030 [Item 01]: Entry Delay 1 (seconds)
045 [Item 02]: Entry Delay 2 (seconds)
120 [Item 03]: Exit Delay (seconds)
004 [Item 04]: Burglary Alarm Cut-off (minutes)
004 [Item 05]: Fire Alarm Cut-off (minutes)

[03] Installer's Code **Page 32**

Default

0900 Enter 4 digits using 0 through 9; do not enter [*] or [#].

[04] Master Code **Page 32**

Default

1234 Enter 4 digits using 0 through 9; do not enter [*] or [#].

[05] First System Options **Page 33**

| Default | | | Number ON | | Number OFF |
|----------------|-------|---|-----------------------------------|--|--|
| <u>OFF</u> | _____ | 1 | Quick-Exit disabled | | Quick-Exit enabled |
| <u>OFF</u> | _____ | 2 | Auto-Interior enabled | | Auto-Interior Disabled |
| <u>OFF</u> | _____ | 3 | Door Chime Option Not Available | | Door Chime Option Available |
| <u>OFF</u> | _____ | 4 | Access Code 9 is One-Time Use | | Access Code 9 is normal Access Code |
| <u>OFF</u> | _____ | 5 | Sounder Shutdown enabled | | Sounder Shutdown disabled |
| <u>OFF</u> | _____ | 6 | Second Sounder for Alarms only | | Second Sounder functions normally |
| <u>OFF</u> | _____ | 7 | Pre-Alert Volume is Medium | | Pre-Alert Volume is Low |
| <u>OFF</u> | _____ | 8 | AC Failure excluded from Troubles | | AC Failure Included in Troubles |

[06] Second System Options **Page 35**

| Default | | | Number ON | | Number OFF |
|----------------|-------|---|-------------------------------|--|---|
| <u>OFF</u> | _____ | 1 | [F] Key disabled | | [F] Key enabled |
| <u>OFF</u> | _____ | 2 | [P] Key disabled | | [P] Key enabled |
| <u>OFF</u> | _____ | 3 | [A] Key disabled | | [A] Key enabled |
| <u>OFF</u> | _____ | 4 | [P] Key has audible alarm | | [P] Key alarm is silent |
| <u>OFF</u> | _____ | 5 | [F] Key sounds steady alarm | | [F] Key sounds pulsed alarm |
| <u>OFF</u> | _____ | 6 | Bypassing disabled | | Bypassing enabled |
| <u>OFF</u> | _____ | 7 | Keypad Lockout enabled | | Keypad Lockout disabled |
| <u>OFF</u> | _____ | 8 | AC Frequency at 50Hz (Europe) | | AC Frequency at 60Hz (North America) |

[07] Third System Options **Page 36**

| Default | | | Number ON | | Number OFF |
|----------------|-------|---|--|--|---|
| <u>OFF</u> | _____ | 1 | Entry Delay Off Arming Available | | Entry Delay Off Arming Not Available |
| <u>ON</u> | _____ | 2 | Silent Supervisory Faults/ Troubles enabled | | Silent Supervisory Fault disabled |
| <u>OFF</u> | _____ | 3 | Tampers transmit only while armed | | Tampers always transmit |
| <u>OFF</u> | _____ | 4 | Interior Zone with Delay enabled | | Interior Zone with Delay disabled |
| <u>OFF</u> | _____ | 5 | Exit Delay Termination enabled | | Exit Delay Termination disabled |
| <u>OFF</u> | _____ | 6 | Audible Home Mode Arming enabled | | Audible Home Mode Arming disabled |
| <u>OFF</u> | _____ | 7 | For Future Use | | |



All Default Programming is printed in Bold.

CHAPTER 9. COMMUNICATOR PROGRAMMING SECTIONS

[20] First Monitoring Station Telephone Number *Page 37*

Enter [0] for the digit "0" (zero) in the telephone number.



Be sure to enter [#] to complete the entry of the telephone number.

[21] Second Monitoring Telephone Number *Page 37*

[22] Account Code *Page 37*

[23] Alarm Reporting Codes, Zones 1 to 10 *Page 38*

- ___ [Item 01]: Zone 1 Alarm
- ___ [Item 02]: Zone 2 Alarm
- ___ [Item 03]: Zone 3 Alarm
- ___ [Item 04]: Zone 4 Alarm
- ___ [Item 05]: Zone 5 Alarm
- ___ [Item 06]: Zone 6 Alarm
- ___ [Item 07]: Zone 7 Alarm
- ___ [Item 08]: Zone 8 Alarm
- ___ [Item 09]: Zone 9 Alarm
- ___ [Item 10]: Zone 10 Alarm

[24] Restoral Reporting Codes, Zones 1 to 10 *Page 38*

- ___ [Item 01]: Zone 1 Restoral
- ___ [Item 02]: Zone 2 Restoral
- ___ [Item 03]: Zone 3 Restoral
- ___ [Item 04]: Zone 4 Restoral
- ___ [Item 05]: Zone 5 Restoral
- ___ [Item 06]: Zone 6 Restoral
- ___ [Item 07]: Zone 7 Restoral
- ___ [Item 08]: Zone 8 Restoral
- ___ [Item 09]: Zone 9 Restoral
- ___ [Item 10]: Zone 10 Restoral

[25] Closing (Arming) Reporting Codes, Access Codes 0 to 9 *Page 38*

- ___ [Item 01]: Access Code 0
- ___ [Item 02]: Access Code 1
- ___ [Item 03]: Access Code 2
- ___ [Item 04]: Access Code 3
- ___ [Item 05]: Access Code 4
- ___ [Item 06]: Access Code 5
- ___ [Item 07]: Access Code 6
- ___ [Item 08]: Access Code 7
- ___ [Item 09]: Access Code 8

 ___ [Item 10]: Access Code 9

[26] Opening (Disarming) Reporting Codes, Access Codes 0 to 9 Page 38

 ___ [Item 01]: Access Code 0

 ___ [Item 02]: Access Code 1

 ___ [Item 03]: Access Code 2

 ___ [Item 04]: Access Code 3

 ___ [Item 05]: Access Code 4

 ___ [Item 06]: Access Code 5

 ___ [Item 07]: Access Code 6

 ___ [Item 08]: Access Code 7

 ___ [Item 09]: Access Code 8

 ___ [Item 10]: Access Code 9

[27] Tamper Reporting Codes, Zones 1 to 10 Page 38

 ___ [Item 01]: Zone 1 Tamper Alarm

 ___ [Item 02]: Zone 2 Tamper Alarm

 ___ [Item 03]: Zone 3 Tamper Alarm

 ___ [Item 04]: Zone 4 Tamper Alarm

 ___ [Item 05]: Zone 5 Tamper Alarm

 ___ [Item 06]: Zone 6 Tamper Alarm

 ___ [Item 07]: Zone 7 Tamper Alarm

 ___ [Item 08]: Zone 8 Tamper Alarm

 ___ [Item 09]: Zone 9 Tamper Alarm

 ___ [Item 10]: Zone 10 Tamper Alarm

[28] Tamper Restoral Reporting Codes, Zones 1 to 10 Page 38

 ___ [Item 01]: Zone 1 Tamper Restoral

 ___ [Item 02]: Zone 2 Tamper Restoral

 ___ [Item 03]: Zone 3 Tamper Restoral

 ___ [Item 04]: Zone 4 Tamper Restoral

 ___ [Item 05]: Zone 5 Tamper Restoral

 ___ [Item 06]: Zone 6 Tamper Restoral

 ___ [Item 07]: Zone 7 Tamper Restoral

 ___ [Item 08]: Zone 8 Tamper Restoral

 ___ [Item 09]: Zone 9 Tamper Restoral

 ___ [Item 10]: Zone 10 Tamper Restoral

[29] Low Battery Reporting Codes, Zones 1 to 10 Page 39

 ___ [Item 01]: Zone 1 Low Battery Trouble

 ___ [Item 02]: Zone 2 Low Battery Trouble

 ___ [Item 03]: Zone 3 Low Battery Trouble

 ___ [Item 04]: Zone 4 Low Battery Trouble

 ___ [Item 05]: Zone 5 Low Battery Trouble

 ___ [Item 06]: Zone 6 Low Battery Trouble

 ___ [Item 07]: Zone 7 Low Battery Trouble

 ___ [Item 08]: Zone 8 Low Battery Trouble

-
- ___ [Item 09]: Zone 9 Low Battery Trouble
 - ___ [Item 10]: Zone 10 Low Battery Trouble

[30] Low Battery Restoral Reporting Codes, Zones 1 to 10 Page 39

- ___ [Item 01]: Zone 1 Low Battery Restoral
- ___ [Item 02]: Zone 2 Low Battery Restoral
- ___ [Item 03]: Zone 3 Low Battery Restoral
- ___ [Item 04]: Zone 4 Low Battery Restoral
- ___ [Item 05]: Zone 5 Low Battery Restoral
- ___ [Item 06]: Zone 6 Low Battery Restoral
- ___ [Item 07]: Zone 7 Low Battery Restoral
- ___ [Item 08]: Zone 8 Low Battery Restoral
- ___ [Item 09]: Zone 9 Low Battery Restoral
- ___ [Item 10]: Zone 10 Low Battery Restoral

[31] Supervisory Reporting Codes, Zones 1 to 10 Page 39

- ___ [Item 01]: Zone 1 Supervisory Condition
- ___ [Item 02]: Zone 2 Supervisory Condition
- ___ [Item 03]: Zone 3 Supervisory Condition
- ___ [Item 04]: Zone 4 Supervisory Condition
- ___ [Item 05]: Zone 5 Supervisory Condition
- ___ [Item 06]: Zone 6 Supervisory Condition
- ___ [Item 07]: Zone 7 Supervisory Condition
- ___ [Item 08]: Zone 8 Supervisory Condition
- ___ [Item 09]: Zone 9 Supervisory Condition
- ___ [Item 10]: Zone 10 Supervisory Condition

[32] Supervisory Restoral Reporting Codes, Zones 1 to 10 Page 39

- ___ [Item 01]: Zone 1 Supervisory Restoral
- ___ [Item 02]: Zone 2 Supervisory Restoral
- ___ [Item 03]: Zone 3 Supervisory Restoral
- ___ [Item 04]: Zone 4 Supervisory Restoral
- ___ [Item 05]: Zone 5 Supervisory Restoral
- ___ [Item 06]: Zone 6 Supervisory Restoral
- ___ [Item 07]: Zone 7 Supervisory Restoral
- ___ [Item 08]: Zone 8 Supervisory Restoral
- ___ [Item 09]: Zone 9 Supervisory Restoral
- ___ [Item 10]: Zone 10 Supervisory Restoral

[33] Priority Alarms and Restorals Page 39

- ___ [Item 01]: Keypad [F]ire Alarm
- ___ [Item 02]: Keypad [A]uxiliary Alarm
- ___ [Item 03]: Keypad [P]anic Alarm
- ___ [Item 04]: Fire Zone Trouble
- ___ [Item 05]: Keypad [F]ire Restoral
- ___ [Item 06]: Keypad [A]uxiliary Restoral

-
- ___ [Item 07]: Keypad [P]anic Restoral
 - ___ [Item 08]: Fire Zone Trouble Restoral

[34] System Trouble Reporting Codes Page 40

- ___ [Item 01]: Controller AC Failure Trouble
- ___ [Item 02]: Controller Low Battery Trouble
- ___ [Item 03]: Sounder 1 AC Failure Trouble
- ___ [Item 04]: Sounder 1 Low Battery Trouble
- ___ [Item 05]: Sounder 2 AC Failure Trouble
- ___ [Item 06]: Sounder 2 Low Battery Trouble
- ___ [Item 07]: Keypad 1 Low Battery Trouble
- ___ [Item 08]: Keypad 2 Low Battery Trouble

[35] System Restoral Reporting Codes Page 40

- ___ [Item 01]: Controller AC Failure Restoral
- ___ [Item 02]: Controller Low Battery Restoral
- ___ [Item 03]: Sounder 1 AC Failure Restoral
- ___ [Item 04]: Sounder 1 Low Battery Restoral
- ___ [Item 05]: Sounder 2 AC Failure Restoral
- ___ [Item 06]: Sounder 2 Low Battery Restoral
- ___ [Item 07]: Keypad 1 Low Battery Restoral
- ___ [Item 08]: Keypad 2 Low Battery Restoral

[36] Keypad and Sounder Tamper Reporting Codes Page 40

- ___ [Item 01]: Sounder 1 Tamper
- ___ [Item 02]: Sounder 2 Tamper
- ___ [Item 03]: Sounder 1 Supervisory Condition
- ___ [Item 04]: Sounder 2 Supervisory Condition
- ___ [Item 05]: Keypad 1 Tamper
- ___ [Item 06]: Keypad 2 Tamper
- ___ [Item 07]: Keypad 1 Supervisory Condition
- ___ [Item 08]: Keypad 2 Supervisory Condition

[37] Keypad and Sounder Restoral Reporting Codes Page 41

- ___ [Item 01]: Sounder 1 Tamper Restoral
- ___ [Item 02]: Sounder 2 Tamper Restoral
- ___ [Item 03]: Sounder 1 Supervisory Restoral
- ___ [Item 04]: Sounder 2 Supervisory Restoral
- ___ [Item 05]: Keypad 1 Tamper Restoral
- ___ [Item 06]: Keypad 2 Tamper Restoral

- ___ [Item 07]: Keypad 1 Supervisory Restoral
- ___ [Item 08]: Keypad 2 Supervisory Restoral

[38] Additional Reporting Codes Page 41

- ___ [Item 01]: Failure to Communicate
- ___ [Item 02]: RF Jam Detect
- ___ [Item 03]: Periodic Test Transmission (program hexadecimal "FF" to disable)
- ___ [Item 04]: Installer Lead-in Code
- ___ [Item 05]: Installer Lead-out Code
- ___ [Item 06]: Downloading Lead-in Code
- ___ [Item 07]: Downloading Lead-out Code
- ___ [Item 08]: Partial Closing Code
- ___ [Item 09]: Opening After Alarm
- ___ [Item 10]: Telephone Line Monitor Restoral Code

[39] Communication Variables Page 42

Default

- 0 0 3 [Item 01]: Swinger Shutdown Counter (number of transmissions. **Valid entries are from 000 to 015**)
- 0 0 0 [Item 02]: Delay Before Transmission: Burglary Zones (**seconds**)
- 0 3 0 [Item 03]: AC Failure Communication Delay (**minutes**)
- 0 3 0 [Item 04]: Test Transmission Cycle (**days**)
- 0 3 0 [Item 05]: Fire Safety Transmission Delay (**seconds**)
- 0 0 7 [Item 06]: Zone Low Battery Transmission Delay (**days**)

[40] Test Transmission Time of Day Page 43

Default

- 0 1 0 0 Enter the time-of-day for the test transmission in the 24-hour clock (military time) format. For the hour, enter 00 to 23; for the minutes, enter 00 to 59.

[41] Communicator Format Options Page 43

Default

- 0 1
- 00 Silent Knight, ADEMCO Slow, 10 BPS, 1400Hz handshake
- 01 Sescoa, Franklin, DCI, Vertex, 20 BPS, 2300Hz handshake
- 02 Sescoa, Franklin, DCI, Vertex, 20 BPS, 1400Hz handshake
- 03 Radionics, 40 BPS, 1400Hz handshake
- 04 Radionics, 40 BPS, 2300Hz handshake
- 05 Radionics, 40 BPS with parity, 1400Hz handshake
- 06 Radionics, 40 BPS with parity, 2300Hz handshake

If the system is to report to a Sur-Gard MLR or SLR series central station receiver, use format [4] with 4/2 non extended reporting.

[42] First Communicator Options Page 44

Default

OFF

OFF

OFF

OFF

OFF

OFF

Number ON

1 Communicator disabled

2 Pulse dialing

3 Pulse Dial 67/33 ratio

4 Transmissions limited to 24-hour period

5 Telephone Line Monitor disabled

6 TLM silent when armed

Number OFF

Communicator enabled

DTMF dialing

Pulse Dial 60/40 ratio

Transmissions limited to Armed period

Telephone Line Monitor enabled

TLM alarm audible when Armed

OFF 7 **For Future Use**

OFF 8 **For Future Use**

[43] Second Communicator Options Page 45

Default

ON

OFF

OFF

OFF

OFF

OFF

Number ON

1 **Restorals Follow Zone enabled**

2 Restorals on Sounder Time-out enabled

3 Restorals on Disarming enabled

4 **For Future Use**

5 **For Future Use**

6 **For Future Use**

Number OFF

Restorals Follow Zone disabled

Restorals on Sounder Time-out disabled

Restorals on Disarming disabled

OFF 7 **For Future Use**
 OFF 8 **For Future Use**

CHAPTER 10. DOWNLOADING PROGRAMMING SECTIONS

[70] ~~Downloading Options~~ Page 46

| Default | | | Number ON | | Number OFF |
|----------------|-------|---|-------------------------------------|--|------------------------------------|
| <u>OFF</u> | _____ | 1 | Ring Detect enabled | | Ring Detect disabled |
| <u>OFF</u> | _____ | 2 | Answering Machine Override disabled | | Answering Machine Override enabled |
| <u>OFF</u> | _____ | 3 | Downloading Callback enabled | | Downloading Callback disabled |
| <u>OFF</u> | _____ | 4 | User-Initiated Call-up enabled | | User-Initiated Call-up disabled |
| <u>OFF</u> | _____ | 5 | Periodic Downloading enabled | | Periodic Downloading disabled |
| <u>OFF</u> | _____ | 6 | For Future Use | | |
| OFF | | 7 | For Future Use | | |
| OFF | | 8 | For Future Use | | |

[71] ~~Downloading Telephone Number~~ Page 47

Refer to [20] First Telephone Number for programming instructions.

[72] ~~Downloading Access Code~~ Page 47

Default

9 0 9 0

[73] ~~System Identification Code~~ Page 47

Default

0 9 0 9

[74] ~~Number of Rings Before Answering~~ Page 47

Default

0 1 2

[75] ~~Installer-Initiated Downloading~~ Page 47



Enter this section to have the system initiate a call to the downloading computer.

Ensure that a Downloading Telephone Number is programmed in Section [71].

CHAPTER 11. INSTALLER TEST MODES

[80] Installer Walk Test Mode Page 48

Enter this section to initiate an Installer Walk Test. Refer to Section 7F: Walk Testing Your System in the Owner's Manual for instructions on testing system components.

[81] Module Placement Test Page 48

Enter this section to initiate a Module Placement Test. Refer to Chapter 4. Module Placement and Testing section of the Installation Manual for more information.

[82] Sounder Test Page 48

Enter this section to initiate a Sounder Test.

[83] Manual Dialer Test Page 48

Enter this section to initiate a Manual Dialer Test to the monitoring station.

CHAPTER 12. MISCELLANEOUS PROGRAMMING SECTIONS

[90]  Installer Lockout Enable Page 49

Enter this section to enable the Installer Lockout.

Ensure that the new Installer's Code has been entered correctly before enabling this feature as there will be no way to re-enter the Installer's Programming Mode without the correct Installer's Code.

[91]  Installer Lockout Disable Page 49

Enter this section to disable the Installer Lockout.

Systems returned for service with the Installer's Lockout feature enabled and no other apparent problems will be subject to an additional service charge!

[99] Restore Factory Default Programming Page 49

Enter this section to restore the factory default programming.

ASCII CHARACTER CHART

Use this chart when entering ASCII characters in the Zone Label Editing Mode.

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 032 | 048 | 064 | 080 | 096 | 112 | 160 | 176 | 192 | 208 | 224 | 240 |
| ! | 1 | A | Q | a | q | ■ | ア | チ | ㄥ | ä | q |
| 033 | 049 | 065 | 081 | 097 | 113 | 161 | 177 | 193 | 209 | 225 | 241 |
| " | 2 | B | R | b | r | r | イ | ウ | ノ | ß | ö |
| 034 | 050 | 066 | 082 | 098 | 114 | 162 | 178 | 194 | 210 | 226 | 242 |
| # | 3 | C | S | c | s | ┘ | ウ | テ | E | ε | ∞ |
| 035 | 051 | 067 | 083 | 099 | 115 | 163 | 179 | 195 | 211 | 227 | 243 |
| \$ | 4 | D | T | d | t | 、 | I | ト | ト | μ | Ω |
| 036 | 052 | 068 | 084 | 100 | 116 | 164 | 180 | 196 | 212 | 228 | 244 |
| % | 5 | E | U | e | u | ■ | オ | ナ | 1 | ε | ü |
| 037 | 053 | 069 | 085 | 101 | 117 | 165 | 181 | 197 | 213 | 229 | 245 |
| & | 6 | F | V | f | v | ヲ | カ | ニ | ヨ | ρ | Σ |
| 038 | 054 | 070 | 086 | 102 | 118 | 166 | 182 | 198 | 214 | 230 | 246 |
| ' | 7 | G | W | g | w | ア | チ | ヲ | ウ | g | π |
| 039 | 055 | 071 | 087 | 103 | 119 | 167 | 183 | 199 | 215 | 231 | 247 |
| (| 8 | H | X | h | x | イ | ウ | ネ | リ | フ | × |
| 040 | 056 | 072 | 088 | 104 | 120 | 168 | 184 | 200 | 216 | 232 | 248 |
|) | 9 | I | Y | i | y | ウ | ケ | ノ | ル | 、 | y |
| 041 | 057 | 073 | 089 | 105 | 121 | 169 | 185 | 201 | 217 | 233 | 249 |
| * | : | J | Z | j | z | エ | コ | ン | レ | j | ≠ |
| 042 | 058 | 074 | 090 | 106 | 122 | 170 | 186 | 202 | 218 | 234 | 250 |
| + | ; | K | [| k | < | オ | サ | ヒ | 口 | × | ≠ |
| 043 | 059 | 075 | 091 | 107 | 123 | 171 | 187 | 203 | 219 | 235 | 251 |
| , | < | L | * | l | l | ト | シ | フ | ワ | φ | ≠ |
| 044 | 060 | 076 | 092 | 108 | 124 | 172 | 188 | 204 | 220 | 236 | 252 |
| — | = | M |] | m | > | ユ | ズ | 、 | ン | ± | ÷ |
| 045 | 061 | 077 | 093 | 109 | 125 | 173 | 189 | 205 | 221 | 237 | 253 |
| ■ | > | N | ^ | n | → | ヨ | セ | ホ | 、 | ñ | |
| 046 | 062 | 078 | 094 | 110 | 126 | 174 | 190 | 206 | 222 | 238 | 254 |
| / | ? | O | _ | o | ← | ウ | ヴ | マ | ■ | ö | ■ |
| 047 | 063 | 079 | 095 | 111 | 127 | 175 | 191 | 207 | 223 | 239 | 255 |