**Virtual-Key Codes**

* Article
* 06/22/2022
* 5 minutes to read
* 7 contributors

The following table shows the symbolic constant names, hexadecimal values, and mouse or keyboard equivalents for the virtual-key codes used by the system. The codes are listed in numeric order.

| **Constant** | **Value** | **Description** |
| --- | --- | --- |
| VK\_LBUTTON | 0x01 | Left mouse button |
| VK\_RBUTTON | 0x02 | Right mouse button |
| VK\_CANCEL | 0x03 | Control-break processing |
| VK\_MBUTTON | 0x04 | Middle mouse button (three-button mouse) |
| VK\_XBUTTON1 | 0x05 | X1 mouse button |
| VK\_XBUTTON2 | 0x06 | X2 mouse button |
| - | 0x07 | Undefined |
| VK\_BACK | 0x08 | BACKSPACE key |
| VK\_TAB | 0x09 | TAB key |
| - | 0x0A-0B | Reserved |
| VK\_CLEAR | 0x0C | CLEAR key |
| VK\_RETURN | 0x0D | ENTER key |
| - | 0x0E-0F | Undefined |
| VK\_SHIFT | 0x10 | SHIFT key |
| VK\_CONTROL | 0x11 | CTRL key |
| VK\_MENU | 0x12 | ALT key |
| VK\_PAUSE | 0x13 | PAUSE key |
| VK\_CAPITAL | 0x14 | CAPS LOCK key |
| VK\_KANA | 0x15 | IME Kana mode |
| VK\_HANGUEL | 0x15 | IME Hanguel mode (maintained for compatibility; use VK\_HANGUL) |
| VK\_HANGUL | 0x15 | IME Hangul mode |
| VK\_IME\_ON | 0x16 | IME On |
| VK\_JUNJA | 0x17 | IME Junja mode |
| VK\_FINAL | 0x18 | IME final mode |
| VK\_HANJA | 0x19 | IME Hanja mode |
| VK\_KANJI | 0x19 | IME Kanji mode |
| VK\_IME\_OFF | 0x1A | IME Off |
| VK\_ESCAPE | 0x1B | ESC key |
| VK\_CONVERT | 0x1C | IME convert |
| VK\_NONCONVERT | 0x1D | IME nonconvert |
| VK\_ACCEPT | 0x1E | IME accept |
| VK\_MODECHANGE | 0x1F | IME mode change request |
| VK\_SPACE | 0x20 | SPACEBAR |
| VK\_PRIOR | 0x21 | PAGE UP key |
| VK\_NEXT | 0x22 | PAGE DOWN key |
| VK\_END | 0x23 | END key |
| VK\_HOME | 0x24 | HOME key |
| VK\_LEFT | 0x25 | LEFT ARROW key |
| VK\_UP | 0x26 | UP ARROW key |
| VK\_RIGHT | 0x27 | RIGHT ARROW key |
| VK\_DOWN | 0x28 | DOWN ARROW key |
| VK\_SELECT | 0x29 | SELECT key |
| VK\_PRINT | 0x2A | PRINT key |
| VK\_EXECUTE | 0x2B | EXECUTE key |
| VK\_SNAPSHOT | 0x2C | PRINT SCREEN key |
| VK\_INSERT | 0x2D | INS key |
| VK\_DELETE | 0x2E | DEL key |
| VK\_HELP | 0x2F | HELP key |
|  | 0x30 | 0 key |
|  | 0x31 | 1 key |
|  | 0x32 | 2 key |
|  | 0x33 | 3 key |
|  | 0x34 | 4 key |
|  | 0x35 | 5 key |
|  | 0x36 | 6 key |
|  | 0x37 | 7 key |
|  | 0x38 | 8 key |
|  | 0x39 | 9 key |
| - | 0x3A-40 | Undefined |
|  | 0x41 | A key |
|  | 0x42 | B key |
|  | 0x43 | C key |
|  | 0x44 | D key |
|  | 0x45 | E key |
|  | 0x46 | F key |
|  | 0x47 | G key |
|  | 0x48 | H key |
|  | 0x49 | I key |
|  | 0x4A | J key |
|  | 0x4B | K key |
|  | 0x4C | L key |
|  | 0x4D | M key |
|  | 0x4E | N key |
|  | 0x4F | O key |
|  | 0x50 | P key |
|  | 0x51 | Q key |
|  | 0x52 | R key |
|  | 0x53 | S key |
|  | 0x54 | T key |
|  | 0x55 | U key |
|  | 0x56 | V key |
|  | 0x57 | W key |
|  | 0x58 | X key |
|  | 0x59 | Y key |
|  | 0x5A | Z key |
| VK\_LWIN | 0x5B | Left Windows key (Natural keyboard) |
| VK\_RWIN | 0x5C | Right Windows key (Natural keyboard) |
| VK\_APPS | 0x5D | Applications key (Natural keyboard) |
| - | 0x5E | Reserved |
| VK\_SLEEP | 0x5F | Computer Sleep key |
| VK\_NUMPAD0 | 0x60 | Numeric keypad 0 key |
| VK\_NUMPAD1 | 0x61 | Numeric keypad 1 key |
| VK\_NUMPAD2 | 0x62 | Numeric keypad 2 key |
| VK\_NUMPAD3 | 0x63 | Numeric keypad 3 key |
| VK\_NUMPAD4 | 0x64 | Numeric keypad 4 key |
| VK\_NUMPAD5 | 0x65 | Numeric keypad 5 key |
| VK\_NUMPAD6 | 0x66 | Numeric keypad 6 key |
| VK\_NUMPAD7 | 0x67 | Numeric keypad 7 key |
| VK\_NUMPAD8 | 0x68 | Numeric keypad 8 key |
| VK\_NUMPAD9 | 0x69 | Numeric keypad 9 key |
| VK\_MULTIPLY | 0x6A | Multiply key |
| VK\_ADD | 0x6B | Add key |
| VK\_SEPARATOR | 0x6C | Separator key |
| VK\_SUBTRACT | 0x6D | Subtract key |
| VK\_DECIMAL | 0x6E | Decimal key |
| VK\_DIVIDE | 0x6F | Divide key |
| VK\_F1 | 0x70 | F1 key |
| VK\_F2 | 0x71 | F2 key |
| VK\_F3 | 0x72 | F3 key |
| VK\_F4 | 0x73 | F4 key |
| VK\_F5 | 0x74 | F5 key |
| VK\_F6 | 0x75 | F6 key |
| VK\_F7 | 0x76 | F7 key |
| VK\_F8 | 0x77 | F8 key |
| VK\_F9 | 0x78 | F9 key |
| VK\_F10 | 0x79 | F10 key |
| VK\_F11 | 0x7A | F11 key |
| VK\_F12 | 0x7B | F12 key |
| VK\_F13 | 0x7C | F13 key |
| VK\_F14 | 0x7D | F14 key |
| VK\_F15 | 0x7E | F15 key |
| VK\_F16 | 0x7F | F16 key |
| VK\_F17 | 0x80 | F17 key |
| VK\_F18 | 0x81 | F18 key |
| VK\_F19 | 0x82 | F19 key |
| VK\_F20 | 0x83 | F20 key |
| VK\_F21 | 0x84 | F21 key |
| VK\_F22 | 0x85 | F22 key |
| VK\_F23 | 0x86 | F23 key |
| VK\_F24 | 0x87 | F24 key |
| - | 0x88-8F | Unassigned |
| VK\_NUMLOCK | 0x90 | NUM LOCK key |
| VK\_SCROLL | 0x91 | SCROLL LOCK key |
|  | 0x92-96 | OEM specific |
| - | 0x97-9F | Unassigned |
| VK\_LSHIFT | 0xA0 | Left SHIFT key |
| VK\_RSHIFT | 0xA1 | Right SHIFT key |
| VK\_LCONTROL | 0xA2 | Left CONTROL key |
| VK\_RCONTROL | 0xA3 | Right CONTROL key |
| VK\_LMENU | 0xA4 | Left ALT key |
| VK\_RMENU | 0xA5 | Right ALT key |
| VK\_BROWSER\_BACK | 0xA6 | Browser Back key |
| VK\_BROWSER\_FORWARD | 0xA7 | Browser Forward key |
| VK\_BROWSER\_REFRESH | 0xA8 | Browser Refresh key |
| VK\_BROWSER\_STOP | 0xA9 | Browser Stop key |
| VK\_BROWSER\_SEARCH | 0xAA | Browser Search key |
| VK\_BROWSER\_FAVORITES | 0xAB | Browser Favorites key |
| VK\_BROWSER\_HOME | 0xAC | Browser Start and Home key |
| VK\_VOLUME\_MUTE | 0xAD | Volume Mute key |
| VK\_VOLUME\_DOWN | 0xAE | Volume Down key |
| VK\_VOLUME\_UP | 0xAF | Volume Up key |
| VK\_MEDIA\_NEXT\_TRACK | 0xB0 | Next Track key |
| VK\_MEDIA\_PREV\_TRACK | 0xB1 | Previous Track key |
| VK\_MEDIA\_STOP | 0xB2 | Stop Media key |
| VK\_MEDIA\_PLAY\_PAUSE | 0xB3 | Play/Pause Media key |
| VK\_LAUNCH\_MAIL | 0xB4 | Start Mail key |
| VK\_LAUNCH\_MEDIA\_SELECT | 0xB5 | Select Media key |
| VK\_LAUNCH\_APP1 | 0xB6 | Start Application 1 key |
| VK\_LAUNCH\_APP2 | 0xB7 | Start Application 2 key |
| - | 0xB8-B9 | Reserved |
| VK\_OEM\_1 | 0xBA | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the ';:' key |
| VK\_OEM\_PLUS | 0xBB | For any country/region, the '+' key |
| VK\_OEM\_COMMA | 0xBC | For any country/region, the ',' key |
| VK\_OEM\_MINUS | 0xBD | For any country/region, the '-' key |
| VK\_OEM\_PERIOD | 0xBE | For any country/region, the '.' key |
| VK\_OEM\_2 | 0xBF | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the '/?' key |
| VK\_OEM\_3 | 0xC0 | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the '`~' key |
| - | 0xC1-D7 | Reserved |
| - | 0xD8-DA | Unassigned |
| VK\_OEM\_4 | 0xDB | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the '[{' key |
| VK\_OEM\_5 | 0xDC | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the '\|' key |
| VK\_OEM\_6 | 0xDD | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the ']}' key |
| VK\_OEM\_7 | 0xDE | Used for miscellaneous characters; it can vary by keyboard. For the US standard keyboard, the 'single-quote/double-quote' key |
| VK\_OEM\_8 | 0xDF | Used for miscellaneous characters; it can vary by keyboard. |
| - | 0xE0 | Reserved |
|  | 0xE1 | OEM specific |
| VK\_OEM\_102 | 0xE2 | The <> keys on the US standard keyboard, or the \\| key on the non-US 102-key keyboard |
|  | 0xE3-E4 | OEM specific |
| VK\_PROCESSKEY | 0xE5 | IME PROCESS key |
|  | 0xE6 | OEM specific |
| VK\_PACKET | 0xE7 | Used to pass Unicode characters as if they were keystrokes. The VK\_PACKET key is the low word of a 32-bit Virtual Key value used for non-keyboard input methods. For more information, see Remark in [KEYBDINPUT](https://learn.microsoft.com/en-us/windows/win32/api/winuser/ns-winuser-keybdinput), [SendInput](https://learn.microsoft.com/en-us/windows/win32/api/winuser/nf-winuser-sendinput), [WM\_KEYDOWN](https://learn.microsoft.com/en-us/windows/win32/inputdev/wm-keydown), and [WM\_KEYUP](https://learn.microsoft.com/en-us/windows/win32/inputdev/wm-keyup) |
| - | 0xE8 | Unassigned |
|  | 0xE9-F5 | OEM specific |
| VK\_ATTN | 0xF6 | Attn key |
| VK\_CRSEL | 0xF7 | CrSel key |
| VK\_EXSEL | 0xF8 | ExSel key |
| VK\_EREOF | 0xF9 | Erase EOF key |
| VK\_PLAY | 0xFA | Play key |
| VK\_ZOOM | 0xFB | Zoom key |
| VK\_NONAME | 0xFC | Reserved |
| VK\_PA1 | 0xFD | PA1 key |
| VK\_OEM\_CLEAR | 0xFE | Clear key |

**Requirements**

| **Requirement** | **Value** |
| --- | --- |
| Minimum supported client | Windows 2000 Professional [desktop apps only] |
| Minimum supported server | Windows 2000 Server [desktop apps only] |
| Header | Winuser.h |