

**NAME**

**isctrl**, **isctrl\_l** - control character test

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <ctype.h>
```

*int*

```
isctrl(int c);
```

*int*

```
isctrl_l(int c, locale_t loc);
```

**DESCRIPTION**

The **isctrl()** and **isctrl\_l()** functions test for any control character. The value of the argument must be representable as an *unsigned char* or the value of EOF.

In the ASCII character set, this includes the following characters (with their numeric values shown in octal):

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| 000 NUL | 001 SOH | 002 STX | 003 ETX | 004 EOT |
| 005 ENQ | 006 ACK | 007 BEL | 010 BS  | 011 HT  |
| 012 NL  | 013 VT  | 014 NP  | 015 CR  | 016 SO  |
| 017 SI  | 020 DLE | 021 DC1 | 022 DC2 | 023 DC3 |
| 024 DC4 | 025 NAK | 026 SYN | 027 ETB | 030 CAN |
| 031 EM  | 032 SUB | 033 ESC | 034 FS  | 035 GS  |
| 036 RS  | 037 US  | 177 DEL |         |         |

The **isctrl\_l()** function takes an explicit locale argument, whereas the **isctrl()** function uses the current global or per-thread locale.

**RETURN VALUES**

The **isctrl()** and **isctrl\_l()** functions return zero if the character tests false and return non-zero if the character tests true.

**COMPATIBILITY**

The 4.4BSD extension of accepting arguments outside of the range of the *unsigned char* type in locales with large character sets is considered obsolete and may not be supported in future releases. The

**iswcntrl()** or **iswcntrl\_l()** function should be used instead.

#### SEE ALSO

ctype(3), ctype\_l(3), iswcntrl(3), iswcntrl\_l(3), xlocale(3), ascii(7)

#### STANDARDS

The **iscntrl()** function conforms to ISO/IEC 9899:1990 ("ISO C90"). The **iscntrl\_l()** function conforms to IEEE Std 1003.1-2008 ("POSIX.1").

#### HISTORY

The **iscntrl()** function first appeared in Version 7 AT&T UNIX.