

CONIO Reference Manual

2.0

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Chapter 1

CONIO Main Page

Borland-style CONIO implementation for MinGW/Dev-C++.

[Homepage](#)

Send any improvements to this library to [me](#), I'll do new release of this devpak.

For the example of use, look at example in the `Examples\conio\conio_test.c` subdirectory of your Dev-C++ directory. It's simple:

1. Include [conio2.h](#).
2. Link with `libconio.a` (add `-lconio` parameter to linker).

Functions defined already in MinGW's `conio.h`

[conio2.h](#) automatically includes `conio.h`. It also provides several `#defines` so you can use all these functions without underscores.

```
char* _cgets (char*);
int _cprintf (const char*, ...);
int _cputs (const char*);
int _cscanf (char*, ...);
```

```
int _getch (void);
int _getche (void);
int _kbhit (void);
int _putch (int);
int _ungetch (int);
```

```
int getch (void);
int getche (void);
int kbhit (void);
int putch (int);
int ungetch (int);
```

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Version:
2.0

Chapter 2

CONIO Namespace Index

2.1 CONIO Namespace List

Here is a list of all documented namespaces with brief descriptions:

[conio](#) (This namespace contain all C++ specific things) 9

Chapter 3

CONIO Data Structure Index

3.1 CONIO Data Structures

Here are the data structures with brief descriptions:

char_info (Structure used by gettext/puttext)	13
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Chapter 4

CONIO File Index

4.1 CONIO File List

Here is a list of all documented files with brief descriptions:

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constream (A constream implementation for Mingw/Dev-C++)	23

Chapter 5

CONIO Namespace Documentation

5.1

This namespace contain all C++ specific things.

Functions

- `_Setxy` [setxy](#) (int x, int y)
setxy manipulator
- `_Setclr` [setclr](#) (int color)
setclr manipulator
- `_Setbk` [setbk](#) (int color)
setbk manipulator
- `_Setattr` [setattr](#) (int _attr)
setattr manipulator
- `_Setcsrtype` [setcsrtype](#) (int type)
setcsrtype manipulator
- `std::ostream &` [clrscr](#) (std::ostream &o)
clrscr manipulator
- `std::ostream &` [creol](#) (std::ostream &o)
creol manipulator
- `std::ostream &` [highvideo](#) (std::ostream &o)
highvideo manipulator
- `std::ostream &` [lowvideo](#) (std::ostream &o)
lowvideo manipulator
- `std::ostream &` [normvideo](#) (std::ostream &o)

normvideo manipulator

- `std::ostream & delline (std::ostream &o)`

delline manipulator

- `std::ostream & insline (std::ostream &o)`

insline manipulator

5.1.1 Detailed Description

This namespace contain all C++ specific things.

5.1.2 Function Documentation

5.1.2.1 `std::ostream& clreol (std::ostream & o)` [`inline`]

clreol manipulator

See also:

[clreol\(void\)](#)

5.1.2.2 `std::ostream& clrscr (std::ostream & o)` [`inline`]

clrscr manipulator

See also:

[clrscr\(void\)](#)

5.1.2.3 `std::ostream& delline (std::ostream & o)` [`inline`]

delline manipulator

See also:

[delline\(void\)](#)

5.1.2.4 `std::ostream& highvideo (std::ostream & o)` [`inline`]

highvideo manipulator

See also:

[highvideo\(void\)](#)

5.1.2.5 `std::ostream& inline (std::ostream & o)` [inline]

inline manipulator

See also:

[inline\(void\)](#)

5.1.2.6 `std::ostream& lowvideo (std::ostream & o)` [inline]

lowvideo manipulator

See also:

[lowvideo\(void\)](#)

5.1.2.7 `std::ostream& normvideo (std::ostream & o)` [inline]

normvideo manipulator

See also:

[normvideo\(void\)](#)

5.1.2.8 `_Setattr setattr (int attr)` [inline]

setattr manipulator

See also:

[textattr](#)

5.1.2.9 `_Setbk setbk (int color)` [inline]

setbk manipulator

See also:

[textbackground](#)

5.1.2.10 `_Setclr setclr (int color)` [inline]

setclr manipulator

See also:

[textcolor](#)

5.1.2.11 `_Setcsrtype setcsrtype (int type)` `[inline]`

setcsrtype manipulator

See also:

[_setcursortype](#)

5.1.2.12 `_Setxy setxy (int x, int y)` `[inline]`

setxy manipulator

See also:

[gotoxy](#)

Chapter 6

CONIO Data Structure Documentation

6.1 char_info Struct Reference

Structure used by gettext/puttext.

```
#include <conio2.h>
```

Data Fields

- char [letter](#)
character value
- unsigned short [attr](#)
attribute value

6.1.1 Detailed Description

Structure used by gettext/puttext.

See also:

[_conio_gettext](#)
[puttext](#)

The documentation for this struct was generated from the following file:

- [conio2.h](#)

6.2 text_info Struct Reference

Structure holding information about screen.

```
#include <conio2.h>
```

Data Fields

- unsigned char [curx](#)
cursor coordinate x
- unsigned char [cury](#)
cursor coordinate y
- unsigned short [attribute](#)
current text attribute
- unsigned short [normattr](#)
original value of text attribute after start of the application
- unsigned char [screenwidth](#)
screen width
- unsigned char [screenheight](#)
screen height

6.2.1 Detailed Description

Structure holding information about screen.

See also:

[gettextinfo](#)
[inittextinfo](#)

6.2.2 Field Documentation

6.2.2.1 unsigned short [text_info::normattr](#)

original value of text attribute after start of the application

If you don't called the `inittextinfo` on the beginning of the application, this always will be black background and light gray foreground

The documentation for this struct was generated from the following file:

- [conio2.h](#)

Chapter 7

CONIO File Documentation

7.1 conio2.h File Reference

A conio implementation for Mingw/Dev-C++.

```
#include <conio.h>
```

Data Structures

- struct [text_info](#)
Structure holding information about screen.
- struct [char_info](#)
Structure used by gettext/puttext.

Cursor types

Predefined cursor types.

- #define [_NOCURS](#) 0
no cursor
- #define [_SOLIDCUR](#) 100
cursor filling whole cell
- #define [_NORMALCUR](#) 20
cursor filling 20 percent of cell height

Defines

- #define [gettext](#) _conio_gettext
Define alias for _conio_gettext.

Enumerations

- enum `COLORS` {
 `BLACK`, `BLUE`, `GREEN`, `CYAN`,
 `RED`, `MAGENTA`, `BROWN`, `LIGHTGRAY`,
 `DARKGRAY`, `LIGHTBLUE`, `LIGHTGREEN`, `LIGHTCYAN`,
 `LIGHTRED`, `LIGHTMAGENTA`, `YELLOW`, `WHITE` }

Colors which you can use in your application.

Functions

- void `gettextinfo` (struct `text_info` *info)
Returns information of the screen.
- void `inittextinfo` (void)
Call this if you need real value of normattr attribute in the `text_info` structure.
- void `clreol` (void)
Clears rest of the line from cursor position to the end of line without moving the cursor.
- void `clrscr` (void)
Clears whole screen.
- void `delline` (void)
Delete the current line (line on which is cursor) and then moves all lines below one line up.
- void `insline` (void)
Insert blank line at the cursor position.
- void `_conio_gettext` (int left, int top, int right, int bottom, struct `char_info` *buf)
Gets text from the screen.
- void `puttext` (int left, int top, int right, int bottom, struct `char_info` *buf)
Puts text back to the screen.
- void `movetext` (int left, int top, int right, int bottom, int destleft, int desttop)
Copies text.
- void `gotoxy` (int x, int y)
Moves cursor to the specified position.
- void `cputsxy` (int x, int y, char *str)
Puts string at the specified position.
- void `putchxy` (int x, int y, char ch)
Puts char at the specified position.
- void `_setcursortype` (int type)

Sets the cursor type.

- void [textattr](#) (int _attr)

Sets attribute of text.

- void [normvideo](#) (void)

Sets text attribute back to value it had after program start.

- void [textbackground](#) (int color)

Sets text background color.

- void [textcolor](#) (int color)

Sets text foreground color.

- int [wherex](#) (void)

Reads the cursor X position.

- int [wherey](#) (void)

Reads the cursor Y position.

- char * [getpass](#) (const char *prompt, char *str)

Reads password.

- void [highvideo](#) (void)

Makes foreground colors light.

- void [lowvideo](#) (void)

Makes foreground colors dark.

7.1.1 Detailed Description

A conio implementation for Mingw/Dev-C++.

Written by: Hongli Lai <hongli@telekabel.nl> tkorrovi <tkorrovi@altavista.net>
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7.1.2 Define Documentation

7.1.2.1 #define gettext _conio_gettext

Define alias for _conio_gettext.

If you want to use gettext function from some other library (e.g. GNU gettext) you have to define `_CONIO_NO_GETTEXT_` so you won't get name conflict.

7.1.3 Enumeration Type Documentation

7.1.3.1 enum **COLORS**

Colors which you can use in your application.

Enumeration values:

BLACK black color
BLUE blue color
GREEN green color
CYAN cyan color
RED red color
MAGENTA magenta color
BROWN brown color
LIGHTGRAY light gray color
DARKGRAY dark gray color
LIGHTBLUE light blue color
LIGHTGREEN light green color
LIGHTCYAN light cyan color
LIGHTRED light red color
LIGHTMAGENTA light magenta color
YELLOW yellow color
WHITE white color

7.1.4 Function Documentation

7.1.4.1 void **_conio_gettext** (int *left*, int *top*, int *right*, int *bottom*, struct **char_info** * *buf*)

Gets text from the screen.

If you haven't defined `_CONIO_NO_GETTEXT_` prior to including `conio2.h` you can use this function also under the `gettext` name.

See also:

[char_info](#)
[puttext](#)

Parameters:

left Left coordinate of the rectangle, inclusive, starting from 1.
top Top coordinate of the rectangle, inclusive, starting from 1.
right Right coordinate of the rectangle, inclusive, starting from 1.
bottom Bottom coordinate of the rectangle, inclusive, starting from 1.
buf You have to pass buffer of size $(right - left + 1) * (bottom - top + 1) * sizeof(char_info)$.

7.1.4.2 void _setcursortype (int *type*)

Sets the cursor type.

See also:

[cursortypes](#)

Parameters:

type cursor type, under Win32 it is height of the cursor in percents

7.1.4.3 void cputsxy (int *x*, int *y*, char * *str*)

Puts string at the specified position.

Parameters:

x horizontal position

y vertical position

str string

7.1.4.4 void delline (void)

Delete the current line (line on which is cursor) and then moves all lines below one line up.

Lines below the line are moved one line up.

7.1.4.5 char* getpass (const char * *prompt*, char * *str*)

Reads password.

This function behaves like cgets.

See also:

[cgets](#)

Parameters:

prompt prompt which will be displayed to user

str string for the password. `str[0]` have to contain length of the `str - 3`

Returns:

`&str[2]`, the password will be stored in `str` beginning at `str[2]`, in `str[1]` will be length of the string without `\0`, at `str[2 + str[1]]` will be `\0`.

7.1.4.6 void gettextinfo (struct [text_info](#) * *info*)

Returns information of the screen.

See also:

[text_info](#)

7.1.4.7 void gotoxy (int *x*, int *y*)

Moves cursor to the specified position.

Parameters:

x horizontal position

y vertical position

7.1.4.8 void highvideo (void)

Makes foreground colors light.

If the current foreground color is less than DARKGRAY adds 8 to the its value making dark colors light.

See also:

[COLORS](#)

[lowvideo](#)

7.1.4.9 void inittextinfo (void)

Call this if you need real value of normattr attribute in the [text_info](#) structure.

See also:

[text_info](#)

7.1.4.10 void insline (void)

Insert blank line at the cursor position.

Original content of the line and content of lines below moves one line down. The last line is deleted.

7.1.4.11 void lowvideo (void)

Makes foreground colors dark.

If the current foreground color is higher than LIGHTGRAY subtracts 8 from its value making light colors dark.

See also:

[COLORS](#)

[highvideo](#)

7.1.4.12 void movetext (int *left*, int *top*, int *right*, int *bottom*, int *destleft*, int *desttop*)

Copies text.

Parameters:

left Left coordinate of the rectangle, inclusive, starting from 1.

top Top coordinate of the rectangle, inclusive, starting from 1.
right Right coordinate of the rectangle, inclusive, starting from 1.
bottom Bottom coordinate of the rectangle, inclusive, starting from 1.
destleft Left coordinate of the destination rectangle.
desttop Top coordinate of the destination rectangle.

7.1.4.13 void normvideo (void)

Sets text attribute back to value it had after program start.

It uses text_info's normattr value.

See also:

[text_info](#)

7.1.4.14 void putchxy (int x, int y, char ch)

Puts char at the specified position.

Parameters:

x horizontal position

y vertical position

ch char

7.1.4.15 void puttext (int left, int top, int right, int bottom, struct [char_info](#) * buf)

Puts text back to the screen.

See also:

[char_info](#)

[_conio_gettext](#)

Parameters:

left Left coordinate of the rectangle, inclusive, starting from 1.

top Top coordinate of the rectangle, inclusive, starting from 1.

right Right coordinate of the rectangle, inclusive, starting from 1.

bottom Bottom coordinate of the rectangle, inclusive, starting from 1.

buf You have to pass buffer of size $(right - left + 1) * (bottom - top + 1) * sizeof(char_info)$.

7.1.4.16 void textattr (int _attr)

Sets attribute of text.

Parameters:

_attr new text attribute

7.1.4.17 void textbackground (int *color*)

Sets text background color.

See also:

[COLORS](#)

Parameters:

color new background color

7.1.4.18 void textcolor (int *color*)

Sets text foreground color.

See also:

[COLORS](#)

Parameters:

color new foreground color

7.1.4.19 int wherex (void)

Reads the cursor X position.

Returns:

cursor X position

7.1.4.20 int wherey (void)

Reads the cursor Y position.

Returns:

cursor Y position

7.2 constream File Reference

A constream implementation for Mingw/Dev-C++.

```
#include <iostream>
#include "conio2.h"
```

Namespaces

- namespace [conio](#)

Functions

- `_Setxy` [setxy](#) (int x, int y)
setxy manipulator
- `_Setclr` [setclr](#) (int color)
setclr manipulator
- `_Setbk` [setbk](#) (int color)
setbk manipulator
- `_Setattr` [setattr](#) (int _attr)
setattr manipulator
- `_Setcrsrtype` [setcrsrtype](#) (int type)
setcrsrtype manipulator
- `std::ostream &` [clrscr](#) (std::ostream &o)
clrscr manipulator
- `std::ostream &` [clreol](#) (std::ostream &o)
clreol manipulator
- `std::ostream &` [highvideo](#) (std::ostream &o)
highvideo manipulator
- `std::ostream &` [lowvideo](#) (std::ostream &o)
lowvideo manipulator
- `std::ostream &` [normvideo](#) (std::ostream &o)
normvideo manipulator
- `std::ostream &` [delline](#) (std::ostream &o)
delline manipulator
- `std::ostream &` [insline](#) (std::ostream &o)
insline manipulator

7.2.1 Detailed Description

A constream implementation for Mingw/Dev-C++.

Warning:

There is not implemented constream class, only manipulators for iostream, so use them on cin/cout.

Author:

Michal Molhanec <michal@molhanec.net>

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7.2.2 Function Documentation

7.2.2.1 `std::ostream& clreol (std::ostream & o)` [inline]

clreol manipulator

See also:

[clreol\(void\)](#)

7.2.2.2 `std::ostream& clrscr (std::ostream & o)` [inline]

clrscr manipulator

See also:

[clrscr\(void\)](#)

7.2.2.3 `std::ostream& delline (std::ostream & o)` [inline]

delline manipulator

See also:

[delline\(void\)](#)

7.2.2.4 `std::ostream& highvideo (std::ostream & o)` [inline]

highvideo manipulator

See also:

[highvideo\(void\)](#)

7.2.2.5 `std::ostream& insline (std::ostream & o)` [inline]

insline manipulator

See also:

[insline\(void\)](#)

7.2.2.6 std::ostream& lowvideo (std::ostream & o) [inline]

lowvideo manipulator

See also:

[lowvideo\(void\)](#)

7.2.2.7 std::ostream& normvideo (std::ostream & o) [inline]

normvideo manipulator

See also:

[normvideo\(void\)](#)

7.2.2.8 _Setattr setattr (int *attr*) [inline]

setattr manipulator

See also:

[textattr](#)

7.2.2.9 _Setbk setbk (int *color*) [inline]

setbk manipulator

See also:

[textbackground](#)

7.2.2.10 _Setclr setclr (int *color*) [inline]

setclr manipulator

See also:

[textcolor](#)

7.2.2.11 _Setcsrtype setcsrtype (int *type*) [inline]

setcsrtype manipulator

See also:

[_setcursortype](#)

7.2.2.12 _Setxy setxy (int *x*, int *y*) [inline]

setxy manipulator

See also:

[gotoxy](#)

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