## **Borland Graphics Interface (BGI) for Windows**

Version 6.0, August 9, 2004

The following functions are mostly from the original Borland Graphics Interface for DOS programs. The BGI graphics functions may also be used with Windows programs created by the Borland 5.0 compiler, the free GNU C++ compiler, and possibly other compilers. Extra Windows functions are also available, described in <a href="https://www.cs.colorado.edu/~main/bgi/doc/bgi.html">www.cs.colorado.edu/~main/bgi/doc/bgi.html</a>. These extra functions are indicated below by WIN. Also, any of the functions that use colors can use <a href="https://www.cs.colorado.edu/~main/bgi/doc/bgi.html">RGB colors</a> in addition to the 16-color BGI palette.

## **Functions**:

```
void arc (int x, int y, int stangle, int endangle, int radius);
               void bar (int left, int top, int right, int bottom);
               void <u>bar3d</u> (int left, int top, int right, int bottom, int depth, int topflag);
      ostringstream <u>bgiout</u>; WIN
               void circle (int x, int y, int radius);
                void cleardevice (void);
                void <u>clearmouseclick</u>(int kind); WIN
                void <u>clearviewport</u> (void);
                void <u>closegraph</u> (int window=ALL_WINDOWS); WIN
                 int converttorgb (int color); WIN
                void <u>delay</u> (int millisec); WIN
                void detectgraph (int *graphdriver, int *graphmode);
                void drawpoly (int numpoints, int *polypoints);
                void <u>ellipse</u> (int x, int y, int stangle, int endangle, int xradius, int yradius);
                void <u>fillellipse</u> (int x, int y, int xradius, int yradius);
                void fillpoly (int numpoints, int *polypoints);
                void floodfill (int x, int y, int border);
                 int <u>getactivepage</u> (void); WIN
                void <u>getarccoords</u> (struct arccoordstype *arccoords);
                void getaspectratio (int *xasp, int *yasp);
                 int getbkcolor (void);
                 int <u>getch</u> (void); WIN
                 int <u>getcolor</u> (void);
                 int <u>getcurrentwindow</u> (void); WIN
struct palettetype* getdefaultpalette (void);
                 int <u>getdisplaycolor</u> (int color); WIN
               char* getdrivername (void);
               void getfillpattern (char *pattern);
                void getfillsettings (struct fillsettingstype *fillinfo);
                int <u>getgraphmode</u> (void);
                void getimage (int left, int top, int right, int bottom, void *bitmap);
                void getlinesettings (struct linesettingstype *lineinfo);
                int getmaxcolor (void);
                 int getmaxmode (void);
                 int getmaxheight (void); WIN
                 int getmaxwidth (void); WIN
                 int getmaxx (void);
                 int getmaxy (void);
              char* getmodename (int mode number);
               void getmoderange (int graphdriver, int *lomode, int *himode);
```

```
void getmouseclick(int kind, int& x, int& y); WIN
    void getpalette (struct palettetype *palette);
     int getpalettesize (void);
     int getpixel (int x, int y);
    void <u>gettextsettings</u> (struct textsettingstype *texttypeinfo);
    void getviewsettings (struct viewporttype *viewport);
     int <u>getvisualpage</u> (void); WIN
     int <u>getwindowheight</u> (void); WIN
     int getwindowwidth (void); WIN
     int <u>getx</u> (void);
     int <u>gety</u> (void);
    void graphdefaults (void);
   char* grapherrormsg (int errorcode);
     int graphresult(void);
unsigned imagesize (int left, int top, int right, int bottom);
    void <u>initgraph</u> (int *graphdriver, int *graphmode, char *pathtodriver);
     int <u>initwindow</u> (int width, int height, const char* title="Windows BGI", int left=0, int top=0, bool dbflag=false, bool closeflag=true);
     int installuserdriver (char *name, int huge (*detect)(void));
     int installuserfont (char *name);
    bool <u>ismouseclick</u>(int kind); WIN
     int kbhit (void); WIN
    void <u>line</u> (int x1, int y1, int x2, int y2);
    void <u>linerel</u> (int dx, int dy);
    void <u>lineto</u> (int x, int y);
     int mousex (void); WIN
     int mousey (void); WIN
    void moverel (int dx, int dy);
    void moveto (int x, int y);
    void outtext (char *textstring);
    void outtextxy (int x, int y, char *textstring);
    void \underline{\text{pieslice}} (int x, int y, int stangle, int endangle, int radius);
    void <u>printimage</u> (
             const char* title=NULL, double width_inches=7,
             double border_left_inches=0.75, double border_top_inches=0.75,
             int left=0, int right=0, int right=INT_MAX, int bottom=INT_MAX
             ); WIN
    void <u>putimage</u> (int left, int top, void *bitmap, int op);
    void <u>putpixel</u> (int x, int y, int color);
    void <u>readimagefile</u> (
             const char* filename=NULL,
             int left=0, int top=0, int right=INT MAX, int bottom=INT MAX
             ):
    void rectangle (int left, int top, int right, int bottom);
     int registerbgidriver (void (*driver)(void));
     int registerbgifont (void (*font)(void));
    void <u>registermousehandler</u> (int kind, void h(int, int)); WIN
    void restorecrtmode (void);
```

```
RGB functions: WIN
            COLOR(r,g,b),
            RED_VALUE(v), GREEN_VALUE(v), BLUE_VALUE(v),
            IS_BGI_COLOR(v), IS_RGB_COLOR(v)
    void <u>sector</u> (int x, int y, int stangle, int endangle, int xradius, int yradius);
    void <u>setactivepage</u> (int page);
    void <u>setallpalette</u> (struct palettetype *palette);
    void <u>setaspectratio</u> (int xasp, int yasp);
    void <u>setbkcolor</u> (int color);
    void <u>setcolor</u> (int color);
    void <u>setcurrentwindow</u> (int window); WIN
    void <u>setmousequeuestatus</u>(int kind, bool status=true); WIN
    void <u>setfillpattern</u> (char *upattern, int color);
    void <u>setfillstyle</u> (int pattern, int color);
unsigned <u>setgraphbufsize</u> (unsigned bufsize);
    void <u>setgraphmode</u> (int mode);
    void <u>setlinestyle</u> (int linestyle, unsigned upattern, int thickness);
    void <u>setpalette</u> (int colornum, int color);
    void <u>setrgbpalette</u> (int colornum, int red, int green, int blue);
    void <u>settextjustify</u> (int horiz, int vert);
    void <u>settextstyle</u> (int font, int direction, int charsize);
    void <u>setusercharsize</u> (int multx, int divx, int multy, int divy);
    void <u>setviewport</u> (int left, int top, int right, int bottom, int clip);
    void <u>setvisualpage</u> (int page);
    void <u>setwritemode</u> (int mode);
     int showerrorbox (const char *message); WIN
     int <u>swapbuffers</u> (void); WIN
     int textheight (char *textstring);
     int textwidth (char *textstring);
    void writeimagefile (
             const char* filename=NULL,
              double width_inches=7, double border_left_inches=0.75, double border_top_inches=0.75,
              int left=0, int top=0, int right=INT_MAX, int bottom=INT_MAX
              ); WIN
```