

KDGraf
Version 1.3 - May 1989
A Product of KD Ranch Enterprises (c)

GENERAL:

KDGraf is a pull-down, menu-driven graphics package for EGA/VGA users. It will not display graphics on a CGA system. Bars, 3D Bars, Lines, 3D Lines and Pies are supported. Graphs can be saved and retrieved. They can be printed on most Epson compatible printers (FX-80 and above). A maximum of 6 sets of values can be displayed over 15 occurrences -- i.e., up to 90 values can be shown.

KDGraf was written in Turbo Pascal 5.0.

HISTORY:

Version 1.0 - Beta Only (April 1988).

Version 1.1 - Initial Release (June 1988).

Version 1.2 - Minor Bug Fixes (Sept. 1988).

Version 1.3 - Added Scaling Enhancements (May 1989).

COMMAND SYNTAX: KDGraf [grafname]

The only parameter supported by KDGraf is the name of an existing graph. All graphs are saved with the extension .KDG. Do not use the extension when calling a graph with the command parameter. The called graph will be loaded at startup. The parameter is not required. Any existing graph in the current directory can be called from within the program.

USAGE:

Upon execution, a pull-down menu system will be displayed. The idea here is to use the menus to select the type of graph, input the data, make whatever cosmetic adjustments you might be

interested in, and then display and/or print your graph.

Hopefully, to create a reasonably useful and attractive graph, this should be pretty simple. If not, the author (me) has failed in one of the primary goals. There are, however, some intricacies that may take further explanation -- that's why we have a .DOC file.

I do not plan to describe everything possible in this .DOC file. Most functions will be obvious. The following information will concentrate on those that aren't.

Additionally, if the package you have received is intact, there should be 18 example graphs to help you with most of the functions. All data and settings used to create these graphs are always included in the saved graph file and are available from the menu system.

FUNCTIONS:

The Pull-Down Menu System:

These menus operate like most other pull-down systems. Generally, you hilite your selection with the arrow keys and then press ENTER, or simply select the item you want by pressing the first character (KeyLetter) of any item within the current selection menu.

A selection from a menu could do a lot of different things:

- just pull-down another selection menu.
- set an item as data that affects the graph.
- open a data input area asking for you to input some data.
- open a special sub-process for various reasons.
- actually execute something.

What each menu does will become evident rather quickly. The "Help" function is designed to let you know what might happen to you before it happens in addition to providing a hint or two about input data.

There are a few special keys that may be of use:

- F1 - is usually a "HELP" key and will provide a little information about where you currently are and what you will get next.
- F2 - is the pull/pop key. If a menu is currently displayed, F2 will

pop you all the way back to ground zero (Data Display). If you are at ground zero, it will pull back all the menus that were last activated. Actually, ground zero is of very little use.

/ - takes you to the Main (Top) Menu from almost everywhere. This is a much more valuable key. For example, the keys "/VG" will show your graph as long as you are not currently in a process that requires Esc to leave.

Esc - moves you back one level in the menu process or takes you out of sub-processes (e.g. help, save, etc.). Sometimes, this is the only avenue of escape.

The last line of the screen, The Message Line, will always show which keys are active and what they do. Once you play with the menus a while, you should have little problem.

Menu Detail (based on Main Menu options):

*** Many of the options listed below have some common selection criteria. Most of these are listed under APPENDIX I. ***

ChartType:

Allows you to select one of 13 types. I am not going to list them here. When you change a choice here, you are automatically thrown to the View Graph selection. It may seem a little strange at first, but I believe you will find it useful.

Data:

Data comes in two varieties - Values and Names. You will find that a graph is constructed by use of a matrix with the "names" of a set of "values" listed down the side and "labels" listed along the top. This is where you enter all that stuff. You will also be allowed to give specific color and pattern information to each set of values and names from here. Specific details about what impact the data values, names, colors and patterns may have are covered as we go on.

Titles:

Three titles can be entered which will automatically be centered on the top of the graph. From here you also enter the X and Y axis titles

which will be placed appropriately. You can vary the Font, Color, and Size of any of these (See APPENDIX).

Notes:

Up to 9 notes can be entered and placed on the graph anywhere you want. Again, Font, Color and Size can be selected along with the position. The position is controlled by a set of X,Y coordinates. You will probably have to play with the positioning a bit to get the note exactly where you want it. For general information, the notes are connected at the chosen X,Y coordinates at their left center. X coordinates range from 0 to 639, Y from 0 to 349.

Enhancements:

This is the most complicated, least necessary, most used and hardest to explain section of the whole package. This is where most of the cosmetic changes are made to the graphs. It is also the only menu that varies with a ChartType selection (a Pie requires different stuff than the other 12 types do). Here goes:

BackGround - Select a background color. 0 (black) is the default.

Any other color selected causes that color's number to mean black. That way, you don't lose a color and all that you had set up will still show when you switch. Think about it -- it makes sense (I think).

Outline - Tell whether you want an outline around the whole graph or not. You also have your basic Color, Thickness and Style choices. The default is ON and color 15.

****** For Bars and Lines -- Pie information to follow ******

X axis line,

Y axis line,

Vert Grid,

Hor Grid - Tell whether you want them and select Color, etc. The axis defaults are ON and 15. The grids default to OFF.

Annotation - Tell if you want the values and/or labels to be shown and where (most of the time). The choices are "DO NOT DISPLAY", "INTERNAL", "EXTERNAL" and "BOTH" (internal

and external). You will have to play with this some to get it where you like it. It would take the rest of this file to try to explain all the possibilities and the effect that each has on the various graphs.

Chart Limits-Assign Low, High and Step Size values for the graph and set "ROOM" variables for top,bottom,left and right.

Room means just what it implies - how much room should be available on each of the perimeters. The defaults: Top and Bottom - 45; Left and Right - 60. These will handle a "normal" graph. If your numbers are unusually large, or you make big titles, etc., adjust the room to accommodate them. Room is also used to squeeze, elongate and position graphs for different effects.

Also, in 3D mode, a platform depth can be assigned. The limits are 1 to 349. This is used to help view the data at slightly different angles -- nothing too dramatic. All of these values, by default (indicated by 0), will scale automatically.

****** For Pies [Ok - here's where it gets tough!] ******

Values Attribute,

Percent Attribute,

Labels Attribute - For each of these, select whether you want them or not, Color, Size and Font. Their placement is controlled by ANNOTATION (below). A "bogus" color is allowed to force the color of these items to match the color of their respective pie slice. That color is 16 (15 is normally the limit). The normal defaults are color-15, Size-0, Font-0 (0 = default) and ON.

InBox Attribute - If you have chosen "INTERNAL" for any of the above items, they can be surrounded by a box.

Select the attributes for that box here.

A SPECIAL NOTE: The normal style for the InBox is 0 which means "hollow" and therefore just lets the background color show through. To change the color, a style other than 0 must be

- selected. The default is ON and "hollow".
- Annotation - Similar to annotation from BARS except there are two more items - PERCENT and NAMES. If you choose to have the NAMES external you will also have to indicate side or bottom. Again, this is best to play with instead of trying to explain the possibilities.
- Size - This is a relative pie size indicator. Basically, it is expressed as a percentage of the "normal" full screen pie. The default is 100, but if you don't want room for titles and stuff, you can go larger. Size becomes very important if you plan to display more than 1 pie. Again, play with it.
- Relationship - This is a Yes/No question. It is primarily designed to show multiple pies in sizes that are relative to each other as opposed to showing them all the same size even though the total value of each pie is different. The default is NO. EXTRA: If relationship is YES, and the pie label is on, the total value of each pie is shown as part of the label even if there is only one pie.
- Centers - Allows placement of any of the 6 possible pies using X,Y coordinates. The X,Y coordinate is where the center of the pie will be drawn. Coordinates are the same as NOTES. Placing pies becomes very important when using the RELATIONSHIP option. You'll see.

View:

This is the place you go to show your graph.

Select the "Graph" option to display it. After you see the graph, any key will return to the menu system.

Select "Print" to (you guessed it) print the graph. You will be given the choice of a vertical or horizontal output. Assuming you have the correct printer and it is ready, the graph will be

displayed (that's how I get my hands on the data to print -- directly from the screen) and the printing will start. Return is automatic as soon as all the necessary data is in your print buffer.

The other option, "Data", is simply a listing of what your data currently looks like from a save file standpoint. It was used as a debug tool for me, but I kind of liked it, so I left it in. With some thought, you may find some value in it too. WARNING: The data listed is not being extracted from a saved file. It is a listing of the data that is currently active in the menu system. If you want to keep it, you must use the SAVE function. APPENDIX II list the line numbers and what they mean.

Files:

To retrieve a saved graph, you have two options. If you select "Get", a new window is displayed allowing you to enter the saved graf name. You can also select "Directory" which will show you a list of all the graphs saved in the current directory and allow you to hilite the one that you want. Press ENTER and the hilited file will automatically go through the "Get" routine. The "Directory" function also allows you to sort or delete files.

"Save" is pretty straightforward. A new window will ask for a name and go through a normal save type routine (check for duplicates,etc.). If you want to save with the current file name (lower right corner of Data Screen), leave the field blank and just press ENTER. The save files are pure ascii. APPENDIX II lists the line numbers and what they mean.

"Reset" does just that -- resets all the values and selections to their original defaults. Be careful, if you haven't saved your current work, it will be gone.

The initial screen starts in the "FILES" menu. From here, you can access any of the saved files. It seemed like a better place to start than the actual beginning. The actual beginning has no menu items hilited or any menus pulled for your use (ground zero). You can get to that point by simply pressing F2.

Quit:

You get two chances. The trailing menu requires another "Quit" to actually exit. "Stay" does nothing but stay.

APPENDIX I:

Most of the values allowed below are indigenous to Turbo Pascal 5.0.

| | |
|-------------------------------------|--------------------------------|
| Colors: 0 - black | Fonts: 0 - default (character) |
| 1 - blue | 1 - triplex |
| 2 - green | 2 - small |
| 3 - cyan | 3 - sans serif |
| 4 - red | 4 - gothic |
| 5 - magenta | |
| 6 - brown | |
| 7 - gray (dull white) | Patterns: 0 - empty (hollow) |
| 8 - dark gray | 1 - solid |
| 9 - light blue | 2 - lines |
| 10 - light green | 3 - light slashes |
| 11 - light cyan | 4 - slashes |
| 12 - light red | 5 - back slashes |
| 13 - light magenta | 6 - light back slashes |
| 14 - light brown (orange ?) | 7 - hatches |
| 15 - white (bright) | 8 - cross hatches |
| 16 - match to pie slices only | 9 - interleave |
| | 10 - wide dots |
| Styles: 0 - solid | 11 - close dots |
| 1 - dotted | |
| 2 - center dotted | Thickness: 1 - normal |
| 3 - dashed | 2 - thick |
| 4 - dash/dot * | |
| 5 - dash/dash/dot * | Sizes: 0 - 4 (0 is default) |
| 6 - dash/dot/dot * | |
| * used for line on line graph only. | |

APPENDIX II:

The following are the line numbers used in the save files:

1 ChartType (A thru M)
 2 - 17 Values - Set #1 (2 is Label name)
 18 - 33 Values - Set #2 (18 is Label name)
 34 - 49 Values - Set #3 (34 is Label name)
 50 - 65 Values - Set #4 (50 is Label name)
 66 - 81 Values - Set #5 (66 is Label name)
 82 - 97 Values - Set #6 (82 is Label name)
 98 - 113 Fill Color (98 is word "Fill Color")
 114 - 129 Pattern (114 is word "Patterns")
 130 - 145 Names (130 is word "Names")
 146 - 161 Color (146 is word "Color")
 162 (Platform Depth for 3D only)
 163 - 177 Font (No word "Font" preceding)
 178 - 193 Size (178 is word "Size")
 194 - 196 Chart Limits (194-Step; 195-Low; 196-High)
 197 Reducer (Pie Only)
 198 Relativeness (Pie Only)
 199 Side or Bottom (Pie Only for Legend)
 200 - 203 First Title (Text,Color,Font,Size)
 204 - 207 Second Title (Text,Color,Font,Size)
 208 - 211 Third Title (Text,Color,Font,Size)
 212 - 215 X Axis Title (Text,Color,Font,Size)
 216 - 219 Y Axis Title (Text,Color,Font,Size)
 220 - 225 Note # 1 (Text,Color,Font,Size,X,Y)
 226 - 231 Note # 2 (Text,Color,Font,Size,X,Y)
 232 - 237 Note # 3 (Text,Color,Font,Size,X,Y)
 238 - 243 Note # 4 (Text,Color,Font,Size,X,Y)
 244 - 249 Note # 5 (Text,Color,Font,Size,X,Y)
 250 - 255 Note # 6 (Text,Color,Font,Size,X,Y)
 256 - 261 Note # 7 (Text,Color,Font,Size,X,Y)
 262 - 267 Note # 8 (Text,Color,Font,Size,X,Y)
 268 - 273 Note # 9 (Text,Color,Font,Size,X,Y)
 274 BackGround Color (0 is default)
 275 - 278 Outline (Exist,Color,Font/Thk,Size/Sty)
 279 - 282 X Axis *[Val Attr] (Exist,Color,Font/Thk,Size/Sty)
 283 - 286 Y Axis *[% Attr] (Exist,Color,Font/Thk,Size/Sty)
 287 - 290 H Grid *[Lab Attr] (Exist,Color,Font/Thk,Size/Sty)
 291 - 294 V Grid *[InB Attr] (Exist,Color,Font/Thk,Size/Sty)

295 - 298 Annotation (Values,Names,PerCent,Labels)
299 - 300 Pie # 1 Center (X,Y)
301 - 302 Pie # 2 Center (X,Y)
303 - 304 Pie # 3 Center (X,Y)
305 - 306 Pie # 4 Center (X,Y)
307 - 308 Pie # 5 Center (X,Y)
309 - 310 Pie # 6 Center (X,Y)
311 - 314 Room (Top,Bottom,Left,Right);
315 Currently Free (Future)

* if Pie

REQUISITE DISCLAIMER and OTHER STUFF:

I am not a programmer by profession. I just like to play. As such, KD Graf is an extremely ambitious venture into programming for me. It is very large and terribly complicated. You have your hands on version 1.3 (the first "general" release). I would suspect that there are still some bugs and many things that could be done differently and/or improved.

It was written to try to learn a little something about how two things work -- pull-down menus and graphics. Both of these are tough nuts to crack. The pull-down menus were designed as a composite of many of the systems that I have worked with or seen -- primarily Turbo Pascal itself, Windows and a program that credited the included menu system to something called "PULL11". The graphics part is pure Turbo.

So, the following is extra true about KD Graf:

Every reasonable attempt has been made to offer a fun product that may be of some use and be "bug" free. I (the author) can, however, offer no guarantees as to the suitability or use of this program. Therefore (here we go)...

**THIS PRODUCT IS PROVIDED "AS IS" AND
WITHOUT WARRANTIES EXPRESS OR IMPLIED.**

THE USER ASSUMES ALL RISK ASSOCIATED
WITH THE USE OF THIS PROGRAM.

You may copy and distribute this program freely. Please don't charge for it and please provide this .DOC file and the example graf with it.

Anyone who is interested, can send the author (me) \$5.00 or so.
(Mainly, I'm curious to see if anyone is interested!)

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P.S. As I said before, I'm not a programmer by profession but I have written a few other things -- usually because I can't find or buy precisely what I'm looking for. You may see some of these floating around.

[All of my programs begin with KD].

KDQwik - a small, easy word processor. Extremely straight forward for a beginner or an executive. This is not currently in general release.

KDCalcG - an EGA/VGA graphics implementation of a hand held calculator. It has list, print, and does some neat stuff with its nine memory registers.

KDCalc - a non-graphics version of KDCG. Has a few more functions and can be made memory resident for pop-up capability.

KDLogic - a set of 5 brain teaser logic puzzles (HiQ, Minefield, Mastermind, Fifteen Squares and Towers). Program can be made memory resident for quick pop up and down.

KDPoker - There are a lot of good blackjack games, but I couldn't

find a good, true rendition of the Video Poker machines that are now extremely popular in Las Vegas, Reno, etc. Two commercial versions I bought were awful. This plays pretty much like the real thing.

KDPokan!- This is kind of a companion program to KDPoker. It has two modes - one, a PLAY mode which will play much like the games included in KDPoker; the other - ANALYSIS mode which allows you to set up any hand, hold the cards you want and draw to it repeatedly to help determine the best strategies to play Video Poker.