

BPWIN.WRI

bbBLOOD PRESSURE PLOTTER
FOR WINDOWS

By
Richard S. Cohen

Version 1.0w
Oct. 20, 1992

For IBM, Compitables or any computer that can run
Microsoft Windows

Richard S. Cohen
132 E. Palmer Ave.
Collingswood NJ, 08108

What is BPPW (Blood Pressure Plotter for Windows

- * Keep records of Systolic, Diastolic pressure and Pulse readings for any date
- * Plots all three above readings as a colorful line graph
- * Graphs a week (7 days) of data, or
- * Graphs average, minimum and maximum readings for the Month * or all months stored within 100 readings
- * Prints a hard-copy Form to be used when taking BP readings, which will be entered into the computer at a later date.
- * A very easy to use Install program.

Requires

- * Computer with a 286 CPU or better
- * MicroSoft Windows 3.x
- * EGA/VGA Graphics color monitor
- * At least one hi-density floppy (5.25" or 3.5" size)
- * Hard Disk and a Mouse, Printer recommended
- * VBRUN100.DLL (can be obtained from most BBS's)
- * And most of all a home Blood Pressure Tester

Overview

Blood Pressure is the pressure exerted by the blood against the inner walls of a blood vessel, usually an artery. The pressure is created by the pumping action or contraction of the heart. It is measured by an instrument called a sphygmomanometer. An electronic device consists of an activate bag in a cuff, and inflation bulb and valve connected to the electronic unit. This unit has an ON/OFF switch, an LCD display and is run by batteries. A stethoscope, used by doctors and nurses, is not necessary.

When the cuff is inflated around the arm, it presses the artery against the bone, constricting the flow of blood. As soon as the flow of blood is restricted by the cuff, the air in the cuff is released. The blood then begins to flow again and the pressure readings are monitored by the device. The maximum amount of force exerted by the heart is called the SYSTOLIC pressure and the minimum pressure is called DIASTOLIC pressure. The display will show the reading, for example 120/80. Most devices will also monitor your pulse rate. The pulse rate reading usally alternates with blood pressure reading on the same display.

While there is no "normal" blood pressure which is considered right for everyone, it is conceded by most physicians that 120/80 is a healthy blood pressure. During the day blood pressure fluctuates due to stress and strain or overexertion. This is normal. But if blood pressure remains high, it can be a serious condition. Which may have a specific cause, such as hypertension. Strokes, heart or kidney failure can occur if not discovered early. It can be controlled, however, by diet,

therapy or medication. This program is for people who have this condition. By keeping records to show your doctor, he may be able to control the problem.

□

BPPW allows easy entry of BP data to a file which is plotted in a line graph. The original program is from an old DOS program I wrote several years back. This version is a completely new program rewritten for the Windows environment. In the old program, data was entered by using the arrow keys. In the new Windows version, scroll bars are used for entry. The old version used CGA Black and White display to plot in high resolution, Mode 2. The graph had 100 points across which didn't allow room to display dates. Now, by using VGA displays, we can now plot in color, with enough space to show dates.

This release is Shareware. It is a complete working copy. Anyone who has use for this program must register, or un-install it from their system.

List of Files

BPWIN.EXE (supplied)	The main program	in (program) dir	
BPFORMS.EXE	The Form printing program	"	"
BPINSTAL.EXE	The install program	"	"
HELP1.BPH	HELP files called by	"	"
HELP2.BPH	BPWIN.EXE	"	"
HELP3.BPH	"	"	"
HELP4.BPH	"	"	"
"			
BPWIN.WRI	This file (document)	"	"
README.TXT	Read before installing	"	"
SAMPLE.BPW (supplied)	Sample data file	in (data) dir	(not supplied)
VBRUN100.DLL	Required but not supplied	in system's path	
BPWIN.INI		Created by the program	
in (windows) dir			
*.BPW	Data files created by the program.	in (data) dir	

Installation

NOTE: If you down-loaded this program from a Bulletin Board, you have to UNZIP, using Pkware's PKUNZIP utility, the files either to a floppy disk or to another directory on your hard-drive. In either case, this will be known as the Source directory. Also, you need information on where to install files, as the Program File and the Data File directory. Before starting make sure "VBRUN100.DLL" is located in DOS path. Most people put it in the windows directory. This file is not supplied. It can be found in most BBS's.

1. With Windows operating, run the File Manager
2. Log on to the Source directory
3. Double-Click BPINSTAL.EXE, to Run it. (or select Run from the menu)
4. If BPWIN.EXE is not in the current directory, you will have to enter the correct directory name in a dialog box.
5. The first active field "Program File Directory" has a default directory name for program files. This may be changed by typing a new directory name. When done, press the TAB key to go to the next field.
6. If the directory used in step 5 above, does not exist, another dialog box will open, asking you if it should be created. Answer with the 'Yes' command button.
7. Do steps 5 and 6, above, for the next field, "Data File Directory".
8. Click the "Start Copy" command button, or ALT+S on the keyboard. All files will be copied to their correct directories.
9. If you are already Registered, and have received the registration card from us, click the "Register Info" command button, ALT+R.
10. The entry box labels will change to "Register To", "ProgID Number" and "Serial Number". Fill-in these entries very carefully. Incorrect entries will not be accepted.
11. Click the "Save INI File" command button, or ALT+I to created the BPWIN.INI file. (otherwise BPWIN.INI will not be installed with the data just entered)
12. Click "Cancel" button, or ESC key, to exit the install program.
13. In the Program Manager, Install BPPW. See Windows documentation.

If you wish to install manually, you can copy files from DOS using XCOPY, or from windows using the File Managers Copy or Move function. The INI file, after its created by BPWIN.EXE or BPINSTAL.EXE can be edited with any ASCII text editor.

Un-Install is easy. Just delete the program and data files and directories created by the install program. Delete BPWIN.INI file from the Windows directory. Delete the BPWIN Icon from the Program Manager. That's about it. There were no changes made to existing AUTOEXEC.BAT, CONFIG.SYS, WIN.INI or SYS.INI.

Getting started

NOTE: We provided a sample data file for you to try (all data files have the extension ".BPW"). Study the forms first, and read all the On-Line-Help from the main menu on the "Blood Pressure Graph" and "Blood Pressure Entry" forms, (Alt+H) then select Index (I), or from the keyboard press F1. Most dialog boxes, such as "About BPPW", "ShareWare", "Open Data File" and "Save File As" have their own "Help" Command Button. (ALT+H) When you are ready to create your own data files, delete the sample file first.

When you take your pressure readings, create a paper data sheet with the columns: "Date", "Blood Pressure", "Pulse", and "Time". Each day you take your pressure readings, fill in this paper chart. When you have enough readings, you are now ready to enter data into the computer.

1. Run BPPW from the Program Manager, or BPWIN.EXE from the File Manager.
2. "About BPPW" window opens. Press Continue.
3. If you are not registered, the "ShareWare" dialog box will open. Please read the shareware notice. If not registered, press the Continue button.
4. If you are registered, and have the registration card from us, then Click "Register" command button. (or Alt+R)
Enter the information from the card to the form on the screen
Then click the "Continue" button
Exit program, then re-run it again to reload the data saved in the INI file.
5. The first of two main windows will open, "Blood Pressure Graph". if a data file is listed in then INI file (DataFile=SAMPLE.BPW for example), it will load and display a graph, otherwise, from the menu, select File,Open (Alt+F,O) to open a file of your choice. (see below)
6. The "- Graph" window, displays a Windows type menu, a panel for the data, a panel for the graph, "Display Readings As:" panel and a "Cancel" button.
7. The "File" menu (ALT+F) contains "New" (N), "Open..." (O), "Print" (P), and Exit (X). All functions work the same as any other Windows program, except for "Print" (see below).
8. The "Data-In" menu item (ALT+D) takes you directly to the "Blood Pressure Entry" window. (see below)
9. The "Graph" menu item (Alt+G) will give you three selections, one of which is checked when selected.
- 9a. "Day View" (D) displays 7 days of readings. "Scan Weeks" up and down buttons appear, allowing data to be shifted up or down 7

days at a time. Display Readings as: "Actual" radio (option) button will be ON, and can't be changed.

9b. "Week View" (W) displays a whole month (1 week per reading). A panel will open, asking "For the Month of:". Enter the month number you wish to display. Then select from "Display Readings As:" radio (option) buttons as "Average", "Minimum", or "Maximum". The "Actual" button can't be selected.

9c. "Month View" (M) displays each month of the data available in the data base. Select from "Display Readings As:" radio (option) buttons as "Average", "Minimum", or "Maximum". The "Actual" button can't be selected.

10. Printing a paper graph from this window is not straight forward. With the graph displayed on the screen, select from the menu "File, Print" (Alt+F,P) or without pulling down the menu, key CTRL+P. The data and graph will be sent to the Windows "Write" accessory via the clip board. Both clip board and Write must be in DOS path. For several graphs, change to a new graph and select Print again. Later, activate Write, you can edit, write a report and then Print a Hard-Copy.

"Blood Pressure Entry" window

1. This window opens when menu item "Data-In" (Alt+D) is selected from the

"-Graph" window.

2. This window contains a menu, entry panels for Date, Systolic, Diastolic and Pulse. A display panel showing the data, the Data File Name and number of records in this file.

3. The menu item "File" contains "New", "Open...", "Save", "Save As...", "Print", and "Exit". New, Open, and Exit work as in the "-Graph" window. Save and Save As... works as any other window function with the same names. "Print", unlike "-Graph" window, prints a data listing directly to the printer and don't use the clip board or "Write" accessory at all.

4. "Show-Graph" (ALT+S) menu item returns you to the "Blood Pressure Graph" window.

5. "Update" menu item (ALT+U) allows several ways to update the "Date" entry field.

5a. "Automatic" (A) will open another menu where you may select the updating factor. Every time a record is saved the date will update automatically by the next factor.

5b. "Scroll Bars" menu item (ALT+S) will turn ON or OFF, scroll bars to change the date. When ON, select "Chg Day" or "Chg Month" determines how much of the date is changed by the scroll bar.

5c. "KeyBoard" menu item (ALT+K) determines if keyboard is ON or OFF on the date field. This is a Checked item.

6. After the date is set, entry items "Systolic (hi)", "Diastolic (low)", and "Pulse" values can be changed using it's scroll bar.

7. When all readings are correct, select the "Ok" button to enter data.
NOTE: Data is not saved to the disk file until "Save" or "Save As" is selected. The program has built in safeguards, so a "Save Data?" dialog box will open under conditions where you can lose your data.
8. Use the "Edit" button if a mistake was made, and you need to change it before it is saved to a file. First, you need to know the record number that needs editing. Easy way to do this is to count each record from the top as you scroll data up in the data window. Select "Edit" button, and enter record number in the dialog box. Make changes and press "Ok" to finalize the change.
9. Press "Cancel" or ESC key to return to the Graph window.

Printing a Form

It is not a good idea to enter data when taking your pressure. For good readings you must be relaxed. For this reason, we are supplying the program "BPFORMS". You can make a hard-copy form to be filled out while taking readings. Later, enter the data into your computer from this form.

To Use:

1. Run BPFORMS.EXE from the Program or File Manager.
2. Enter the name of person the blood pressure readings are for. This name will be printed on the form. If no name is entered, the program will print an underline so a name can be written in later.
3. Enter the name of the data file. (good idea if more than one file is used.) This will also be printed on the form. If no name is entered, underlines will be printed.
4. "Step date" will allow printing the dates on the form.
 - 4a. 1st Option, "None", will not print any dates. Allows you to write-in your own dates. Good when readings are taken at random periods. Each sheet is good for 50 readings.
 - 4b. 2nd Option, "Daily", will print dates down the first column. The second column is for extra readings. This is good for people who take readings every day (or sometimes more than once a day). Each sheet will print 25 days (and 25 blanks).
 - 4c. 3rd Option, "Weekly", will print a date on the left side, 7 days apart, good for 5 or 6 months.
 - 4d. 4th and final Option, "Monthly", will print a date, for each month (all on the same day).
5. Next, enter into the "Start Date On" field with the starting date to be printed on the form.
6. Finally, enter the "Number of Copies" to be printed. Note, with the "Step Date" set at "None" or "Daily", you may print up to 12 copies. Daily dates will continue from one sheet to the next. With the "Weekly" or "Monthly" options, you can print only one copy at a time.

Using Help

This program does not use the normal Windows Help system. When selecting "Help" from any menu or command button, a "Help" window will open. In this window, you will see an "Index" and "Help" panels. By clicking a item in the Index panel, help data for that item will move to the top in the help panel. The Help panel also has a scroll bar to scan, up or down, through the help data. When done, click the Cancel button to return.

Registration

BPPW is a shareware product and is available to you, free, for an evaluation period of thirty days. If you like what you see and find it useful, you are encouraged to register with us. The registration fee is only \$15.00 per copy.

By registering you will:

1. Receive a registration card with special ProgID and Serial Number that will remove the annoying "Shareware" dialog box every time you start the program.
2. Receive one free upgrade (except for shipping & handling) on the next release, and a special discount on future upgrades.
3. Encourages the author to continue producing new high quality software.

Trademarks

The following trademarks and service marks appear in this product:

Microsoft(R), Windows(TM) and Visual Basic(TM) are registered trademarks of Microsoft Corporation.

PKUNZIP(R) is registered trademark of PKWARE, Inc.

Limited Warranty

This program and the accompanying documentation is provided "AS IS" without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose with respect to defects in the program or documentation. Richard S. Cohen assumes no risk to the quality and performance of the program. Should the program prove defective, you assume the entire cost of any loss of profit or any other commercial damage.

REGISTRATION FORM
for
BPWin Version 1.0w

Date of Registration: _____ (Please Print)

Name:

Company:

Address:

City: _____ State: _____

Zip: _____

Phone: (____) _____

Country: _____

Disk Size: () 5.25", () 3.5". Please check one.

Where did you get BPWin? _____

Registration Fee is \$15.00 per copy.

Total Copies of Standard _____ X \$15.00 = \$_____._____

Please enclose check payable to:

Richard S. Cohen
132 E. Palmer Ave.
Collingswood NJ, 08108

COMMENT FORM
for
BPWin Version 1.0w

Date _____

Name: _____

Address: _____

City: _____ State: _____ Zip _____

Phone: (____) _____

Where did you get BPWin? _____

Please check one: not registered.

Registered, Serial # _____ - _____

In future releases of this program, I would like to see:

1. Added or Changed:

2. Removed:

3. Bugs found:

Thank you -- Richard S. Cohen