



# Bob's CD Player


Bob's CD Player (BCDP) is a program for the Microsoft Windows operating system that allows you to control your computer's CD-ROM drive when playing audio compact discs. BCDP provides familiar tape deck style controls for your CD-ROM drive. BCDP's window is small and unobtrusive, with the look of an audio component from your stereo. This program takes full advantage of the Windows interface, allowing you access to its features with a pointing device or the keyboard. All of BCDP's features are described in the on-line document.

## CONTENTS

- [BCDP's Main Window](#)
- [BCDP's Menu](#)
- [Using the Keyboard with BCDP](#)
- [Using the Mouse with BCDP](#)
- [Play Track Number](#)
- [Repeat Play](#)
- [Shuffle/Random Play](#)
- [Auto Play](#)
- [Error Messages and Problems](#)
- [BCDP.INI File](#)
- [Installing BCDP](#)
- [Installing the \[MCI\] CD Audio Driver](#)
- [Other Programs from Bob's Software](#)
- [How To Get Rid of that Registration Reminder](#)
- [Registration](#)
- [License Agreement and Legal Stuff](#)
- [ASP Ombudsman Statement](#)
- [Technical Support](#)


# BCDP'S MAIN WINDOW



Click on any item when the mouse pointer looks like this:  for more information.



## BCDP'S MENU

The menu for BCDP is attached to the system menu. Click on the system icon  and the menu will appear. The menu has the following options.

- Restore
- Move
- Minimize
- Close
- Switch To...
- Always on Top
- Play
- Cue
- Next Track
- Pause (Pawz)
- Stop
- Review
- Previous Track
- Eject
- Options
- Help
- About...

In addition to the menu, BCDP can also be controlled by the mouse and the keyboard.



## **OPTIONS MENU**

Continuous Play

Shuffle/Random Play

Repeat Track

Auto Play

Disable Status Checking

 **AUTO PLAY**

This option will cause the disc to begin playing when inserted in the drive (without BCDP becoming the active application), or BCDP will start playing the disc when it run.



## **SHUFFLE/RANDOM PLAY**

Pressing this button, or checking this menu item, will cause the tracks on the disc to play in a random order. If a disc is playing, selecting or deselecting this option will cause play to pause for a moment. The reason for this is that BCDP has to send the driver a new play command in order to be notified when a track is over. If a track is currently playing, that track may be replayed before all of the other tracks are played. After all of the tracks are played, they will be played again. Repeat Track has precedence over Shuffle/Random Play.



## **REPEAT TRACK**

Pressing this button, or checking this menu item, will cause the current track to repeat until this option is unselected, or another track is selected with Play Track, Play, Next, or Previous. If a disc is playing, selecting or deselecting this item will cause play to pause for a moment. The reason for this is that BCDP has to send the driver a new play command in order to be notified when a track is over.



## USING THE KEYBOARD WITH BCDP

BCDP can be controlled using the function keys [F1] to [F9]. The function keys are assigned as follows:

- [F1] = Help
- [F2] = Play
- [F3] = Fast Forward/Cue
- [F4] = Next
- [F5] = Pause
- [F6] = Stop
- [F7] = Rewind/Review
- [F8] = Previous
- [F9] = Eject

The function keys will only work if BCDP is the active window and the menu is not open.

You can also control BCDP with the [spacebar] and the [Tab] key. By pressing the [spacebar] you will "press" the button that has the focus. The [Tab] key will switch the focus to the next button. BCDP's buttons will only have the focus when it is the active window. When switching to BCDP, the Play button will have the focus, unless the CD is paused, then the Pause button will have the focus.

When BCDP is the active window, you can switch to any track by pressing that track number. See Play Track Number for more information.

In addition to the keyboard, BCDP can also be controlled by the mouse and through a menu.





## PLAY TRACK NUMBER

If BCDP is the active application, and not minimized, entering a number from 1 to 9 with the keyboard will bring up the "Play Track" dialog box. If the track number is greater than 10 you can enter the rest of it. Pressing "Enter", or clicking "OK" will cause that track to start playing. "Esc" or "Cancel" will close the dialog without playing that track. If you enter a number greater than the number of tracks on the disc it will have no effect.





## **USING A MOUSE WITH BCDP**

A mouse (or other pointing device) is the easiest way to use BCDP. Just click on the button to "press" it and activate that function.

In addition to the mouse, BCDP can also be controlled by the menu and the keyboard.

Please refer to [BCDP's Main Window](#) for the layout of the buttons.

## **PLAY**



, [F2], or Play

Play will start the CD playing at the first track. When BCDP becomes the active window, the Play button will have the focus, unless the CD is paused, where as the Pause button will have the focus.

## **FAST FORWARD/CUE**



, [F3], or Cue

Fast Forward/Cue will move the current playing position ahead 20 seconds in the current track. If closer than 20 seconds to the end of the track, play will resume at the beginning of the next track.

## **NEXT**



, [F4], or Next Track

Next will start play at the beginning of the next track. If the current track is the last track on the disc, Next will cause play to begin at the first track on the disc.

## PAUSE



, [F5], or Pause (Pawz)

If the disc is playing, pressing the Pause button will cause BCDP to stop play and retain the current position. If the disc is paused, pressing the Pause button will cause BCDP to resume playing the disc from the retained position. When BCDP becomes the active window, the Pause button will have the focus if the disc is paused, otherwise the Play button will have the focus.

**STOP**



, [F6], or Stop

Stop will stop the disc playing.

## **REWIND/REVIEW**



, [F7], or Rewiew

Rewind/Review will move the current playing position back 20 seconds in the current track. If closer than 20 seconds to the beginning of the track, play will resume at the beginning of the track.



## **PREVIOUS**



, [F8], or Previous Track

Previous will start play at the beginning of the previous track. If the current track is the first track on the disc, Previous will cause play to begin at the last track on the disc.

## **EJECT**



, [F9], or Eject

Ejects stops play and ejects the disc from the drive.

## TRACK DISPLAY

The track display is visible when the BCDP window is maximized and when it is iconic or minimized. This display provides a quick reference to the status of the CD driver.



This indicates that the drive is empty.



This is displayed when a disc is in the drive but not playing.



When a CD is playing or paused, the current track number will be displayed.

If the Disable Status Checking menu item is checked, a static icon will cover the track display when BCDP is minimized.



## **THE MINIMIZED BCDP WINDOW**

When minimized the track display will take up the entire window. If the Disable Status Checking menu option is checked, when BCDP is minimized it will not repeatedly query the [MCI] CD Audio driver for the status of the CD-ROM drive, and a static icon will cover the track display.



## **DISABLE STATUS CHECKING**

Normally, BCDP will check with the Windows [MCI] CD Audio driver every second to get the status of the drive. This is how BCDP knows when you put a disc in, eject a disc, and when a disc is playing. Some CD-ROM drives are slow to respond, and this status check may seriously slow the system. If BCDP noticeably affects your system's performance, select the "Options | Disable Status Checking" menu item, and minimize BCDP when playing CDs. BCDP's icon title will no longer indicate whether a disk is playing or paused, and a static icon will be placed over the track display. When BCDP is restored from an icon, it will resume the status checks. The state of this menu item is saved in the BCDP.INI file when you close BCDP.

**ABOUT...**

Selecting this menu item displays the BCDP About dialog box which contains the version number, release date, and copyright notice.

**HELP**

Selecting this menu item causes BCDP to have the Windows Help system to display this on-line document.

## **FOCUS**

The button with the focus is the one that will be pressed by depressing the [spacebar]. This button is shown with the gray dashed lines around it.



This button has the focus,



this one does not.



**TITLE BAR**

BCDP's title bar displays the program name "Bob's CD Player" when the CD is not playing or there is not a CD in the drive. "Playing" is displayed when the CD-ROM drive is playing an audio CD, and "Paused" is displayed when the playing CD has been paused. The title bar also flashes the name of each button when they are pressed.

**RESTORE**

Returns the window to its previous, non-iconic, size.

**MOVE**

Selecting this menu item will allow you to use the keyboard to move the window to another position.

**MINIMIZE**

Selecting this menu item will reduce the window to an icon. Refer to [the minimized BCDP window](#), for more information.

**CLOSE**

Selecting this menu item will close the BCDP window. If a CD is playing, it will continue playing.

**SWITCH TO...**

Selecting this menu item will open the Windows Task List, which enables you to switch between running applications and rearrange windows and icons on your desktop.

**ALWAYS ON TOP**

When this menu item is checked, BCDP will display on top of other windows, even when BCDP is inactive. The check status of this menu is saved when you exit the program.



## **CONTINUOUS PLAY**

When this menu item is checked, BCDP will continuously repeat playing of the disc. The check status of this menu is saved when you exit the program.

Note: If you exit BCDP while a disc is playing, and then start BCDP again, without pressing one of the play controls, the current disc will stop at the end. This is because Windows notifies the window that issued the play command, but that window no longer exists.





**HOW TO GET RID OF THE REGISTRATION REMINDER**

Register!



## REGISTRATION

To register BCDP send me:

1. your name,
2. your address,
3. the program's name and version number,
4. where you got the program,
5. your disk preference (5.25 or 3.5), and
6. A check or money order for \$10 US\* (Canada and Mexico add \$1.00, overseas add \$2.00).

To make it easier for you, I have included a registration form as part of this help file. To print that form, make it the current topic, and select "Print Topic" from WinHelp's "File" menu.

Send it to:

Bob Hayes  
Bob's Software  
10104 Blue Tee Terrace  
Gaithersburg, MD 20879

After I receive the above, I will send you a disk containing a personalized version of the program, without the "Registration Reminder". Also included on the disk will be copies of other programs available from Bob's Software, and a few BMP files to use as your Windows background. If you register before June 1, 1995, you will also receive a certificate that will entitle you to one issue of the "JCSM Shareware Collection"™ CD-ROM for only \$9.95 plus S&H.

CompuServe users can register with CompuServe's Shareware Registration Service. Enter **GO SWREG** at the ! prompt and follow the menus. **Bob's CD Player's registration id is 2781.**

\*Note: Please pay with a check or money order that is drawn on a U.S. bank, or an international postal money order that can be cashed at a U.S. Post Office. My bank charges me \$10.00 to cash a check drawn on a foreign bank. Canadian and Mexican orders please add \$1.00, overseas orders please add \$2.00, to cover shipping costs. Please **do not** send credit card numbers, Bob's Software does not have the ability to process credit card orders. I have received a number of orders from Europe where people have sent me U.S. cash, this works for me.



## **LICENSE AGREEMENT AND LEGAL STUFF**

Bob's CD Player - Copyright 1992, 94 by Robert Hayes. All Rights Reserved.

### **LICENSE AGREEMENT**

This copyrighted program is being distributed as shareware. You may try this program for 30 days, and if you like it, or find it useful, and wish to continue using it, you are expected to register with the author. You are free (and encouraged) to copy this program and distribute it to anyone, as long as no fee, other than a nominal fee for the disk and shipping/handling, is charged for the program, and as long as this documentation file accompanies the program.

### **TRADEMARKS**

Microsoft is a registered trademark and Windows is a trademark of Microsoft Corporation. Any other product names mentioned are probably trademarks or registered trademarks of their respective holders.

### **WARRANTY AND LEGAL NOTICES**

Bob's CD Player (BCDP) is provided AS IS without any warranty, expressed or implied, including, without limitation, implied warranties of merchantability and fitness for a particular purpose. Any use by you of the software is at your own risk. In no event shall the author be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use or inability to use this product.

### **THE [MCI] CD AUDIO DRIVER**

The Windows [MCI] CD Audio driver, MCICDA.DRV, provides a high-level interface between Windows programs and a CD-ROM drive. BCDP makes use of this interface, and the driver must be installed before you can use BCDP. For more information refer to [Installing the \[MCI\] CD Audio Driver](#).



## INSTALLING THE [MCI] CD AUDIO DRIVER

1. Start Control Panel and double click the "Drivers" icon.
2. Press the "Add..." button.
3. Select the "[MCI] CD Audio" entry and press the "OK" button.
4. If prompted, insert the Windows disk that is asked for and follow the instructions.
5. Restart Windows.

The driver should be installed, and BCDP should work. For more information, refer to "Installing and Configuring Drivers" in chapter 5 of your [Microsoft Windows User's Guide](#).

NOTE: You need to have [MSCDEX](#) loaded for the [MCI] CD Audio driver to function.

**MSCDEX**

Microsoft's CD-ROM extensions - DOS needs this to assign a drive letter to a CD-ROM. This program is usually provided with the drive, and if you use the drive frequently it should be loaded in your AUTOEXEC.BAT.



## THE BCDP.INI FILE

The BCDP.INI file is where BCDP saves information about the state of various selected options and the location of the BCDP window when you last used the program. BCDP writes changes to this file every time you exit the program, therefore manual edits of the INI file will take effect only the next time you run the program. If the BCDP.INI file gets deleted, a new one will be create automatically. The BCDP.INI file is located in your Windows directory. BCDP does not enter anything into the WIN.INI file, this makes it easy to remove BCDP from your system.



## REMOVING BCDP FROM YOUR SYSTEM

To remove BCDP from your system delete the following files:

- BCDP.EXE - the executable file.
- BCDP.HLP - the Windows Help file (you're looking at it).
- BCDP.INI - the initialization file.
- BCDP.TXT - ASCII text file.

Delete the BCDP icon from any Program Manager groups you may have added it to.

BCDP does not modify any of your system files (WIN.INI, SYSTEM.INI, AUTOEXEC.BAT, etc.).



**REGISTRATION FORM FOR BOB'S CD PLAYER v2.1**

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CITY: \_\_\_\_\_

STATE: \_\_\_\_\_

ZIP: \_\_\_\_\_

COUNTRY: \_\_\_\_\_

EMAIL (SPECIFY: CIS, AOL, INTERNET, ETC): \_\_\_\_\_

VERSION NUMBER: \_\_\_\_\_

WHERE DID YOU GET THE PROGRAM? \_\_\_\_\_  
\_\_\_\_\_

WHAT SIZE DISK DO YOU WANT?     5.25             3.5

COMMENTS OR SUGGESTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLEASE SEND THIS FORM AND A CHECK OR MONEY ORDER FOR  
\$10US Canada and Mexico add \$1.00, overseas add \$2.00) TO:

BOB HAYES  
BOB'S SOFTWARE  
10104 BLUE TEE TERRACE  
GAITHERSBURG, MD 20879



## **INSTALLING BCDP**

To install BCDP, copy BCDP.EXE and BCDP.HLP to any directory on your hard disk and add BCDP to a Program Manager group.

In order to run BCDP you must have the [\[MCI\] CD Audio driver installed](#). If you do not have this driver installed, please refer to the section on [installing the \[MCI\] CD Audio driver](#).



## **ERROR MESSAGES AND OTHER PROBLEMS**

There are two error messages possible when starting BCDP:

1. [MCI] CD Audio Driver Error.
2. Timer Error!.

If other errors occur (i.e. play does not begin after pressing the Play button), check to see that the disc is an audio CD, then eject the disc and reinsert it. This allows BCDP to initialize with the disc, and in most cases will solve the problem.

Please contact me to report any bugs or incompatibilities.



## **[MCI] CD Audio Driver Error**

### **Possible Causes**

Bob's CD Player was unable to open the [MCI] CD Audio device driver. There are a number of possible reasons why BCDP was unable to open the driver. These include:

1. Another program is using the drive. Do you have another program running that is using the drive? Many multi-media programs use the CD-ROM drive and the [MCI] CD Audio device driver.
2. The drive is empty. With some CD-ROM drives, if a disc is not in the drive, BCDP will not be able to open the [MCI] CD Audio device driver.
3. The driver is not on your system.

### **Possible Remedies**

1. Close other applications that might be using the drive.
2. Check to see if there is a CD in the drive, if not put one in and press 'Try Again'.
3. Check to see that the driver is installed. If necessary install the [MCI] CD Audio device driver.



## **Timer Error!**

### **Cause**

Windows 3.1 provides 32 timers for use by applications (Windows 3.0 had only 16). You have applications running that have made use of all of the timers.

### **Remedy**

Close one or more of the applications that you have running and press "Try Again" or start BCDP again.



## **ASP Ombudsman Statement**

This program is produced by a member of the Association of Shareware Professional (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a shareware-related problem with an ASP member by contacting the member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 545 Grover Road, Muskegon, MI USA 49442-9427, Fax 616-788-2765, or send a CompuServe message via CompuServe Mail to ASP Ombudsman 70007,3536.



## **Technical Support**

If you ever have a question about the installation or operation of Bob's CD Player, support is available by phone, mail, and email.



## **OTHER PROGRAMS FROM BOB'S SOFTWARE**

[DiskSpace](#)

[BOING!](#)

[Bob's POV-Ray Front End](#)

[DiskInsert](#)

[Mouse Cursor Editor](#)

[PSPrint](#)

[PC-Piano](#)

[CHKM \(Check Mouse\)](#)

[PCX2TPI](#)

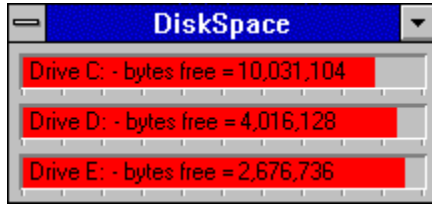
[Program Availability](#)

[Programming Services](#)

[Contacting Bob's Software](#)



## DISKSPACE



Current Version: **0.52**

Archive/BBS file name: **DSW052.(ZIP,ARC,LHA...)**

Registration Fee: **\$7.00**



DiskSpace is a program for the Microsoft® Windows operating system that will allow you to easily monitor the amount of free space on your computer's hard disks. DiskSpace's window displays the number of bytes free and graphically shows the percent of the disk's space allocated. DiskSpace will work with up to 10 logical local drives, and with any size drive. Every second DiskSpace checks the amount of free space available on each drive, and the updates the display only if the amount of free space has changed. When minimized, the bars still display the percent of free disk space.

# BOING!



Current Version: **1.1**

Archive/BBS file name: **BOING1.(ZIP,ARC,LHA...)**

Registration Fee: **\$5.00**



BOING! is a program for the Microsoft® Windows operating system that will allow you to play sound files (WAVE format) with the click of a mouse button. The neat thing about BOING! is that it sits as an icon on your desk top, or on top of other windows, and when you click on it with your right button the sound file that you indicated will play. And since you click it with the right button, the application that you have active does not become inactive. You can run multiple copies of BOING! so you can have lots of sounds just a click away. Be just like those wacky morning radio DJs with crazy sounds livening up your conversations. If you have a sound card, or even just the pc-speaker driver, you'll love BOING!.

## **BOB'S POV-RAY FRONT END**



Current Version: **1.0**

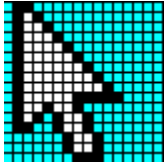
Archive/BBS file name: **BPFE10.(ZIP,ARC,LHA...)**

Registration Fee: **FREWARE (\$0)**

Bob's POVRay Front End, BPOVFE, provides a Windows point and click interface for specifying command line options for the Persistence of Vision Raytracer, POVRay. This program is freeware. Requires Windows and POVRay.



## MOUSE CURSOR EDITOR



Current version: **MCEDIT10.** (MCED10.ZIP on CompuServe)

Archive name: **MCED11.ZIP**

Registration Fee: **\$5.00**

Mouse Cursor EDITor is a programming tool that will enable developers to graphically create mouse cursors. If you have ever manually coded the screen and cursor masks for a mouse cursor you will appreciate this program. Mouse Cursor EDITor will work with all languages. Requires a mouse and EGA compatible graphics. Includes a demo with source and a TP5 mouse unit.

## **PSPRINT**

**\* .TXT → PostScript**

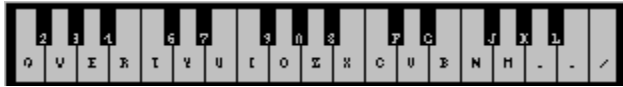
Current version: **2.4**

Archive name: **PSP24.ZIP**

Registration Fee: **\$5.00**

PSPrint will print a text file to a PostScript printer from the DOS command line. Each page is printed with a header containing the file name, the date printed, page number and the total number of pages. Allows font choice and will print up to 220 lines per page. Requires a PostScript printer.

# PC-PIANO



Current version: **1.1**

Archive name: **PC-PIANO.ZIP**

Registration Fee: **none**

PCPIANO Version 1.1 is a fun little program to play simple tunes on you computer.

# CHKM



Current version: **1.1**

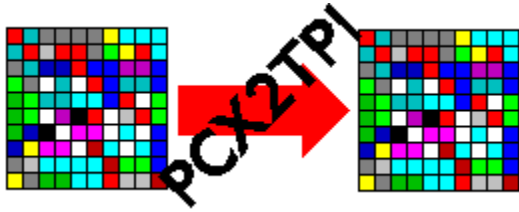
Archive name: **CHKM11.ZIP**

Registration Fee: **none**

CHKM (Check Mouse) Version: 1.1 CHKM, is a small, free utility that checks the status of the mouse driver and mouse. The program will tell you if a mouse driver is installed, the mouse driver version, the mouse type, the IRQ used by the mouse, and the number of buttons.



## PCX2TPI



Current version: **2.0**

Archive name: **PCXTPI.ZIP**

Registration Fee: **\$5.00**

PCX2TPI is a programmers tool to convert 16-color PCX images into a format that can be linked into a Turbo Pascal program and displayed with the PutImage() procedure. Includes an example program with source code. Requires Turbo Pascal and BINOBJ.EXE.

## **PROGRAM AVAILABILITY**

Programs from Bob's Software are available from the following sources:

### **Directly from Bob's Software**

All of the programs listed in this on-line document are available directly from Bob's Software. You may order registered versions of any of the software listed, or you may order a disk containing the Shareware (non-registered) versions of all of the programs for just \$5.00. To make it easy, just print and use the convenient order form included in this file.

### **Online Services**

**CompuServe**

**America Online**

**Channel 1 - (617) 354-3230**

**Exec PC - (414) 789-4214**

**Windows OnLine - (510) 736-8343**

**Waldo's Magic Inc - (301) 929-1722** Established in May, 1991 Running rOverboard 2.0, 20 message areas, and over 350 meg of files of all types, leaning toward games, sound, and Windows apps. Mike Focke's DC BBS listing available monthly. Help with parts and systems available. File requests will be searched on off-line CD. New members welcome at 1200, 2400, or 9600 baud.

**Programmer's Corner - (301) 621-3424**

**...and many more BBSs all over North America**

### **Shareware Disk Vendors**

**JCSM Shareware Collection CD**

JCS Marketing Inc.

P.O. Box 1216

Lakeview, MN 55044

(612) 469-5898

**EMS Professional Shareware Libraries**

4505 Buckhurst Ct.

Olny, MD 20832

(301) 924-3594

**...and many more!**

If you are a Disk Vendor or a BBS operator and would like to distribute programs from Bob's Software, and perhaps be listed here, please contact me.

**BOB'S SOFTWARE ORDER FORM** (BCDP 2.1)

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

PREFERRED DISK SIZE:         3.5                     5.25

REGISTERED VERSIONS:

PRICE	PROGRAM NAME	QUANTITY	\$AMOUNT
\$10	BOB'S CD PLAYER	_____	_____
\$7	DISKSPACE	_____	_____
\$5	BOING!	_____	_____
\$5	DISKINSERT	_____	_____
\$5	PSPRINT	_____	_____
\$5	MOUSE CURSOR EDITOR	_____	_____

SHAREWARE DISK - THIS DISK CONTAINS UNREGISTERED VERSIONS OF ALL OF BOB'S SOFTWARE'S CURRENT RELEASES.

\$5	SHAREWARE DISK	_____	_____
-----	----------------	-------	-------

SUB-TOTAL \_\_\_\_\_

SHIPPING AND HANDLING  
 FOR SHIPMENTS IN THE US ADD \$1,  
 FOR CANADA AND MEXICO ADD \$2,  
 AND FOR OVERSEAS PLEASE ADD \$3 \_\_\_\_\_

TOTAL ---> ---> ---> ---> ---> ---> ---> ---> \_\_\_\_\_

PLEASE SEND THIS FORM AND A CHECK OR MONEY ORDER, PAYABLE TO BOB HAYES, IN US DOLLARS, DRAWN ON A US BANK, OR AN INTERNATIONAL POSTAL MONEY ORDER THAT CAN BE CASHED AT A US POST OFFICE, FOR THE AMOUNT INDICATED AS THE TOTAL TO:

BOB HAYES  
 BOB'S SOFTWARE  
 10104 BLUE TEE TERRACE  
 GAITHERSBURG, MD 20879

THANK YOU.



## **CONTACTING BOB'S SOFTWARE**

If you have any problems installing or using Bob's CD Player, help is available. I would like to hear from you, your comments and suggestions are important to me. If you need to contact me, please send all correspondence to:

Bob Hayes  
Bob's Software  
10104 Blue Tee Terrace  
Gaithersburg, MD 20879

Or you can also reach me on CompuServe @ 71224,3202, America Online, screen name: Bob Hayes1, or the Internet: bobhayes1@aol.com. E-mail is the best way to get a hold of me.

If you need to call me, please call in the evenings (7 to 10pm Eastern), (301) 990-6324.

## PROGRAMMING SERVICES

*Shareware registrations don't pay the mortgage, but they are making the payments on a 486. Thank you to everyone that has registered.*

I am available on a contract basis to provide custom programming services. Services include:



Windows - Based Applications  
DOS Applications (text and/or graphic)  
PostScript Programming  
Demos  
Animations  
On-line Documents

If there is a task that you do over and over again, and you think that there has to be a better way, maybe there is, maybe you need some custom software. [Contact](#) me and we can talk about developing a better way. It probably costs less than you think.

