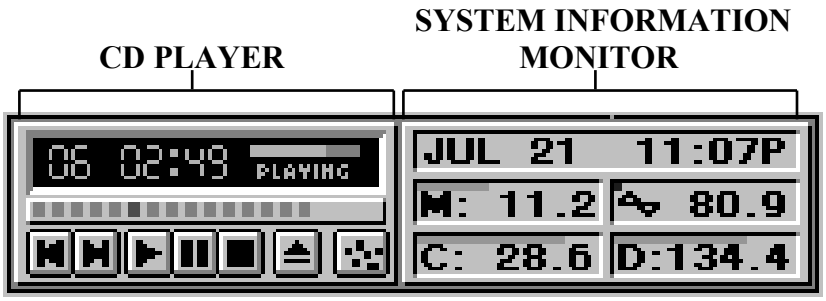
Introducing INFOPlay 1.0!

INFOPlay Version 1.0 is a Windows SHAREWARE program that combines several applications into one application with miniature ergonomic 3D controls and readouts. There are two primary functions of INFOPlay - an audio CD Player interface for your CD ROM drive, and a System Information Monitor and crash protector for your Windows environment. The CD Player allows you to enjoy audio CDs while working in Windows. The System Information Monitor watches all of the critical system resources and warns you when they are nearly depleted thus avoiding a possible system crash.



INFOPlay is SHAREWARE, but has not been crippled in any way. All of the functions described in this document are working in the Evaluation copy of the program. Use INFOPlay for 30 days at no cost. After 30 days you must register the Evaluation copy or discontinue its use as per any standard SHAREWARE agreement. When you register INFOPlay you help assure future revisions, as well as defeat a nagging modal window that appears when INFOPlay terminates!

The program is very fast, and does not excessively interrupt the Windows Operating System. INFOPlay uses only a moderate 6% of the system resources in Windows 3.1 and 3.11, and less than 1% in Windows 95. Yes, INFOPlay has been tested in Windows 95!

Context sensitive HELP is available by right clicking on the control or display of interest.

Install INFOPlay in your STARTUP group and enjoy - Thanks

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DISCLAIMER

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INSTALLATION

INFOPlay requires no special installation. Simply install the following INFOPlay files into a separate directory and run INFOPLAY.EXE.

INFOPLAY.EXE - main executable.
INFOPLAY.INI - Initialization-File.
INFOP.FON - Custom FONT file for the Digital Display, System Information displays, and the CD micro display.
SPACE.DLL - FREEWARE DLL for disk drive information.
ALERT.WAV - default resource warning WAV file.
CDERROR.WAV - default CD Drive ERROR WAV file
HOURLY.WAV - default hourly chime WAV file.

Visual Basic's VBRUN300.DLL (not included) and THREED.VBX file must be in the Windows SYSTEM directory. Also, MMSYSTEM.DLL must be loaded from the SYSTEM.INI file.

REGISTRATION

To register INFOPlay, send the $15 (US dollars / check preferred) registration fee for each copy along with the following personal information:

YOUR NAME
YOUR COMPUSERVE EMAIL ADDRESS
YOUR MAILING ADDRESS
WHERE YOU GOT INFOPlay
ANY COMMENTS, COMPLAINTS, BUGS, SUGGESTIONS

to:
ROGER A. CLARY
456 Philips Drive
Atglen, Pa. 19310

Allow at least two weeks to receive your registration Authorization Code by return mail.

You can also use the CompuServe Shareware Registration Forum to register by EMAIL. On CompuServe GO SWREG and register INFOPLAY 1.0. You registration Authorization Code will be EMAILed to you in a couple of days.

Your personal Authorization Code will include instructions on entering them into INFOPlay.

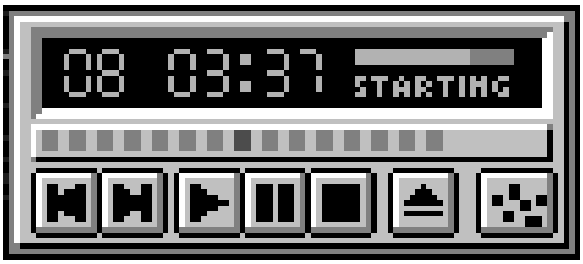
As a registered INFOPlay user your name will be included on a list for automatic upgrades if response to version 1.0 warrants new versions, and you will have supported a new Shareware author. And of course, INFOPlay's exit screen will no longer *take control* of the system until you hit a button!

INFOPlay's Mini CD Player

Compact Disks have established themselves in modern home entertainment centers as the main audio component, and are fast becoming a standard computer mass storage media as multimedia gains strength in the computer market. The Redbook drivers in your Windows operating system and your CD ROM drive can be combined to turn your PC into an audio CD player. With the *right* application, you can enjoy the clean sounds of audio CDs from your multimedia computer.

INFOPlay's CD Player *is* the right application! Operating the Player is as clean as the CD audio sound itself. A couple clicks of the mouse and you can load a disk, start the audio playback, then return to other Windows applications while enjoying the audio CD in the background.

Understanding the CD Player

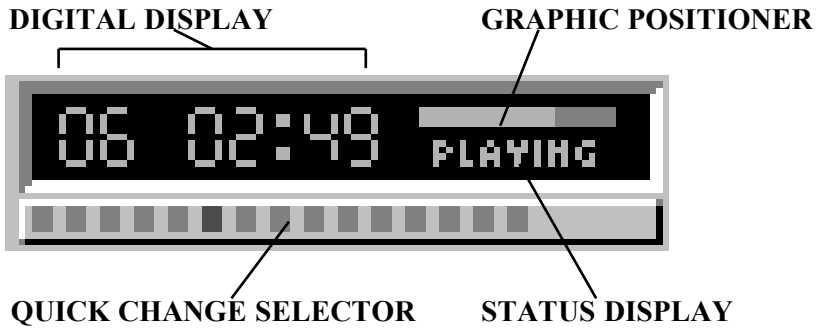


The fully integrated CD Player includes the following features:

- Interactive display with "fluorescent" digital readout
- Micro control buttons for standard playback operations
- Quick Change Selector for instant track access
- Sequential and random Playlist programming
- Introduction scanning
- Continuous looping playback of the CD
- CD ROM detection
- Bad audio track avoidance and error correction
- Auto Idle Shut-Off feature to minimize drive wear
- Miniature size to avoid desktop crowding
- 3D appearance
- Minimum use of CPU resources for drive polling (MCI)

Interactive Display

The main display of the CD Player shows all of the pertinent information regarding the player's current state, and provides a means of control over how the CD is played.



Digital Display Displays track and time position information. Toggles the intensity mode of the display, and is a hotspot to drag the INFOPlay window position or terminate the program.

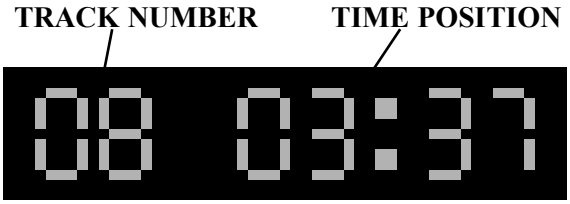
Graphic Positioner Shows the percentage of the current audio track that has been played. Allows you to change the position of the current track.

Quick Change Selector Indicates the current audio track with a red LED, and track(s) to skip with a black LED. Allows instant selection of the first 18 tracks, and programmable disabling of tracks.

Status Display Phrase representing the CD Player's status. Activates the Introduction Scan Mode which plays the first 10 seconds of the playlist. tracks in the

Digital Display

The Digital Display provides you with current track and position information. The display "brightness" can be changed.

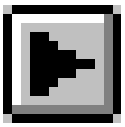


To change the display brightness:

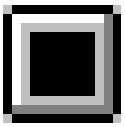
Click the **left** mouse button on the Digital Display. The display intensity will toggle from low to high or high to low.

Playback Controls

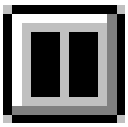
The micro Playback Controls are how the playback operations are initiated on INFOPlay's CD Player.



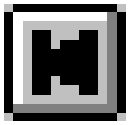
Starts **play** at the beginning of the current audio track. If the CD is already playing, the track is re-started at the beginning. If the CD Player is OFF, the CD is loaded and play starts at the beginning of the first valid track in the playlist.



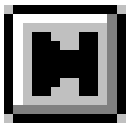
Immediately **stop**s play of the current track, and seeks to the beginning of the first valid track in the playlist.



Pauses or resumes play of a track at its current position



Seeks to the beginning of the **previous** valid track in the playlist. If the CD was playing, play resumes at the beginning of the new track.



Seeks to the beginning of the **next** valid track in the playlist. If the CD was playing, play resumes at the beginning of the new track.

Ejects or loads a CD. If the tray is closed with an audio CD and the player is OFF, or the tray is open with the player ON, the CD is loaded and initialized. If the tray is closed with a CD currently playing, the CD is stopped and the tray ejected.

To start CD playback:

Load an audio CD into the drive and click the PLAY button. The current track will be played from its beginning. If no CD is loaded, the CDERROR.WAV file is played.

To stop playback:

Click the STOP button to stop playing the CD and set the current track back to the first track in the playlist. If no CD is loaded, the CDERROR.WAV file is played.

To pause playback:

Select the PAUSE button. Playback will halt at the current position. Select PAUSE again to restart playback from the current position.

To select a different track:

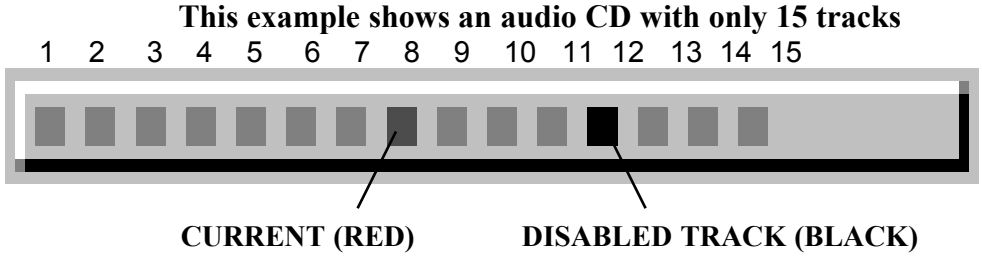
Click the PREVIOUS or NEXT button to more to the beginning of the previous or next track in the playlist. If no CD is loaded, the CDERROR.WAV file is played.

To change the CD:

Click the eject button to open the CD tray or eject the CD caddie.

Quick Change Selector

The Quick Change Selector provides you with the ability to quickly select the track that you want to play, or prevent a track or tracks from being played.
The selector displays gray LEDs; one for each track of the CD up to 18 in total. The LEDs from left to right indicate tracks 1 through 18 (tracks high than 18 are not indicated).



To change tracks:

1. Click and hold the **left** mouse button on the **gray** LED representing the track that you want to change to. Note that the cursor changes to an UP ARROW to show that you are on the selector. As you move the mouse, a green LED will indicate the track under the mouse and the digital track display will turn green while displaying the number of the track.

2. When the green LED and digital track display indicate the track to change to, release the mouse button. The Player will seek to the beginning of the selected track. The LED of the new track will turn red to indicate that it is now the current track.

3. If the CD Player is not playing, press the PLAY button to start playback at the beginning of the new track.

To disable tracks from playing:

1. Press and hold the SHIFT key and the **left** mouse button on the **gray** LED representing the track that you want to exclude from playing. Note that the cursor changes to an UP ARROW to show that you are on the selector. As you move the mouse, a green LED will indicate the track under the mouse and the digital track display will turn green while displaying the number of the track.

2. The LED under the mouse will turn black indicating that it has been excluded from the playlist and will not be played. If track being disabled track is the current track, then the Player will seek to the next valid (enabled) track in the playlist.

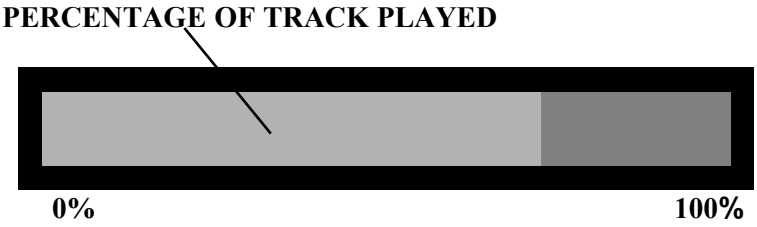
To enable tracks to play:

1. Press and hold the SHIFT key and the **left** mouse button on the **black** LED representing the disabled track that you want to re-include in the playlist. Note that the cursor changes to an UP ARROW to show that you are on the selector. As you move the mouse, a green LED will indicate the track under the mouse and the digital track display will turn green while displaying the number of the track.

2. When the mouse is over a disabled track the digital track display will momentarily turn gray. The LED under the mouse will turn gray indicating that it has been included in the playlist and will be played in turn.

Graphic Positioner

The Graphic Positioner provides you with the ability to change the time position of the current track.



To change time position of the current track:

1. Click and hold the **left** mouse button on the graphic positioner. Note that the cursor changes to an UP ARROW to show that you are on the positioner. As you move the mouse, the highlighted portion of the positioner will turn green to indicate the new time position. In addition, the digital position display will turn green while displaying the new time position of the current track.

2. When the desired time position is reached, release the mouse button. The Player will seek to the new time position of the current track.

3. If the CD Player is not playing, press the PAUSE button to start playback at the new time position of the current track.

Playlist Order Button

The Playlist Order Button allows you to choice whether to generate a sequential or random playlist order.

The Playlist Order button shows which mode is currently being used.

Sequential Playlist Order

Random Playlist Order

The playlist defines the order in which the tracks of the CD will be played. In a sequential playlist, the playlist entries are filled with track numbers arrange in consecutive order starting at track one.

SEQUENTIAL PLAYLIST

Playlist Entry	1	2	3	4	...	16	17	18
Track Number	1	2	3	4	...	16	17	18

In a random playlist, the playlist entries are filled with unique track numbers arrange in a random order.

RANDOM PLAYLIST EXAMPLE

Playlist Entry	1	2	3	4	...	16	17	18
Track Number	5	11	1	17	...	3	18	7

To change the Playlist Order mode:

Click on the Playlist Order button to toggle from Sequential to Random or Random to Sequential. Each time that you toggle to random mode, a new random playlist is created that is different from the last one.

Status Display

The Status Display shows the current status of INFOPlay's CD Player, and allows you to start the Introduction Scanning feature. Introduction Scanning causes the Player to play the first 10 seconds of each valid track in the playlist.

To use the Introduction Scanning feature:

1. Make sure that an audio CD is loaded and that the CD Player is ON.

2. Click on the Status Display. The word SCANNING appears informing you that the scanning mode has been started. The Player will begin at the current track to play the first 10 seconds of each track in the playlist.

3. To cancel the Introduction Scanning feature, click on the Status Display. Scanning will stop, and play normal playback will continue from the present position of the current track. You can also use the PLAY button to end scanning, and restart playback at the beginning of the current track.

The current status of the CD Player is always displayed in the Status Display. The following are descriptions of each of the possible status phrases that could displayed:

CD OFF - INFOPlay starts the CD Player in the OFF mode. The Digital Display, Quick Change Selector, and Graphics Positioner are OFF (grayed out). All controls are disabled save for the DIGITAL DISPLAY and the PLAY, EJECT, and PLAYLIST ORDER buttons. INFOPlay will not interrupt the system to poll the CD Drive for status information.

LOADING -The CD Player is initializing the audio CD in the drive, and load all of the track information. If loading is successful, the CD Player and the Interactive Display are tuned ON. Also the Quick Change Selector displays the correct number of LEDs for the number of tracks on the audio CD.

NO CD - Shows that the CD Player is OFF as in the CD OFF mode, but also indicated that an attempt to load an audio CD failed due to lack of media.

CD ROM - Shows that the CD Player is OFF as in the CD OFF mode, but also indicated that an attempt to load an audio CD failed because a CD ROM is in the drive.

STARTING - Indicates that the CD Player is starting to play the current track from the present time position. During start-up, the system cursor changes to indicate that the system is waiting for CD drive.

 waiting for CD cursor

PLAYING **-** Indicates that the CD Player is playing the current track. The Player displays are updated once every second after the drive is polled.

Status Display cont...

STOPPED - Indicates that INFOPlay's CD Player has been stopped, and is waiting at the beginning of the first valid track in the playlist. The Player displays are update once every second after the drive is polled. If the CD Player remains in the STOPPED mode for more than 5 minutes, the Auto Shut-Off feature will turn the Player OFF and stop polling the drive.

PAUSED - Indicates that play of the current track has been halted. The Player displays are updated once every second after the drive is polled.

SEEKING - Indicates that the current track is being changed or that a new time position is be sought. While seeking, the system cursor changes to indicate that the system is waiting for CD drive.

 waiting for CD cursor

BAD TRACK - Indicates a failed attempt to seek to a new track or time position, or that the current track could not be played. The bad track will be exclude from further use in the playlist.

OPEN - The CD tray is open and the CD Played is ON.

NOT READY - The CD disk has not reached the proper RPM to be read yet. Also indicates that a CD drive that requires a caddie does not have the caddie loaded.

CD ROM Detection

In a Multimedia PC environment there are essentially three types of CD media:

- CD ROM - data only
- Split Track CD ROM - data and audio tracks
- Audio CD - audio only

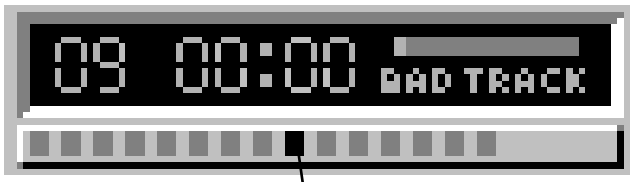
INFOPlay's CD Player can only access **Audio or Split Track** Compact Disk audio tracks.

If you attempt to load a CD ROM disk the CDERROR.WAV will play and the Player will shut OFF. In addition, the Status Display will show "CD ROM" indication that a CD ROM is in the drive.

A Split Track CD ROM *can* be loaded by the Player. On this type of CD ROM the first track contains the ROM data and the remaining tracks are the audio tracks. When an attempt is made to play the first CD track, INFOPlay's CD Player marks the track as BAD and will no longer attempt to play it (see below for BAD TRACK avoidance information). Any of the other audio tracks on the ROM can be play normally as you would with and audio CD.

Bad Track Avoidance

Occasionally an audio CD track is damaged and can't be read correctly by the CD drive. When one of these "bad tracks" are encountered INFOPlay's CD Player automatically marks the track as BAD by removing it from the playlist and turning the tracks LED black on the Quick Change Selector. When a track is marked bad the CDERROR.WAV file is played, and the Status Display will momentarily read "BAD TRACK" to indicate that the current track is now disabled.



TRACK 9 BEING MARKED AS BAD

Once a track is marked bad it can not be selected for play from the Quick Change Selector or the PREVIOUS or NEXT buttons unless it is first enabled for play again (see *"To enable tracks to play"* above for more information).

INFOPlay's System Information Monitor

A common worry while working in Windows is that the dreaded General Protection Fault Error will occur and cause the loss of information or worse yet, crash the hard drive. There are applications on the market that watch the key Windows resources and warn the operator when they reach a critical level so that a possible GPF can be avoided.

INFOPlay's System Information Monitor *is* one such application! Operating in the background, the SIM (System Information Monitor) keeps watch on the Global Resource pool, available Memory, hard drive space, and also displays the CPU work load and speed. If any of the resources exceed a user defined level, an alarm warns you to take corrective action.

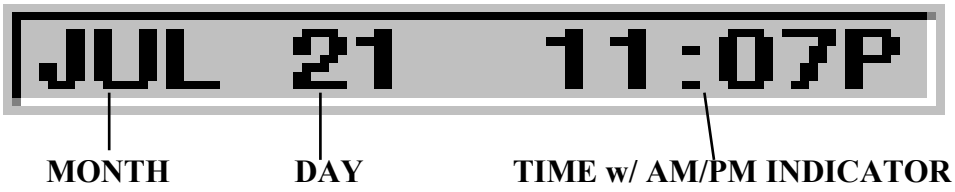
Understanding the System Information Monitor

The System Information Monitor runs in the background and includes the following features:

- Time and Date display
- Programmable hourly chime
- System Resources used gauge with programmable alarm level
- Free Memory display with programmable alarm level
- Hard Drive display and gauge for disk space status
- Programmability for monitoring one or two drives (physical or logical)
- User defined hard drive letters on multiple hard drive or partitioned systems
- Comparative CPU speed displayed in MHz (frequency) or MIPS (millions of instructions per second)
- CPU Usage gauge in percentage of full load
- Miniature size to avoid desktop crowding
- 3D appearance

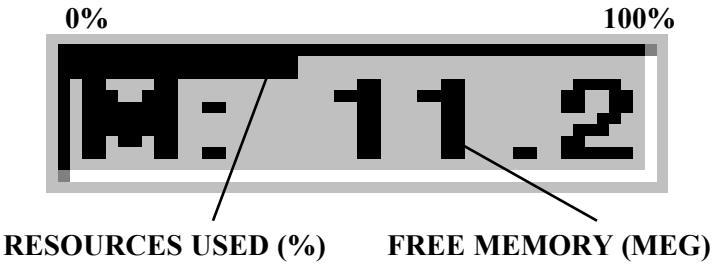
Time and Date Display

The Time and Date display is a straight forward display panel of the current system time and date. By defualt, the INFOPLAY.INI is configured to play the HOURLY.WAV at the top of the hour.



Memory Display and System Resources Gauge

The amount of free total memory and the percent of system resources used are indicated in this panel. Memory and resource information are calculated and displayed once every two seconds.



The percentage of System Resources used is indicated by a bar gauge in the top of the panel. From left to right the gauge reads 0 to 100 percent. The gauge appears in one of three colors, each representing a programmed warning level.

1. RED - Depleted. Indicates that the user programmed value of the used resources has exceeded the Depleted Level.
2. YELLOW - Warning. Indicates that the user programmed value of the used resources has exceeded the Warning Level.
3. GREEN - Normal. Indicate that the amount of used resources are below the Warning and Depleted Levels.

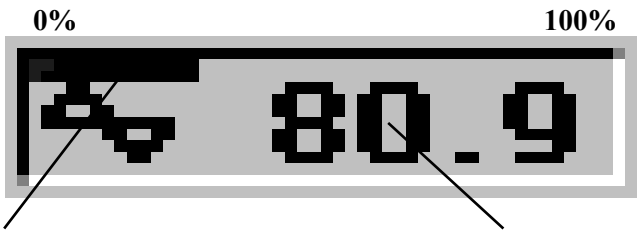
The Warning and Depleted Threshold Levels are set in the INFOPLAY.INI file. When the percentage of used resources have exceeded the Depleted Level the ALERT.WAV will sound once every 2 seconds to alert you. You can silence the alarm by **left** clicking the mouse on the panel.

Total memory is defined as RAM plus Virtual (Swap File) memory. The amount of free total memory is displayed in the panel as a number indicating the amount free in Megabytes. The background color of the panel is nominally gray. However, if the free system memory falls below the programmed value of minimum memory free then the panel background color flashes red.

The Minimum Memory Threshold Levels are set in the INFOPLAY.INI file. When there is insufficient memory left the ALERT.WAV will sound once every 2 seconds to alert you. You can silence the alarm by **left** clicking the mouse on the panel.

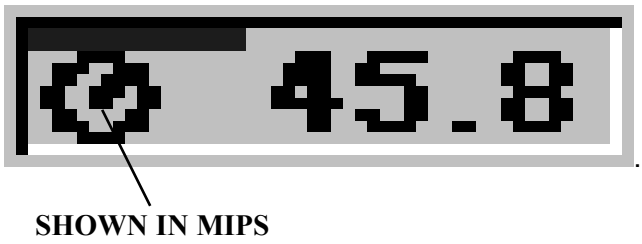
CPU Speed Display And Usage Gauge

This panel contains information pertaining to the performance of the micro-processor.



A blue gauge bar in the top of the panel indicates the current load on the CPU. The value is a percentage of full CPU load, and reads from left to right to indicate 0 to 100 percent. The CPU load is measured and the gauge updated once every second.

The display in the center of the panel shows the current CPU speed under the current work load. The speed can be display in Megahertz indicated by the SINE Wave (above) or in Dhrystone Millions of Instructions Per second indicated by a stopwatch. (below).



You can toggle from MHz to MIPS or MIPS to MHz by **left** clicking the mouse in the panel.

Under normal conditions this display should read the rated CPU frequency in MHz or the nominal MIPS count. Certain applications or heavy CPU loads can cause the value to vary. The CPU speed is measured and the display is updated at intervals programmed by the user in the INFOPLAY.INI file. The default rate is once every sixty seconds.

FOR PENTIUM OWNERS: To correctly display the CPU frequency of a Pentium Processor a parameter in the INFOPLAY.INI file must be changed. Under the System Performance section the Pentium_Processor parameter must be set to “YES”.

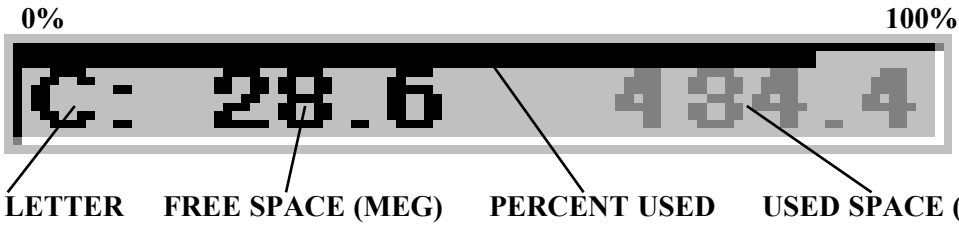
Pentium_Processor=YES

NOTE: The measurement of the CPU speed takes approximately 150 ms. Therefore, to prevent slowing the system performance, set the CPU_Speed_Update_Rate to the longest interval that you can comfortably tolerate.

Hard Disk Information Panel(s)

A Disk Information Panel shows the free disk space and/or disk space used on one or two local hard drives. Hard disk space information is read and the panel is updated once every two seconds.

If your system has only one hard drive with one logical partition installed then both the free and used disk space amounts will be displayed along with a percent used gauge.

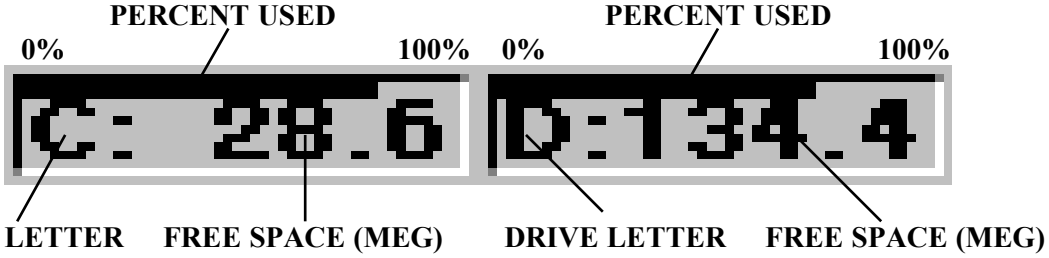


The percentage of hard disk space used is indicated by a bar gauge in the top of the panel. From left to right the gauge reads 0 to 100 percent. The gauge nominally appears in green. If the free disk space falls below the programmed value of minimum free disk space then the gauge color changes to red.

The amount of free space is displayed in a dark color while the used space is displayed in a light color. Both numbers in the panel indicate the amount of space in Megabytes. The background color of the panel is nominally gray. However, if the free disk space falls below the programmed value of minimum free disk space the panel background color flashes red.

The Minimum Disk Space Threshold Level is set in the INFOPLAY.INI file. When there is insufficient disk space left the ALERT.WAV will sound once every 2 seconds to alert you. You can silence the alarm by **left** clicking the mouse on the panel.

If your system has more than one hard drive installed, or a single hard drive has logical partitions, you may elect to monitor two drives. When monitoring two drives only the free space *or* used space for a given drive can be displayed at one time. In addition, a gauge representing the percentage of disk space used will be displayed in the top of each panel for both drives.



The default configuration is to display free disk space in each panel. However, you can change a panel to display used disk space instead. To toggle from free to used or used to free disk space **left** clicking the mouse on the panel of the drive to change.

The amount of free space is displayed in a dark color while the used space is displayed in a light color.

When monitoring two drives you can set a different Minimum Disk Space Threshold Level for each of the drives being monitored.

INFOPlay's Information File

At present, all of the user configurable options are set by either clicking on panels or buttons on the INFOPlay window, or by changing a parameter in the INFOPLAY.INI file. The information file is divided into several sections:

[User]
Contains user name and registration information.

[Options]
Controls the appearance and location of the window.

[CD_Player]
Parameters related to the CD player operation.

[Time_And_Date]
Hourly chime configuration.

[Memory_And_Resources]
System memory and resource alarm threshold parameters.

[System_Performance]
CPU speed and load display configuration.

[Disk_Box_One]
Disk drive one panel configuration and alarm threshold parameters.

[Disk_Box_Two]
Disk drive two panel configuration and alarm threshold parameters.

Please refer to the comments in the INI file for a description of the available parameter choices and the effects.