

# Ladybug 1.00 for Windows

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## Introduction

**MPEG** means "Moving Picture Experts Group". This group is working under the direction of the International Standards Organization (ISO) for the standards of compressed motion pictures and associated audio. **MPEG-1** had been completed

in Oct. 92 known as International Standard ISO-11172.

**Ladybug 1.00** is a software implementation of **MPEG-1** decoder without audio associated. It works from reading a .mpg file and then decoding the code with Huffman decode algorithm, IDCT (Inverse Discrete Cosine Transform), Motion Compensation for P (Predicated) and B (Bidirectional) frames, and Halftone algorithms.

### **Ladybug 1.00 Properties:**

- **Object-Oriented Software System**
- **Friendly Graphic Uesr Interface (GUI)**
- **View MPEG File Variable From Icon To Full Screen**
- **Used as a MPEG Viewer on Internet with a WWW browser**
- **Decode full MPEG-1 video frame types (all I, P, B frames)**
- **Graphics Accelerator with WinG in Windows 3.1**
- **32bit optimization code for x86**

## Architecture

**Ladybug** is designed as an evolution software system that is portable to many platforms. There are several releases of Ladybug target at different markets.

Network version is optimized for Internet access. It can connected with a WWW browser such as Mosaic and Netscape to view the MPEG video clips through Internet.

CDROM version is optimized for CD-ROM access. It includes some interactive and index fundtions. It is a basic tool to play titles and games on the CD-ROM.

This release is the Network version of the Ladybug 1.00 for Windows.

## Architecture

<b>USER</b>	CD-ROM titles Games Network Browser Education
<b>SYSTEM</b>	Windows95/NT Windows 3.1 + Win32s + WinG
<b>ARCHITECTURE</b>	Object-Oriented System Graphic User Interface (GUI) Graphic Acceleration
<b>MICRO-STRUCTURE</b>	Video --> GOP --> Picture --> Slice --> Microblock - -> Block Huffman --> IDCT Bit Stream

## Object Oriented User Interface

**Ladybug** is an object-oriented MPEG player. Users view the mpeg object through a window object and select the demanded commands or operations by menu, button, and dialog box. The mouse and keyboard are the main pointer devices.

After running the ladybug, a window object is displayed on the screen. It includes

- **<System menu>** can be used to close the object and resize the window.
- **<Title bar>** shows the name of the .mpg file object. When there are no open files, the window display "Ladybug for MPEG". Users can point at the title bar and drag the window to relocate.
- **<Client area>** shows the animation of a MPEG object. It is also an interactive area that users can active a pop-up menu to operate on the object.
- **<Menus>** are a common way of presenting commands in an interface. There are a list of **<items>** in a menu that represent the commands. In the Ladybug pop-up menu is the efficient interactive tools to view and command an object. In this way Ladybug demonstrates the principle of display on demand. Pop-up menu is displayed at the current location of the mouse cursor, this eliminates the need to navigate the mouse to get commands. It also saves the screen space.

When clicking the client area of the Ladybug window with the right button of the mouse, a pop-up menu is displayed. On the down transition of the right button, the MPEG object is identified. On the up the menu is displayed to the center and below the cursor location of the mouse.

The menu items in the pop-up menu of the Ladybug are always connected to the MPEG object.

# Requirements

## · *Hardware Environment Requirements*

<b>Machine</b>	Minimum 386sx, Better for 486DX, DX2, DX4, Best for Pentium, K86
<b>Memory</b>	4 MByte memory above
<b>Harddisk</b>	5 MByte free space available
<b>Video Card</b>	SVGA or higher with 256 or 16.7 millions colors The best quality is for 800x600, 256 colors or 1024x768 256 colors

## · *Software Environment Requirements*

### **Windows 3.1/Windows 3.11**

Win32s is required.  
If you did not install Win32s setup will install it first.  
WinG will be installed.

### **Windows NT/Windows95**

Do not need Win32s.

## Installation

In the DOS prompt copy all the files in the diskettes to a directory **LADYBUG** in the harddisk. Run `w32s120.exe` program then start Windows or change to Windows mode. Find the `setup.exe` in the directory **LADYBUG**, then double clicking it in the File Manager to start the setup. Following the setup step to complete the installation.

- **More details about installation**

Suppose there are at least 3MB free space in C: driver. In DOS prompt, Insert Disk #1 type `INST32S` for Windows 3.1/3.11 and `INSTW95` for Windows 95/NT and then following the prompt, all the files will be copied to the directory **C:\LADYBUG**.

Then change to Windows mode or start Windows with Win. In File Manager find the directory **C:\LADYBUG** and file `setup.exe`. Point to **setup.exe** and double clicking it you begin to install the Win32s. Following the prompt to complete your installation of Win32s. And then go back to **C:\LADYBUG** directory run `ladybug.exe`.

After successful installation you could delete the directory **C:\LADYBUG\WIN32S** to save space. In File Manger select File menu and Delete item you could delete it.

- **Requirements to install Win32s on Windows 3.1**

It is necessary to run `SHARE.EXE` on DOS before running Windows. Add `SHARE.EXE` to your `AUTOEXEC.BAT` file. It is recommended that set your `files=30` in `CONFIG.SYS`.

- **Disabling or Disinstalling win32s**

It should be no necessary to disable the win32s if you do not care about the capacity of harddisk. If you must disable win32s or you must reinstall the Win32s then

- Remove following line from Windows `SYSTEM.INI` file in the [Enh36]

**device = c:\windows\system\win32s\w32s.386**

- Delete the `w32sys.dll` and the `win32s16.dll` files from the `windows\system` directory and all files in the subdirectory `windows\system\win32s`.
- Restart Windows 3.1.

- **Disabling WinG**

There is no need to disable the WinG if you do not use it. WinG is really required for Ladybug 1.00 version of Windows. If you must disable WinG then

Delete following files in the directory `C:\WINDOWS\SYSTEM`

**dva.386, wing.dll, wing32.dll, wingde.dll, wingpal.wnd, wingdib.dr**

## Playback

### • Playback Disk or CD-ROM File

1. Clicking the Ladybug 1.00 icon or Run ladybug.exe a initial window is displayed
2. Clicking **RIGHT BUTTON** of the mouse in the area of the initial window, there is a floating popup menu appeared.
3. There are several menu items on the popup menu.

Command	Action
<b>Open</b>	to open a .mpg file select a .mpg file from a file list box
<b>SaveAs</b>	to save a frame of video as a image file.
<b>Play</b>	to play a opened .mpg file if you press the right button of the mouse the player will pause and display the popup menu. If you select the Stop item, when you press the left button of the mouse, the player will stop, otherwise the player will continue.
<b>Step</b>	to play forward step by step.
<b>Stop</b>	to stop the palyer.
<b>Options</b>	to make the choice of a checklist you could choice 2 times image and so on.
<b>Infomation?</b>	to display ladybug information when you finish a .mpg play. You could read the timing result and the rate of frames per second. Clicking the <b>Help</b> button you can read online help file.
<b>Exit</b>	to exit the Ladybug

4. While you are playing if you press right mouse button down, the popup menu appeared and the player pause. When you press left mouse button again without choice any items, the playing procedure continue. If you select stop item, the Ladybug shows the demo window and stop.

### • Playback With A WWW Browser

**MIME** (Multipurpose Internet Mail Extensions) is a method to organize file types. Mosaic and Netscape can not handle all the MIME file types internally. So you need external viewers to associate some MIME files and read them.

Name	MIME TYPE
HTML	.html
Compressed File	.zip
Rich Text Format	.rtf
PostScript	.ps
MPEG	.mpg or .mpeg

JPEG	.jpg
Word Doc	.doc
Audio	.au or aiff

- **In the Mosaic:**

You need an external viewer and associate these file types to an application in the **MOSAIC.INI** file. When active a file Mosaic will invoke the viewer.

Edit the **MOSAIC.INI**  
In the [**Viewers**] section of the **MOSAIC.INI** file add

```
TYPE1023="video/mpeg"
```

where we set n=1023 make sure it is a unique integer.

```
video/mpeg="c:\ladybug\ladybug.exe %ls"
```

c:\ladybug is the directory where the ladybug.exe is in.

In the [**Suffixes**] section define the file type extensions.

```
video/mpeg=.mpeg, .mpg
```

Save the MOSAIC.INI file and restart the mosaic.

- **In the Netscape:**

Start Netscape, choose **Options|Preferences** item. Push the first button with panel (default is **Styles**), select the item **Helper Applications**. To have Netscape start an external viewer, select the **Mime Type** in the list, then choose the radio button **Launch Application**. Choose ladybug.exe as the .mpg external viewer.

## Copyright

This copyright notice is valid for full version of **Ladybug 1.00 for Windows**.

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**Welcome Users Give Us Any Suggestions About Ladybug.  
Welcome OEM, Retailers, and Wholesalers to Contact Us.**

# **Have Fun With Ladybug!**

