



# *ThumbsUp!*

[Introduction](#)

[Getting Started](#)

[Toolbar](#)

[Menus](#)

[View Window](#)

[Glossary](#)

[License](#)

[Ordering Information](#)

[Hints and Tips](#)

[Restrictions](#)

[Thanks to...](#)

---

This software is based in part on the work of the Independent JPEG Group.

Windows is a trademark of Microsoft Corp.

GIF is a service mark of CompuServe, Inc.

Word for Windows is a trademark of Microsoft Corp.

Various other product names mentioned in passing are trademarks or service marks of their respective owners.

---

Copyright © 1993 Cerious Software. All Rights Reserved.

## Introduction



**ThumbsUp** is a graphic file previewer, locator and organizer which simplifies the process of finding and maintaining graphics and clip-art files. It displays a small image (Thumbnail) of each file. You can use ThumbsUp to browse, view, crop, launch editors, and copy images to the clipboard. You can use drag-and-drop to organize graphics files by moving them to appropriate directories. ThumbsUp will also create a slide show from selected graphics, and install bitmap files as Windows wallpaper. You can print individual graphics files, or the thumbnails themselves as a catalog. Though not designed primarily as a conversion tool, ThumbsUp can convert any image that it displays to the appropriate native windows format. ThumbsUp will also convert metafile graphics to bitmaps.

ThumbsUp currently handles the following types of files (more to be added with each subsequent version):

- .BMP Windows Bitmap files (also recognizes .DIB and .RLE extensions)
- .WMF Windows Metafiles and Placeable Metafiles
- .GIF CompuServe Graphics Interchange Format files
- .PCX ZSoft Picture files
- .ICO Windows Icon files
- .JPG JPEG compressed files (in JFIF format)
- .TTF TrueType fonts
- .MND Mandelbrot for Windows image files (also handles .MNI)
- .CDR CorelDraw V3/4 files (preview image only)

By using the Graphics Import Filters supplied by Microsoft with **Word for Windows 2.0** and other packages, ThumbsUp will also handle these (and more) graphic file types:

- .CGM Computer Graphics Metafiles
- .DRW Micrografx Designer and Draw
- .EPS Encapsulated Postscript files
- .HGL HP Graphic Language
- .PIC Lotus 1-2-3 Graphics files
- .PLT AutoCAD Plot files
- .TIF Tagged Image Format files
- .WPG DrawPerfect graphics files

## Directory Color Codes

If the option to Indicate Thumbnails is on from the Tree menu, each directory folder is colored to indicate the presence of thumbnails on the path.



There are no files in this directory with thumbnails, and no sub-directories have thumbnailed files either.



This directory contains no thumbnails, but one or more sub-directories do.



This directory contains thumbnails, but has no sub-directories with thumbnails.



This directory contains thumbnails, and has sub-directories with thumbnails.



This off-line directory has thumbnails.



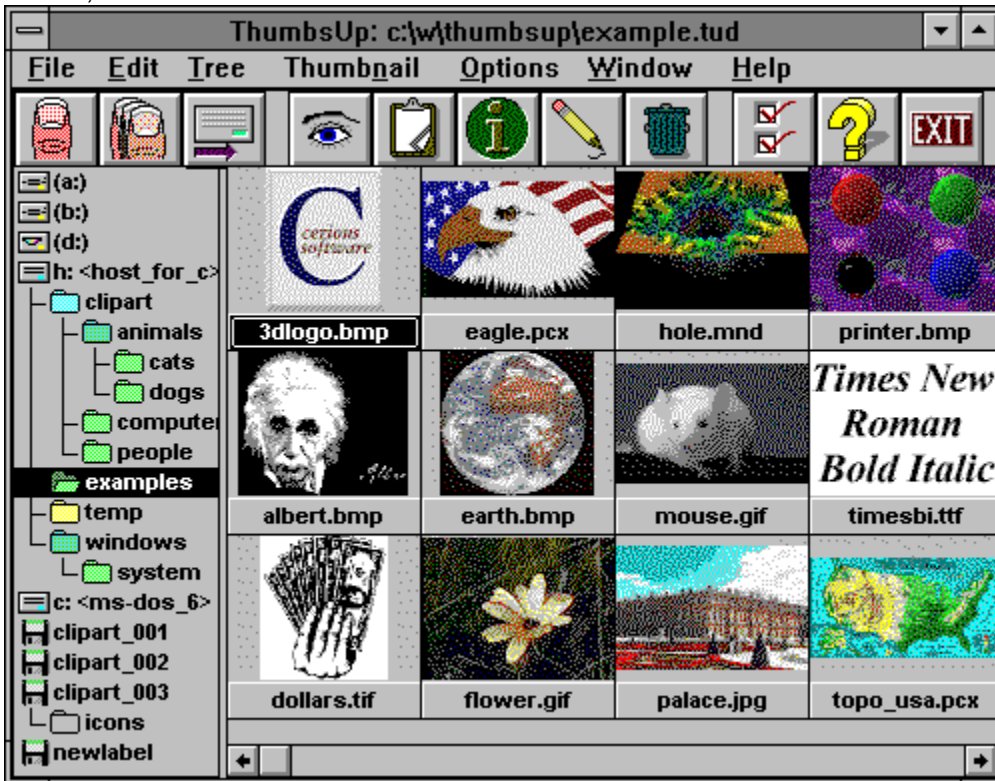
This off-line directory has sub-directories with thumbnails, but none of its own.




This off-line directory has both thumbnails and sub-directories with thumbnails.

## Main Window

The main window consists of the normal Windows interface (title bar, menus, etc.) and three functional areas, as shown below:



 Click on the picture above (anywhere the cursor becomes a hand) to find out about the various parts of the display.

### Additional information:

The toolbar provides short-cuts to several frequently-used commands.

The **directory list** displays disks and directories from which you may select a directory to display. Unless disabled from the Tree menu, directories are color-coded to indicate the presence of previously "nailed" images:

Selecting a directory works much like the Windows File Manager; most operations and menu short-cuts work similarly, and you can drag-and-drop selected files to move or copy them to different directories and drives.

When you select a directory from the **directory list**, file names (and thumbnails, if generated), display in the file list.

You may select one or more files from the file list, then take action on the selected image(s) from the toolbar or menus.

You may also drag the selected files to a new directory or disk.

## **Selected File**

The captions (file names) of selected files are highlighted. Some toolbar and menu options will be grayed if no files are selected.

## Scrollbar

A scrollbar allows you to select the part of a list of items you want to display, when all of the items will not display in the area. For vertical scroll bars, click on the left and right arrows to move a column at a time; for horizontal scroll bars, click on the up and down arrows to move a line at a time.

You can drag the box to move proportionally within the scrolled data; you can click on either side of the box to move a full window of information at a time.

## Selected Directory

The currently selected directory in the directory list is highlighted. This is the directory that contains the files in the file list.

## Disk and Volume Icons

All disk drive in your system and all removable disks (floppies and CDROMs) that you have scanned for thumbnails are represented by small icons in the directory list.



Removable diskette, such as 3.5" and 5.25" floppies.



A local, fixed hard drive.



A network (remotely mounted) drive.



A CDROM drive.



A memory (RAM) disk, used only for temporary storage.



An offline volume which has been scanned for thumbnails. You can view the thumbnails for these volumes without having to insert them in a drive.



## Disk Labels

Every disk or diskette used in DOS and Windows can have a volume label. If you want to keep track of files on multiple disks, it will be much less confusing (to you and to ThumbsUp) if each disk is labeled uniquely.

## Vertical Split Bar

The cursor will change when over this area. You can press the left mouse button and drag the split bar to the desired position, so the directory and file lists are the sizes you want.

## Maximize

This button maximizes ThumbsUp (resizes it to fill the screen). You can click this button again to restore ThumbsUp to its previous size.

## Minimize

This button minimizes ThumbsUp (reduces it to an icon). You can double-click the icon to restore ThumbsUp.


## Title Bar

This caption shows the current program (ThumbsUp in this case), along with the file it has open.

## System Menu

Selecting this button brings down the standard Windows system menu, from which you can move, size, restore, minimize, maximize, or close ThumbsUp. You can also bring up the Task List (with the Switch To option) to switch to another application in Windows.

## Toolbar

 Click on any button below to see a description of its action.



## ThumbsUp Menus




*Click below on the menu of interest.*

**File** **E**dit **T**ree **Th**umbnail **O**ptions **W**indow **H**elp



<u>F</u> ile	<u>E</u> dit	<u>T</u> ree	<u>T</u> humb <u>n</u> ail	<u>O</u> ptions	<u>W</u> indow	<u>H</u> elp
<b>V</b> iew						<b>E</b> nter
<b>E</b> dit...						<b>S</b> hift+ <b>E</b> nter
<b>I</b> nformation...						<b>F</b> 6
<b>P</b> rint...						<b>F</b> 9
<b>P</b> age <b>S</b> etup...						<b>C</b> trl+ <b>F</b> 9
<b>P</b> rinter Setup...						<b>C</b> trl+ <b>F</b> 8
<b>C</b> opy...						<b>F</b> 5
<b>M</b> ove...						<b>S</b> hift+ <b>F</b> 5
<b>R</b> ename...						<b>C</b> trl+ <b>S</b> hift+ <b>F</b> 5
<b>D</b> elete...						<b>D</b> el
<b>C</b> reate Directory...						<b>C</b> trl+ <b>F</b> 5
<b>W</b> allpaper (Center)						<b>F</b> 7
<b>W</b> allpaper (Tile)						<b>S</b> hift+ <b>F</b> 7
<b>S</b> lide <b>S</b> how						<b>F</b> 8
<b>P</b> rint Catalog...						<b>S</b> hift+ <b>F</b> 9
<b>C</b> atalog Setup...						<b>C</b> trl+ <b>S</b> hift+ <b>F</b> 9
<b>R</b> egister <b>T</b> humbsUp...						
<b>E</b> xit						<b>A</b> lt+ <b>F</b> 4

 *Click on any selection above.*



## **File - View**

**Enter**

Opens a view window for each of the currently selected files, up to the maximum specified in the General Options dialog box. This option will be grayed if no files are selected.

From the General Options dialog box, you can selecting Viewing as the default (double-click) action for files.



## **File - Edit**

## **Shift+Enter**

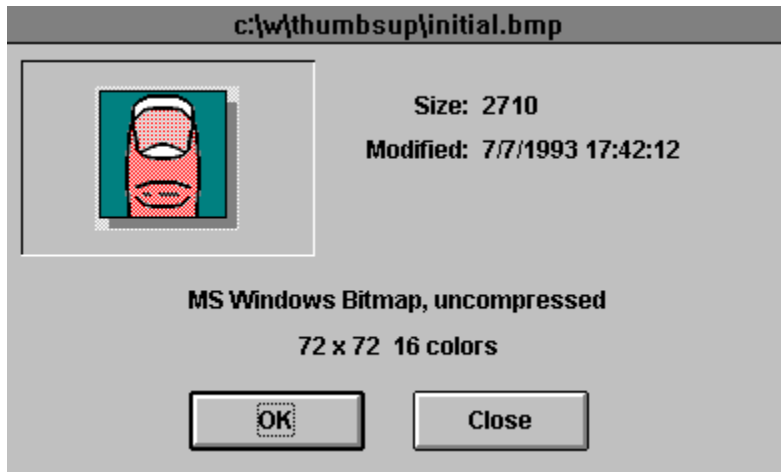
Edits the first selected file by launching the editor defined for its file type. To modify the editor defined for a file type, select File - Modify Options - Editors.

From the General Options dialog box, you can selecting Editing as the default (double-click) action for files.



## File - Info

F6



This option displays an information window for each selected file in turn. Press **Next** to continue to the next selected file or **Cancel** to stop.



## **File - Delete**

## **Delete**

Deletes the selected file(s). If confirmation of file deletion is selected from the Confirmations dialog box, you will be prompted whether or not to delete each file.

## File - Wallpaper (Center)

F7

This option installs the first selected file in the file list as the Windows wallpaper on the desktop. If the file is not a Windows bitmap file, or if it is not on a local hard drive, it is converted to a bitmap and copied to a temporary file, which is installed.

This option centers the bitmap on the screen, and is recommended for large images.

## **File - Wallpaper (Tile)**

**Shift+F7**

This option installs the first selected file in the file list as the Windows wallpaper on the desktop. If the file is not a Windows bitmap file, or if it is not on a local hard drive, it is converted to a bitmap and copied to a temporary file, which is installed.

This option tiles the screen with the bitmap, and is recommended for small images.

## **File - Slide Show**

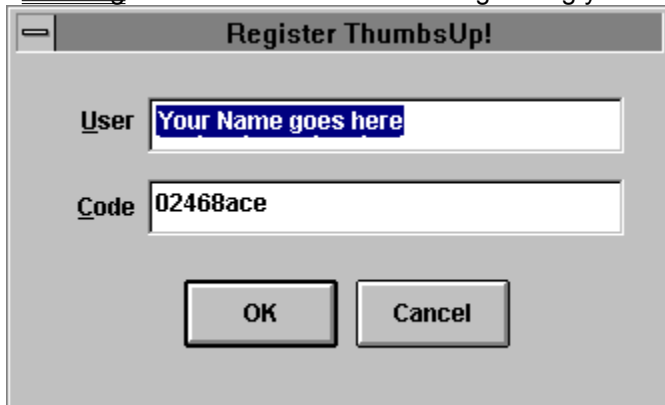
**F8**

Displays the selected images one at a time, in full-screen mode, with a delay between images. Press any key or the left mouse button to end the slide show. You can configure the slide show by selecting Options - Slide Show.



## File - Register ThumbsUp

After you have paid the ThumbsUp registration fee, use this option to enter your name and code. See [Ordering](#) for more information about registering your copy of ThumbsUp.



A dialog box titled "Register ThumbsUp!" with a close button in the top-left corner. It contains two text input fields. The first field is labeled "User" and contains the text "Your Name goes here" in blue. The second field is labeled "Code" and contains the text "02468ace". At the bottom of the dialog are two buttons: "OK" and "Cancel".

Register ThumbsUp!	
User	Your Name goes here
Code	02468ace
OK Cancel	

## File - Copy

F5

Prompts for the desired directory to copy the selected files to, and copies them there. Alternately, you can drag the selected files to the intended directory. To force copying (rather than moving, which is the default when dragging files to a directory on the same disk), you can hold down the **CTRL** key while dragging.

## Icon

An icon is a small representation of something. Generally, icons in the Windows environment are not worshiped, though judging by the size of some people's icon libraries, they're at least *admired*.

## File - Move

## Shift+F5

Prompts for the desired directory to move the selected files to, and moves them there. If the directory is on another disk, this will copy each file, then delete the original. Alternately, you can drag the selected files to the intended directory. To force moving (rather than copying, which is the default when dragging files to a different disk), you can hold down the **SHIFT** key while dragging.

## **File - Rename**

**Ctrl+Shift+F5**

Prompts for a new file name for each selected file, and renames it accordingly. You cannot move a file to a different directory with this option; use File - Move instead.

## File - Create Directory

Ctrl+F5

Prompts for a directory name to create as a sub-directory for the current directory (selected in the **Directory List**).

Note that since it has no thumbnailled files int it, this new directory will not be visible in the directory list unless Tree - List Thumb Dirs Only is **not** checked.

## File - Print Catalog

Shift+F9

Prints a catalog of the thumbnails in the database, organized by directory. If you choose to print only the selection, then ThumbsUp will print thumbnails for the selected directory in the Directory List, and all its sub-directories. If you choose to print All, then ThumbsUp will print all thumbnails in the current database.

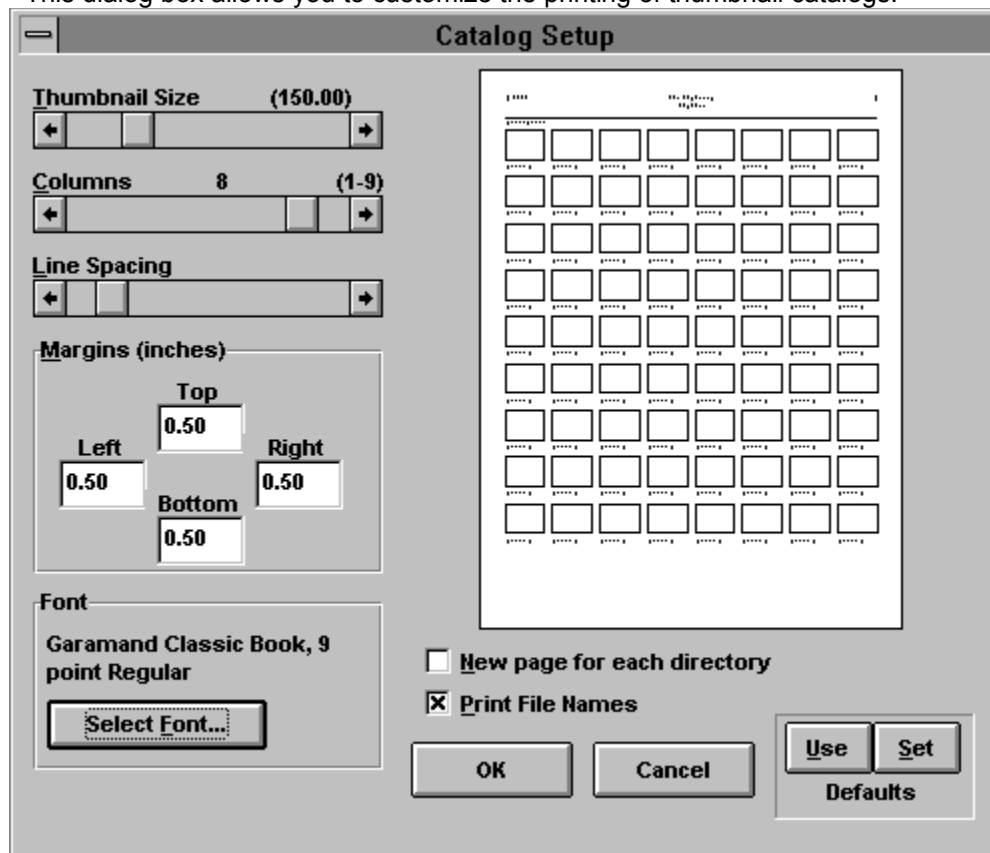
*Note:* ThumbsUp does not re-examine the directories on disk during the printing operation, so thumbnails will print for files which were thumbnailed, but deleted from outside of ThumbsUp.

The format of the catalog is extensively customizable by the Catalog Setup dialog box.

## File - Catalog Setup

Ctrl+Shift+F9

This dialog box allows you to customize the printing of thumbnail catalogs.



### Thumbnail Size

You can vary the printed size of the catalog from 50% to 500% of the size of the thumbnail in the database (96x72 pixels), thus cramming more or fewer thumbnails onto a page. Higher percentages provide more opportunity for monochrome printers to dither, but may look "chunky" because of the stretching of the bitmap.

### Columns

You can vary the number of columns to print; however, the maximum number is based on the **Thumbnail Size** and the resolution and page size of your printer.

### Line Spacing

Allows you to specify the amount of space between lines of thumbnails in the catalog.

### Margins

Allows you to set the top, left, right and bottom margins (in inches).

### Font

You can select the font to print the headings and the file names.

### New page for each directory

When selected, ThumbsUp will start a new page for each directory.

### Print file names

Select this checkbox to cause ThumbsUp to print the file name for each file under its thumbnail.



Unselect it to cram more cool-looking thumbnails onto a page.

**Preview Window**

This window shows a miniature layout of the page, per the options you have selected.

## File - Print

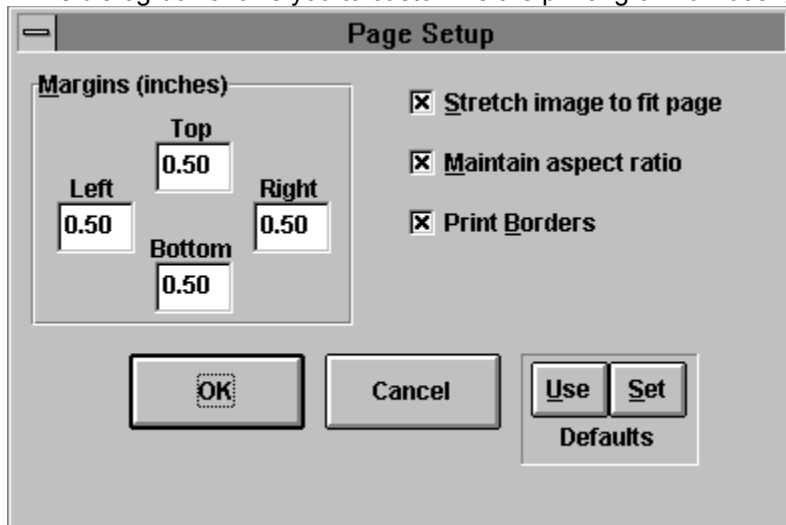
F9

This selection prints all selected graphics files. Each prints on a separate page, with no textual information. You can set the margins and other options using the Page Setup dialog box. To print a catalog of thumbnails, use the Print Catalog menu option.

## File - Page Setup

Ctrl+F9

This dialog box allows you to customize the printing of individual graphics files.



### Margins

Set the top, left, right and bottom margins on the page (in inches).

### Stretch image to fit page

Will cause ThumbsUp to stretch the images to fill the printed page (within the margins).

### Maintain aspect ratio

When selected, ThumbsUp will ensure the the width and height maintain the ratio in the original image, to avoid distortion.

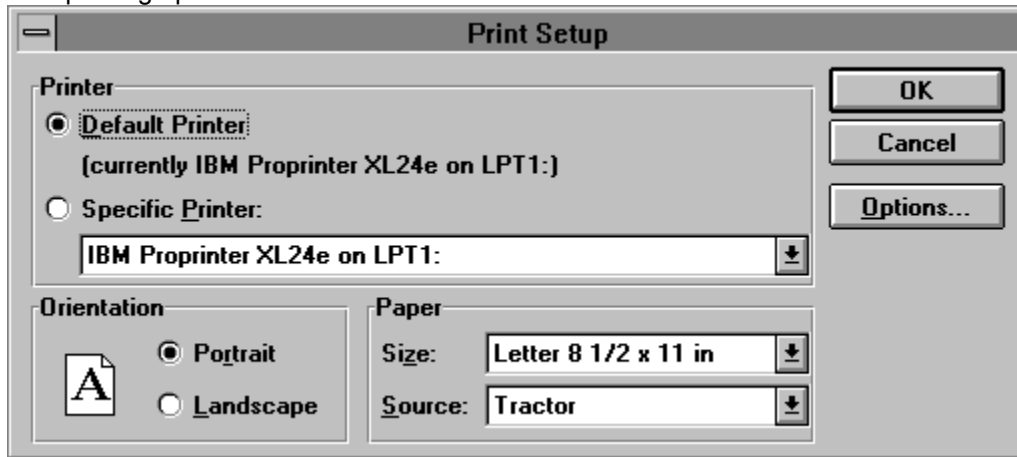
### Print Borders

Causes ThumbsUp to draw a simple black rectangle around the edge of the image.

## File - Printer Setup

Ctrl+F8

This selection displays the Printer Setup dialogbox, which allows you to select an alternate printer and set printing options.




**File - Exit**

Select this option to exit ThumbsUp!

**Alt+F4**

<u>E</u> dit	<u>T</u> ree	<u>T</u> humb <u>n</u> ail	<u>O</u> ptions	<u>W</u> indow	<u>H</u> elp
<u>C</u> opy	Ctrl+C				
<u>P</u> aste	Ctrl+V				
<u>S</u> elect All	Ctrl+A				
<u>C</u> lear All	Ctrl+Shift+A				

 *Click on any selection above.*

## Edit - Copy

Ctrl+C

This option copies the first selected file to the clipboard in the appropriate format for the file (bitmap for raster images or metafile for vector images).

If no files are selected, this menu option is grayed.

You can make this option the default (double-click) option from the General Options dialog box.

## Edit - Paste

Ctrl+V

This option pastes the current clipboard contents to a ThumbsUp View Window. If the clipboard is empty, or the contents are not in a recognized graphics format, this options is grayed.



## Edit - Clear All

This option deselects all selected files in the file list.


Ctrl+A

## Edit - Select All

Ctrl+Shift+A

This option selects all files in the file list for processing by any of the commands which accept multiple files, such as view, info or slide show.

<u>T</u> ree	<u>T</u> humb <u>n</u> ail	<u>O</u> ptions	<u>W</u> indow	<u>H</u> elp
<u>E</u> xpand One Level		+		
Expand <u>B</u> ranch		*		
Expand <u>A</u> ll		Ctrl+*		
<u>C</u> ollapse Branch		-		
<u>C</u> ollapse All		Ctrl+/-		
Colla <u>s</u> e to <u>P</u> ath		/		
<u>R</u> efresh Tree		Ctrl++		
<u>I</u> ndicate Expandable		Ctrl+Shift+X		
✓ <u>I</u> ndicate <u>T</u> humbnails		Ctrl+Shift+I		
<u>L</u> ist Thumb Dirs Only		Ctrl+Shift+O		
✓ <u>S</u> how Offline Volumes		Ctrl+Shift+F		

 *Click on any selection above.*

## Tree - Expand Branch

## Keypad \*

This option expands the currently selected directory entry in the **Directory List** by showing any sub-directories. Any sub-directories are also expanded, thereby showing this "branch" of the tree in its entirety.

If Indicate Expandable is checked, the folders for directories which have sub-directories are marked with a '+'.

If Indicate Thumbnails is checked, directories are color-coded to indicate the presence of thumbnails.

## Tree - Expand One Level

## Keypad +

This option expands the currently selected directory entry in the **Directory List** by showing any sub-directories. Double-clicking an expandable entry also performs this action.

If Indicate Expandable is checked, the folders for directories which have sub-directories are marked with a '+'.  
If Indicate Thumbnails is checked, directories are color-coded to indicate the presence of thumbnails.

## Tree - Expand All

Ctrl + Keypad \*

This option expands **all** branches of **all** drives and off-line volumes in the directory tree.

## Tree - Collapse Branch

## Keypad -

This option hides any subdirectories of the currently selected entry. Double-clicking on an expanded entry also does this.

If Indicate Expandable is checked, the folders for directories which can be collapsed are marked with a '+'.

## **Tree - Collapse All**

**Ctrl + Keypad /**

Hides all directories, leaving only the top level (drive and off-line volume) entries.



## Tree - Collapse to Path

Keypad /

This option collapses all entries except those directories on the currently-selected path. For example, if the current directory is C:\WINDOWS\SYSTEM, all entries for drives other than C are hidden, all first-level directories of C: are shown, and all sub-directories of WINDOWS are shown.

## Tree - Refresh Tree

Ctrl + Keypad +

This option rereads the directory tree. Use this option if you change the directory structure from another application. This option also collapses the tree to the current path (Tree - Collapse to Path).

## Tree - Show Offline Volumes

Ctrl+Shift+F

Select this option to display disks which have been scanned but are not currently on an inserted disk. This will display each such volume as a small diskette, with the disk label next to it. For this option to operate properly, it is important that each diskette have a unique label. This options works for CDROMs as well as diskettes.

This option will also allow you to view directories and files which have thumbnails, but have been removed from the disk by a program other than ThumbsUp. The folders for these directories, and the names for these files, will be grayed. If you do not intend to restore these files to the disk, you can use Thumbnail - Remove or Thumbnail - Remove Tree to remove the thumbnails from the database.

## **Tree - Indicate Expandable**

**Ctrl+Shift+X**

Checking this menu item causes ThumbsUp to display a '+' in directory entries which contain sub-directories and may be expanded, or '-' in directory entries which are already expanded.

## Tree - Indicate Thumbnails

Ctrl+Shift+I


Checking this option causes ThumbsUp to use differently colored folders to indicate "interesting" directories. Folders for directories which contain thumbnails are colored green; folders for directories which do not themselves have thumbnails, but whose subordinate directories do, are colored blue. This option is really useful only after drive(s) have been scanned for images (see [Scan Drive](#)).

## Tree - List Thumb Dirs Only

Ctrl+Shift+O

Select this option to only show directories which contain thumbnails. This is only useful once graphics files have been located (usually by Scan Drive).

<u>Thumbnail</u>	<u>O</u> ptions	<u>W</u> indow	<u>H</u> elp
<u>M</u> ake			F2
<u>M</u> ake <u>A</u> ll...			Shift+F2
<u>S</u> can <u>D</u> rive...			Ctrl+F2
<u>S</u> can <u>T</u> ree			Shift+Ctrl+F2
<u>R</u> emove			Shift+Del
<u>R</u> emove <u>T</u> ree			Shift+Ctrl+Del
<u>N</u> ew Database...			
<u>O</u> pen Database...			
<u>D</u> atabase <u>S</u> tatistics...		Ctrl+T	
<u>R</u> efresh File List			F3

 *Click on any selection above.*



## Thumbnails - Make

F2

This option does the hard work of ThumbsUp: it reads the graphic files selected in the **Image List** and reduces them to create thumbnails, and stores the thumbnails in the ThumbsUp database. These miniature pictures of your graphics files make life with Windows easier by helping you find specific images or drawings quickly and easily.

To create or update thumbnails for all files in the current directory, use the menu option Thumbnails - Make All. To scan a disk drive for all recognized files, use Thumbnails - Scan Drive.

Unlike these other options, **Thumbnail - Make** does not check for updated files and always makes thumbnails, regardless of whether one is already on file.





## Thumbnails - Make All

Shift+F2

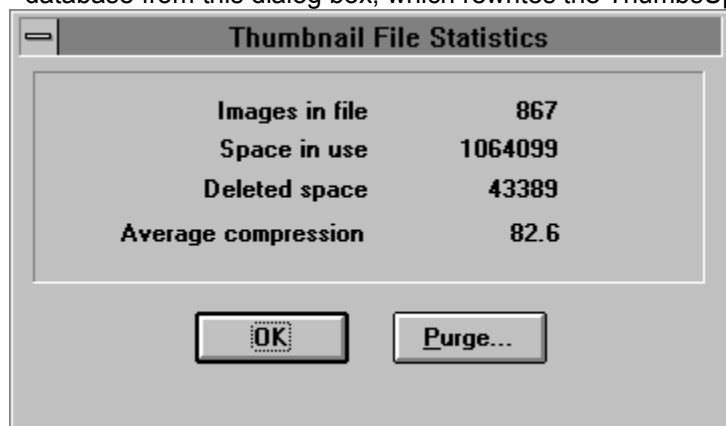
This option creates or updates thumbnails for all recognized files in the current directory. If a thumbnail already exists for a file, its update date and time are checked against what is stored in the ThumbsUp database. If the file has been modified since the thumbnail was made, it is regenerated from the file.

While running, a progress box displays which indicates how much of the work is complete. Click **Cancel** to quit making thumbnails. This progress box also contains a list box where any errors which occur are listed. These errors include the file name being "nailed" at the time of the error. If any errors occur, the progress box will remain until you click **OK**.

## Thumbnails - Statistics

Ctrl+T

This option provides disk usage information about the ThumbsUp database. You may also Purge the database from this dialog box, which rewrites the ThumbsUp file excluding any deleted thumbnails.



### Images In File

The total number of thumbnails which are stored in the ThumbsUp database, not including deleted thumbnails.

### Space in Use

The number of bytes of disk space used by the thumbnails, not including the index.

### Deleted Space

The amount of disk space in use by thumbnails which have been deleted. Whenever a thumbnail is replaced, the original thumbnail's space becomes deleted space. The Purge button will reclaim this deleted space, making it available for new thumbnails or other applications.

### Average Compression

ThumbsUp compresses the thumbnails using a simple Run Length Encoded algorithm. This number indicates the amount of space saved by this algorithm. A standard bitmap of a thumbnail would take 6912 (96 \* 72) bytes; ThumbsUp saves much of this space (generally 50-85%).

## Thumbnails - Remove Tree

**Shift+Ctrl+Del**

This option removes all thumbnails for the current directory tree selected in the Directory List. The corresponding files are **not** deleted.

## Thumbnails - Remove

Shift+Del

This menu selection removes all thumbnails that are selected. This option does **not** delete the corresponding files.

## Thumbnails - New Database

Use this option to create a new thumbnail database. For more discussion on ThumbsUp databases, see the [Thumbnails - Open Database](#) command.

## Thumbnails - Open Database

If you have a lot of graphics files, you may want to organize them into separate databases. This option allows you to select another database to open.

ThumbsUp databases should have the extension ".TUD". Each of these databases has an associated index file, with the extension ".TUX".

ThumbsUp can only open a single database at a time, though you can run ThumbsUp multiple times, each time with a different database.

You can specify the database for ThumbsUp to use on the command line, from Program Manager. You can also double-click on .TUD files from File Manager to bring up ThumbsUp with a specific database.

To create a new database, use the Thumbnails - New Database menu option.

## Thumbnails - Refresh File List

**F3**

This option re-reads the current directory and searches for thumbnails for any files there. You should select this option if you delete, move or add to the files in the current directory.



## Thumbnails - Scan Drive

Ctrl+F2

When you select **Scan Drive**, ThumbsUp examines all files on the current drive looking for files that it recognizes and creates a thumbnail for each of them. If a thumbnail already exists for a file, its update date and time are checked against what is stored in the ThumbsUp database. If the file has been modified since the thumbnail was made, it is regenerated from the file.

While running, a progress box displays which indicates how much of the work is complete. This progress indicator is based on the total space in use on the drive, and is updated by the size of each file as it is examined. Since graphics files are usually grouped together, and different types of files take various amounts of time to analyze and reduce, this indicator does not really indicate the amount of progress made in *time*, but only how far through the disk ThumbsUp has looked.

Click **Cancel** in the progress box to quit making thumbnails. This progress box also contains a list box where any errors which occur are listed. These errors include the file name being "nailed" at the time of the error. If any errors occur, the progress box will remain until you click **OK**.

Note that most CD-ROM disks have useless "total size" information stored on them, so the progress percentage is essentially meaningless for these drives.



## Thumbnails - Scan Tree

Shift+Ctrl+F2


When you select **Scan Tree**, ThumbsUp examines all files in the current directory and any of its sub-directories.

While running, a progress box displays which indicates how much of the work is complete. This progress indicator is based on the total space in use on the drive, and is updated by the size of each file as it is examined. Since graphics files are usually grouped together, and different types of files take various amounts of time to analyze and reduce, this indicator does not really indicate the amount of progress made in *time*, but only how far through the disk ThumbsUp has looked.

Click **Cancel** in the progress box to quit making thumbnails. This progress box also contains a list box where any errors which occur are listed. These errors include the file name being "nailed" at the time of the error. If any errors occur, the progress box will remain until you click **OK**.

Note that most CD-ROM disks have useless "total size" information stored on them, so the progress percentage is essentially meaningless for these drives.

<u>O</u> ptions	<u>W</u> indow	<u>H</u> elp
<u>G</u> eneral...		Ctrl+O
<u>F</u> ile types...		Ctrl+F
<u>C</u> onfirmations...		Ctrl+N
<u>E</u> ditors...		Ctrl+E
<u>V</u> iewer...		Ctrl+W
<u>S</u> lide show...		Ctrl+S
<u>S</u> ave All Options		Ctrl+Shift+S
<u>R</u> estore All Options		Ctrl+Shift+R
√ <u>T</u> oolbar		Ctrl+Shift+B
<u>S</u> tatus <u>L</u> ine		Ctrl+Shift+L
<u>S</u> ave <u>W</u> indow <u>P</u> osition		Ctrl+Shift+P

 *Click on any selection above.*

## Options - Save Position and Database

**Ctrl+Shift+P**

This option saves ThumbsUp's current window position, size and start-up database. Subsequent runs of ThumbsUp will place the main window at its current position.

To change the initial directory selected in the directory list, use the **Properties** option on the **File** menu in Program Manager to change the **Startup Directory** for ThumbsUp.

## Options - Status Line

This menu option toggles the status line on or off.

**Ctrl+Shift+L**

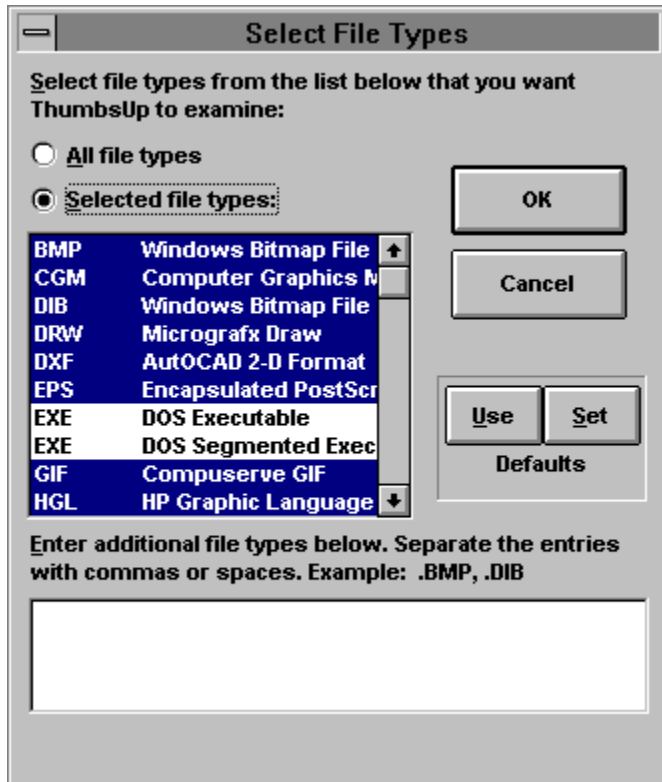
## Options - Toolbar

**Ctrl+Shift+B**

This menu option toggles the toolbar on or off.

## Options - File Types

Ctrl+F



**All file types.** Select this option to show all files in ThumbsUp. Files that are not recognized will not have thumbnails, but you can move, copy, delete and rename these files.

**Selected file types.** Select this option to show only the files selected in the list box. You may select entries in the list to select or unselect specific file types.

**Enter additional file types below.** Enter additional extensions for ThumbsUp to examine. This will not cause ThumbsUp to recognize additional types of files, but ThumbsUp will recognize its standard types with different extensions. However, files accessed using Microsoft [Graphics Import Filters](#) must have the appropriate extensions.

**Defaults - Use.** Reverts settings in this dialog box to those stored in the ThumbsUp! profile (.INI) file.

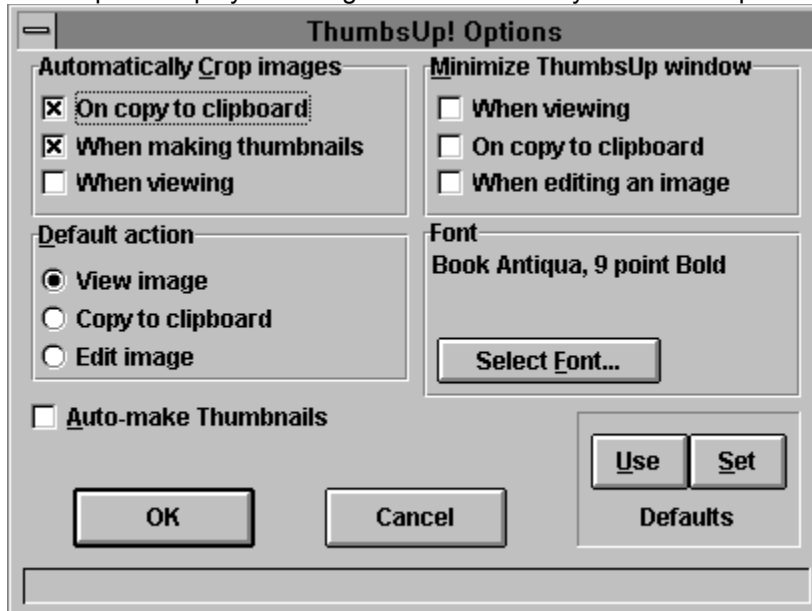
**Defaults - Set.** Saves the current settings as the defaults in your ThumbsUp! profile (.INI) file.



## Options - General

Ctrl+O

This option displays a dialog box which allows you to set the parameters for the operation of ThumbsUp!



**Automatically Crop Images.** Automatically crops, by removing all continuous border of the same color, any image. This may be on or off for each of the following operations:

- On copy to clipboard
- When making thumbnails
- When viewing

**Default Action.** Selects the default action (taken for a double-click with the left mouse button). Select one of the following operations:

- View Image
- Copy to Clipboard
- Edit Image

**Font.** Shows the currently selected font for the **Image List** and the **Directory List** in the main window. Click on **Select Font** to change this font.

**Minimize ThumbsUp Window.** Selects times when you would like the ThumbsUp main window to automatically reduce to an icon for less screen clutter; similar to the **Minimize on Use** option in the program manager. You may elect to minimize ThumbsUp at any of the following times:

- When viewing
- On copy to clipboard
- When editing an image

Images to display concurrently. Selects the maximum number of View windows which ThumbsUp can manage at one time. Select a number between 2 and 40.

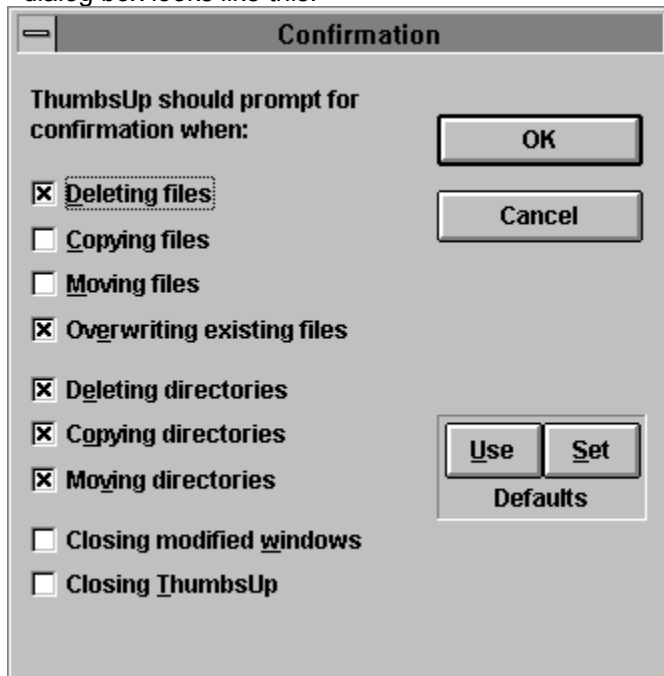
**Defaults - Use.** Reverts settings in this dialog box to those stored in the ThumbsUp! profile (.INI) file.

**Defaults - Set.** Saves the current settings as the defaults in your ThumbsUp! profile (.INI) file.

## Options - Confirmations

Ctrl+N

This menu selection allows you to configure which items ThumbsUp! prompts for confirmation. For example, if you want ThumbsUp! to make sure before deleting files, that option should be checked. The dialog box looks like this:



Each option determines whether or not ThumbsUp! will display a dialog box to confirm the listed operation after it is selected.

**Defaults - Use.** Reverts settings in this dialog box to those stored in the ThumbsUp! profile (.INI) file.

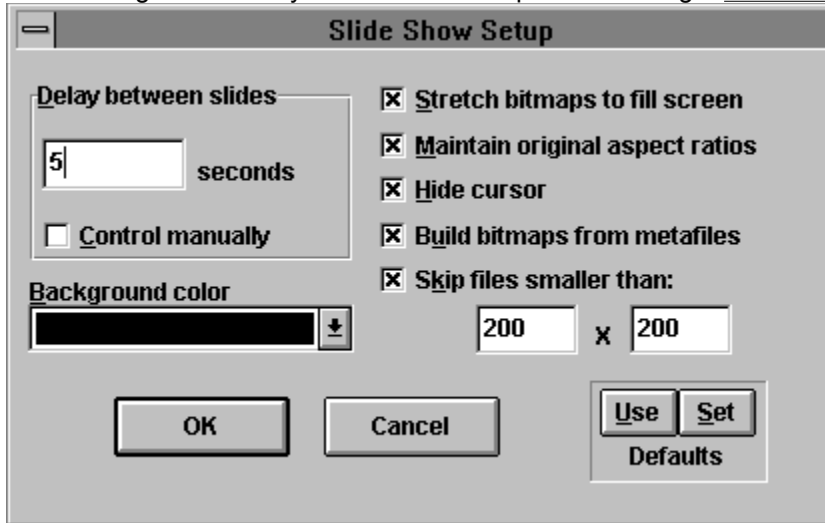
**Defaults - Set.** Saves the current settings as the defaults in your ThumbsUp! profile (.INI) file.



## Options - Slide Show

Ctrl+S

This dialog box allows you to control the operation during a Slide Show.



### Delay between slides

Select either a number of seconds that ThumbsUp will wait between slides, or mark the **Control manually** checkbox to manually switch slides (using the left mouse button or the space bar).

### Background color

Select the background color to use for images smaller than the screen.

### Stretch bitmaps to fill screen

Causes ThumbsUp to stretch images to fill the screen as much as possible.

### Maintain original aspect ratios

When stretching bitmaps, ThumbsUp will ensure that the width-to-height ratio remains constant, rather than distorting the image.

### Hide cursor

Hides the mouse cursor during the slide show.

### Build bitmaps from metafiles

When this checkbox is selected, ThumbsUp will build an in-memory bitmap from a metafile before displaying it. This eliminates watching the metafile draw.

### Skip files smaller than

When selected, ThumbsUp will not display images smaller than the entered size. ThumbsUp cannot always determine the size before viewing; so, for example, TIFF files will display regardless of their size.

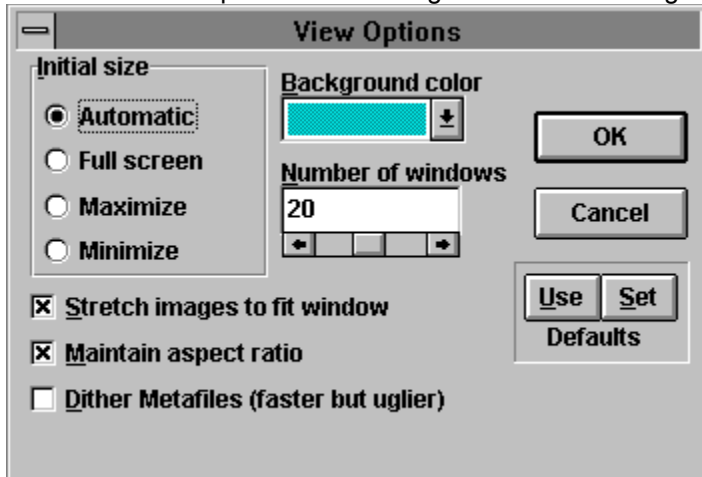
**Defaults - Use.** Reverts settings in this dialog box to those stored in the ThumbsUp! profile (.INI) file.

**Defaults - Set.** Saves the current settings as the defaults in your ThumbsUp! profile (.INI) file.

## Options - Viewer

Ctrl+W

You control the operation of viewing files with this dialog box.



### Initial Size

- Automatic** The size of the view window is based on the size of the image or metafile being displayed.
- Full Screen** The entire screen is used to display the picture, without menu bar or caption. See [View - Full Screen](#) for more information on this mode.
- Maximize** The window is maximized.
- Minimize** The window is iconized.

### Stretch images to fit window

Images are stretched to fill as much of the window as possible, depending on the setting of **Maintain aspect ratio**.

### Maintain aspect ratio

The ratio between the width and height of the image is kept constant, to avoid distorting the image.

### Dither Metafiles

Windows Metafiles generally include 24-bit color information. On 256-color palette-based displays, these colors will be dithered. ThumbsUp generates (up to) 236-color palettes for displaying metafiles, resulting in much smoother displays. However, generating the palette and modifying the metafile display to take it into account slows the display process down. Select this option if you are in a hurry. Also select this option if you are using a 16-color or 24-million color display driver.

### Background color

Select a background color for the sides or top if the window is larger than the image.

### Number of windows

ThumbsUp can display multiple view windows simultaneously. Once this limit is reached, ThumbsUp will close the oldest window before opening another.

**Defaults - Use.** Reverts settings in this dialog box to those stored in the ThumbsUp! profile (.INI) file.

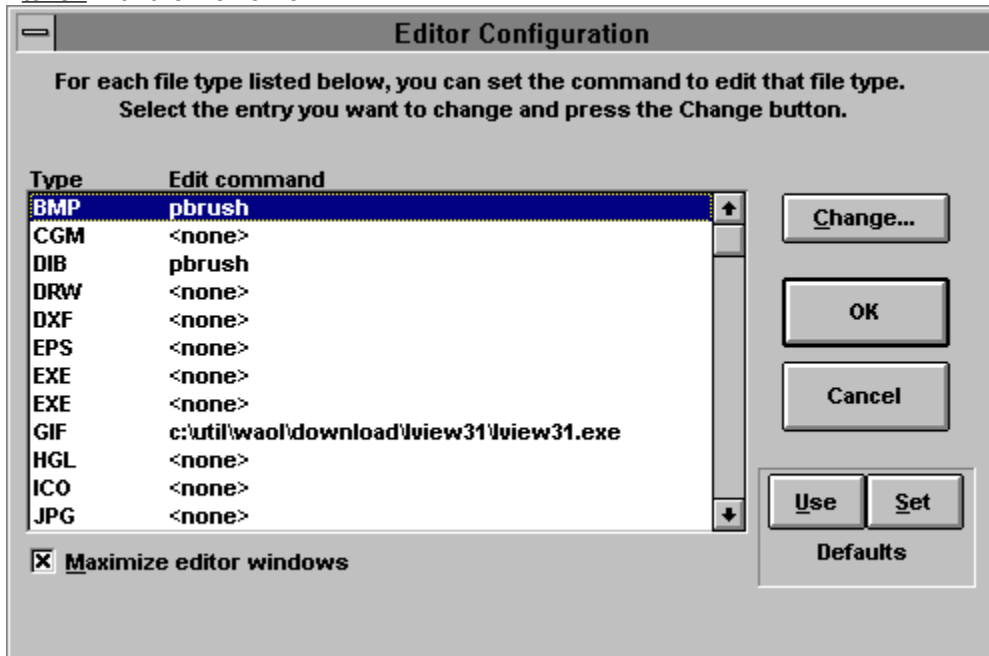
**Defaults - Set.** Saves the current settings as the defaults in your ThumbsUp! profile (.INI) file.

## Options - Editors

Ctrl+E

This option lets you specify graphics editor programs for each image type that ThumbsUp recognizes. When you select to edit an image, ThumbsUp! executes the editor specified here for that graphic file type.

As you can see in the picture of the dialog box below, each file type has a command associated with it. ThumbsUp executes the command, appending the file name after the program, or replacing the '%F' token with the file name.



If you specify a graphics program to edit a file type, make sure from its documentation that it supports loading a file from the command line. The '%F' option is provided to invoke editors that accept additional parameters after the file name. For most programs, you can simply enter the program name.

**Run editor maximized.** When you select this option, ThumbsUp maximizes editor applications when it runs them.

When you select to change an editor, enter the command to run the program in the following dialog box. Be sure to specify the complete drive and directory if the program is not in the default path.





## Options - Save All Options

**Ctrl+Shift+S**

This menu selection saves the current ThumbsUp configuration (profile) as the default when starting ThumbsUp. The information saved includes:

All options in the Options dialog boxes.

The current directory tree options, from the Tree menu.


The Toolbar and Status Line settings, from the Options menu.

## Options - Restore All Options

**Ctrl+Shift+R**

Use this selection to set all ThumbsUp options to their last saved settings, as saved from within the dialog boxes or by the Options - Save All Options selection.

<u>W</u> indow	<u>H</u> elp
<u>S</u> how All	F4
C <u>l</u> ose All	Shift+F4
<u>M</u> inimize All	Ctrl+F4
<b>0:</b> c:\windows\tartan.bmp	
<b>1:</b> c:\windows\leaves.bmp	
<b>2:</b> c:\windows\chitz.bmp	
<b>3:</b> c:\windows\arches.bmp	
<b>4:</b> c:\windows\penrose2.bmp	
<b>5:</b> c:\windows\opus.bmp	
<b>6:</b> c:\windows\albert.bmp	
<b>7:</b> c:\windows\256color.bmp	

 *Click on any selection above.*

This menu also contains a list of all currently opened windows. Selecting any of these entries will cause that window to display.

## Windows - Show All

F4

Causes ThumbsUp to display all open view windows (in the order they were opened). Minimized (iconized) windows are restored; hidden windows are brought to the front.



## Windows - Close All

**Shift+F4**

Closes all opened view windows. If you have selected confirmation on closing modified windows from the General Options dialog box, ThumbsUp will prompt you before closing any modified windows.

## Windows - Minimize All

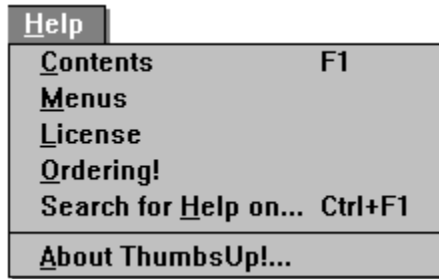
Ctrl+F4

This option will minimize (reduce to an icon) all open view windows. These icons display on the normal Windows desktop for easy access.

## Help - Contents

F1

Displays the Contents section of this help file.



This menu provides access to the ThumbsUp Help system and the About box.

## License

**ThumbsUp** is supplied "as is". The author disclaims all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The author assumes no liability for damages, direct or consequential, which may result from the use of **ThumbsUp**.

**ThumbsUp** is provided free of charge for a thirty day evaluation period. Any use beyond this period requires that **ThumbsUp** be registered with the author, (*Cerious Software*). This registration fee will license **one** copy of ThumbsUp for use on a single computer. Multi-user, network and site licenses are available; contact *Cerious Software* for terms.

If you wish to distribute **ThumbsUp**, alone, as part of a package, or in any publication, and receive any type of remuneration, you must contact *Cerious Software* for authorization and terms.

If you believe **ThumbsUp** is valuable and useful, please give it to anyone else you think would be interested, and encourage them to register their copy.



## ring Information

*Click here for the order form.*

**ThumbsUp** is distributed as for evaluation for thirty days (see [License](#)). Please remember that using unlicensed shareware past the evaluation period is unethical and illegal. To register and receive the latest version of **ThumbsUp**, please send **US\$50.00** (outside the U.S., add \$5.00 for shipping) and a completed order form to:



### ***Cerious Software***

5424 Chedworth Drive, Charlotte, NC 28210 USA

Voice: (704) 529-0200

Internet: [cerious@vnet.net](mailto:cerious@vnet.net)

CompuServe: 71501,2470

America Online: CeriousSW

In Australia, New Zealand & Papua New Guinea, please send **Aus\$80.00** to:

### ***Patrick O'Sullivan***

PO Box 65, Armadale, Victoria 3143 Australia

Voice: 03 509 5250

Fax: 03 576 0801

Compuserve: 100240,273

ThumbsUp may also be registered on-line on CompuServe via "GO SWREG." The registration ID for ThumbsUp is **1357**.

---

Multiple, network and site licenses are available. Contact ***Cerious Software*** for terms and conditions.

---

Prices subject to change without notice.

## ThumbsUp Order Form



*Click here to print this order form. If you do not have a printer, please write or type the information requested below.*

I like **ThumbsUp** and want to register it. I understand I will receive the latest version, support via Internet, Compuserve, America Online or telephone, and the peace of mind that comes with "doing the right thing."

Name

Address

City

State/Country

Zip/Postal Code

Telephone number (optional)

I received my evaluation copy of ThumbsUp from:

- CompuServe
- Prodigy
- America Online
- Genie
- Internet
- A friend
- BBS/Other: \_\_\_\_\_

The version of ThumbsUp that I have is \_\_\_\_\_.

Select disk format:

- 3½" (720K)
- 5¼" (1.2Mb)

Please enclose \$50.00 in U.S. funds; North Carolina residents add sales tax. Foreign orders, please add \$5.00 for shipping. Remit to:

***Cerious Software***

*5424 Chedworth Drive*

*Charlotte, NC 28210 USA*

In Australia, New Zealand & Papua New Guinea please remit **Aus\$80.00** to:

***Patrick O'Sullivan***

*P.O. Box 65*

*Armadale, Victoria 3143 Australia*



## File - Save

Ctrl+S

This option saves the current file under its current name. It may be used to save a cropped or otherwise modified image. ThumbsUp currently only supports three formats for saving files: Windows Bitmap and CompuServe GIF formats for raster images, and Windows Metafile format for vector images.

If the current file has an extension representing another format (such as .PCX or .CGM), it is changed to reflect the format being saved (.BMP, .GIF or .WMF).

## File - Save As

Ctrl+A

This option saves the current file, allowing you to select a file name from a standard Windows Save As dialog box. It may be used to save a cropped or otherwise modified image. ThumbsUp currently only supports three formats for saving files: Windows Bitmap and Compuserve GIF formats for raster images, and Windows Metafile format for vector images.

If the current file has an extension representing another format (such as .PCX or .CGM), it is changed to reflect the format being saved (.BMP, .GIF or .WMF).

## **File - Print**

This selection prints the graphic in the current view window. All options from the Page Setup and Printer Setup dialog boxes are applied.

## **File - Close**

**Alt+F4**


This option closes the view window and removes it from the screen. If you have modified the image and selected confirmation for closing modified images (from the Confirmations dialog box), ThumbsUp will ask you if you wish to save the modified image.

## **File - Close All**

**Shift+Alt+F4**

This option closes all open view windows. If you opted to confirm closing modified images (from the Confirmations dialog box), ThumbsUp will prompt you to save each one before closing it.

<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	<u>H</u> elp	<u>T</u> humbsUp!
<u>S</u> ave				Ctrl+S
Save <u>A</u> s...				Ctrl+A
<u>C</u> lose				Alt+F4
C <u>l</u> ose All				Shift+Alt+F4
<u>P</u> rint...				F9
Page <u>S</u> etup...				Ctrl+F9
Printer <u>S</u> etup...				Ctrl+F8

 *Click on any selection above.*

## Edit - Copy

Ctrl+C

This menu selection copies the currently selected area in the view window to the clipboard.

## Edit - Crop Image

Ctrl+R

Use this menu option to reduce the view window to only the selected area of the image. Anything outside the selected area is eliminated. This change will only be written to the disk file if you use the File-Save or File-Save As option.



## **Edit - Cancel Selection**

This option removes the selection rectangle from the window.

**ESC**

## **Edit - Select All**

**Ctrl+E**


This option selects the entire contents of the view window for processing.

## **Edit - Make Thumbnail**

**F2**

This selection uses the currently selected area in the view window to generate a thumbnail for the image. This is especially useful for clipart files which contain many related images. You can select a representative part of the file and create the thumbnail from only that part.

<u>E</u> dit	<u>V</u> iew	<u>H</u> elp	<u>T</u> humbsUp!
<u>C</u> opy			Ctrl+C
<u>C</u> rop to Selection			Ctrl+R
<u>C</u> ancel Selection			ESC
<u>C</u> onvert to Bitmap			F5
<u>A</u> utocrop			F4
<u>S</u> elect All			Ctrl+E
<u>T</u> humbnail from Selection			F2

 *Click on any selection above.*

This menu provides options that operate on a selected area in the view window. Only bitmaps can be selected from; to operate on a portion of a metafile, it must first be converted to a bitmap using the View-Convert to Bitmap option.

Use the mouse to select an area in the view window: press the left mouse button to start a selection area at one corner, and hold it down while moving the mouse to the opposite corner. Then release the mouse button. ThumbsUp will draw a rectangle around the selected area. If the area is large enough, ThumbsUp will also display the selected area size in a small rectangle in the center of the area.

To select an area from the center out, hold the SHIFT key down, press the left mouse button at the place you want to be the center of the selection, and drag the mouse to a corner. Then release the mouse button.

## **View - Autosize Window**

This option will make the view window the same size as the image displayed in it (if possible).

## View - Maintain Aspect Ratio

This option causes ThumbsUp to maintain the original file's aspect ratio when stretching to fill the window. This applies to both metafiles and bitmaps.

## **View - Stretch to Fill Window**

When this option is checked, the image will be stretched (or shrunk) to fill the size of the window. Note that you cannot select portions of the image when stretched.

## **View - Full Screen**

**F3**

This option causes the View Window to use the entire screen, without title bar or menus. If the image is larger than the screen, you will still have scroll bars. While in full screen mode, use the right mouse button or the F10 key to see the View Window menus, which will appear vertically instead of horizontally. You can perform any of the View Window commands while in full screen mode; however, cropping an image will reduce the window to the size of the cropped image. You can select View-Full Screen again or press F3 to exit full screen mode.



## Edit - Autocrop

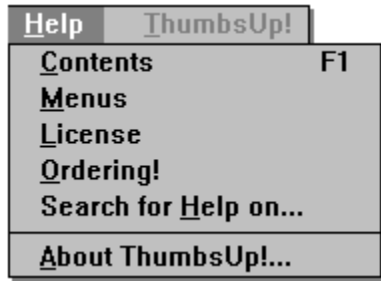
F4

This option automatically crops the current image, removing any edges composed entirely of the same color. The pixel in the bottom left corner of the image is used as the reference pixel. Each of the four sides is compared to this pixel; any side entirely of that color is removed. This process is repeated for each side until a pixel of a different color is found.

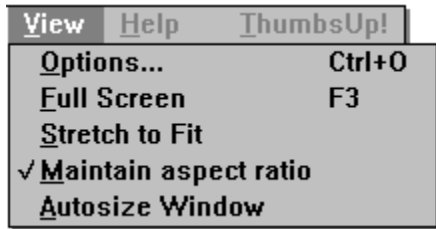
## Edit - Convert to Bitmap


F5

This option converts a metafile to a bitmap. If the metafile contains aspect ration information, the resultant bitmap conforms to that aspect ratio (even if the current window shape is different). Note that you can only select portions of bitmaps, so you must use this selection if you want to select part of a metafile.



This menu allows you to enter this ThumbsUp help file from a view window.



 *Click on any selection above.*


## **ThumbsUp!**

This "quickie" menu, which has no drop-down items associated with it, simply brings the ThumbsUp main window to the top of all windows. It is useful when a large view window obscures or covers the ThumbsUp main window.

## View Window

The View Window provides a simple way to view graphics images from within ThumbsUp. It also allows you to crop images, either manually or automatically; to create a thumbnail from a portion of an image; to convert a metafile (vector) image to raster (bitmap) format; and to save the modified image. The View Window provides the following menu:

**File** **E**dit **V**iew **H**elp **T**humbsUp!

 *Click on any selection above.*

## Glossary

Aspect Ratio

Bitmap

CD-ROM

Crop

Desktop

Dither

Drag-and-Drop

Graphics Filter

Metafile

Path

Pixel

Profile

Purge

Raster image: see bitmap

Thumbnail

Token

Vector image: see metafile

Wallpaper

## Drag and Drop

Drag-and-drop is the process of moving files by pointing with the mouse, clicking the left mouse button, and "dragging" to the desired location. In ThumbsUp, you can use this method to move or copy graphics files.



## Aspect Ratio

The relation between the height and width of an image. For example, a square has an aspect ratio of 1-to-1 (the height is the same as the width).

## Pixel

A pixel is a dot in a raster image, or bitmap. Depending on the color resolution, a pixel takes from 1 to 24 bits to represent in memory and on disk. Therefore, an uncompressed bitmap which is 100 pixels wide by 100 pixels high can require from 10,000 to 240,000 bits (1250 to 30,000 bytes).

## Metafile (vector image)

A metafile is a stored sequence of drawing commands which the computer can repeat to generate an image. Metafiles can contain simple drawing commands (such as *line*, *rectangle*, *circle*, *arc*, *polygon*); they may also contain commands to set colors, fill areas, display text, and even include bitmaps. Thus, metafiles are much more flexible than bitmaps, but they are more difficult for programmers to support and slower to display.

## Bitmap (raster image)

A bitmap (raster image) is a graphics image composed of small dots (pixels). These dots can be simple on-or-off bits (a monochrome bitmap), or represent colors. Windows supports four levels of raster images: monochrome (1 bit per pixel), 16-color (4 bits per pixel), 256-color (8 bits per color), or 16 million color (24 bits per pixel). Raster images do not generally scale to larger sizes very well; the dots become squares or rectangles and the image appears grainy. Also, raster images use lots of disk space and memory. However, they display faster than metafile (vector) images and can show much more true-to-life detail. Scanned images, such as Compuserve GIF files, are raster images.

## Crop

Cropping an image involves selecting an area and removing the rest. ThumbsUp can crop manually (where you select the crop area) from the [View Window](#); ThumbsUp can also crop automatically, removing unnecessary space from around an image. You can control when ThumbsUp does this automatic cropping from the [General Options](#) dialog box.

## Desktop

The window that acts as the background for all windows in Windows 3.1. Other windowing systems generally call this the root window. Icons appear at the bottom of the desktop window.

## Wallpaper

A Windows bitmap displayed in the background (the desktop). This image may be tiled (repeated to fill the screen) or centered.

## Graphics Filter

A program or library (DLL) which can convert graphics from one format to another. Microsoft provides several filters with Word for Windows and other products. ThumbsUp can use these filters to import graphics files.



## Token

A sequence of letters or symbols which represent something else. For example, '%F' is a token which represents a file name in the editor command string invoked by ThumbsUp.

## Dither

Dithering is a process which allows many colors to be represented by a few. The standard Windows VGA driver only has 16 colors, and combines these in simple patterns to represent many more. Dithering is acceptable when viewed from a distance, but often causes images to appear grainy and cluttered.

## **Profile (.INI file)**

Lists configuration options and selections for a program. The Windows profile is called WIN.INI; the profile for ThumbsUp is THUMBSUP.INI. Profile files are generally stored in the Windows directory to be unique for each user in a network environment.

## Path

The DOS Environment variable which specifies where DOS and Windows look for executable files when no explicit drive or directory information is given. It is usually set in the **AUTOEXEC.BAT** file, which runs when DOS starts up.

## **CD-ROM**

A CD (compact disk) used to store data. ROM stands for "Read-Only Memory." You cannot write to a CD-ROM disk.

## Selecting Files

You select files from the **file list** (the area of the screen with thumbnails) by using the mouse or keyboard.

### Using the Mouse to Select Files

You can use a mouse to select a file or group of files. Before you can select files, they must be visible in the **file list**.

#### *To select a file:*

Click the filename or thumbnail.

#### *To select multiple items in sequence:*

1. Click the first file you want to select.
2. Press the SHIFT key while you click the last file to select.

#### *To select two or more file out of sequence:*

Press and hold CTRL while you click on each file.

#### *To cancel the selection of a file:*

Press and hold CTRL while you click the selected file.

### Using the Keyboard to Select Files

You can use the keyboard to select a file or group of files. Before you can select files, they must be visible in the file list.

#### *To select a file:*

Use the following keys to select a file or directory.

<b>Press</b>	<b>To select</b>
UP or DOWN ARROW	A file above or below the current selection.
END	The last file in the list.
HOME	The first file in the list.
PAGE UP	The file at the top of the previous screen.
PAGE DOWN	The file at the bottom of the next screen.

#### *To select two or more items in sequence:*

1. Use the arrow keys to move to the first file you want to select.
2. Press and hold down SHIFT while you select the remaining files.

#### *To select two or more items out of sequence:*

1. Use the arrow keys to move to the first file you want to select.
2. Press and release SHIFT+F8. The selection cursor begins to blink.
3. Move to the next file you want to select.
4. Press the SPACEBAR to select each file.
5. Press SHIFT+F8 when you finish selecting files.

#### *To cancel the selection of a file:*

1. Press and release SHIFT+F8 so that the selection cursor begins to blink.
2. Move to the selection you want to cancel, and then press the SPACEBAR.
3. Press SHIFT+F8 when you finish canceling selections.

## Purge

To eliminate unneeded, unused or deleted space.

## Thumbnail

A small representation of an image, used as an aid in indexing or cataloging graphics images.



## Hints and Tips

**File Manager Drag & Drop.** ThumbsUp will act as a drag-and-drop client from File Manager. Simply drag file names from File Manager to the ThumbsUp window (or icon). ThumbsUp will open a view window for each file (up to the maximum number of view windows specified in the Viewer Options).

**View Window Shortcuts.** Double-clicking with the left mouse button in a view window will change it to full screen mode. Double-clicking with the right mouse button in a view window will close the window.

**Metafile Viewing.** If you're displaying true-color (24-bits) or standard VGA, turn on "Dither Metafiles" from the Viewer Options dialog box. In the case of true-color, Windows never dithers; in the case of standard VGA, the special code to create solid colors for the dithered colors cannot work.

**Background Colors.** For full-screen displays of 256-color images on a palette-based (256-color) display, select either black or white as the background color from the Viewer Options or the Slide Show Options dialog box, as ThumbsUp steals the other system colors to more accurately display the image.

**Internal Drag & Drop.** Although ThumbsUp has only a single window, you can drag files to directories not visible on the directory list by scrolling it **after** selecting the files you want to move or copy.

**Performance.** Though there is no built-in limitation on the number of file ThumbsUp can handle, I recommend creating multiple catalogs (databases) if you have more than about 5000 files. Besides the memory required, it will speed up access.

## Restrictions

**TrueType Fonts.** ThumbsUp cannot yet process TrueType fonts in Macintosh format. These fonts work fine in Windows, but ThumbsUp does not recognize them. This will be fixed in a subsequent release.

**Unlabeled Disks.** If you view offline volumes ([Tree - Show Offline Volumes](#)), it may be confusing to try to handle unlabeled diskettes.

**CGA-format PCX files.** ThumbsUp does not currently handle 4-color (two plane) PCX files.

**Non-standard JPEG files.** ThumbsUp uses version 4 JPEG code to handle JFIF files and may not recognize files created with earlier releases. Also, some programs create proprietary (non-JFIF) format files also called ".JPG", which ThumbsUp does not recognize.

## Thanks to...

Many thanks to everyone involved in the development and testing of ThumbsUp. I would like to offer special recognition to:

**David Hanna**, for excellent suggestions and great insight into what ThumbsUp should become (and I hope it has!).

**Pat O'Sullivan**, for the most thorough testing any developer could hope for from a single person.

**Steve Rimmer**, for his excellent reference works on graphics formats. I wish I had found his books before I started, rather than well into the project. They would have saved me a lot of time and mistakes.

**Cricket, Adam, Rachel, Leah and Evan Crews**, my wife and children, for putting up with me during the development of ThumbsUp.

**The Independent JPEG Group**. Many thanks for routines that are well-written, easy to understand, straightforward to implement, and were simple to integrate into ThumbsUp.

Many thanks also to everyone who tested ThumbsUp, and especially to those who have registered. Remember to support shareware - without your support, you won't be able to "try before you buy."

