MM:GIF Multimedia GIF Player

MM:GIF is a multimedia GIF file viewer. It can play multi-image GIF files that include both MIDI music and Wave PCM sound data.

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System Requirements

MM:GIF is a Windows 3.1 program and will run on any machine that satisfactorily runs Windows. But realistically, any graphics program is both memory and CPU-speed intensive. For optimal satisfaction you should probably have a 486 with 4 meg of ram, an SVGA monitor capable of 640x480 resolution at 256 colors, and some sort of MIDI device, such as a sound card. A 386 works fine but displays the images more slowly. A machine with 2 meg of ram may not have enough memory to decode the larger gifs. A lower resolution monitor with fewer colors will make you wonder why you bother. Nearly all mmgifs contain 256 color images. It simply isn't possible to reduce 256 colors to 16 without serious compromise. To hear the music encoded in an mmgif, you have to have a MIDI device. (But see No Sound Card for a way around this limitation).

For more information about ways to cope with systems that have less than optimal configurations, see <u>Frequently Asked Questions</u>.

What's New

This version of **MM:GIF** includes support for the new transition effects that are available to creators of **MM:GIFs** with the new **EMBED.EXE** tool. These effects allow the GIF image to be displayed in an evolving pattern, rather than all at once. Due to the speed differences between computers with various processors and video cards, a new **Image Transitions** Option has been added to the <u>Options</u> menu. Slower computers may not display the transitions fast enough for the file to be viewed the way its creator intended, and faster computers may minimize the transition effects. Slower computers may also not show images that were meant to be shown because they would have been showing during the time taken up by the transition effect of the previous image.

A new <u>Play List</u> option has been added to the **File** menu. this option allows you to create and play groups of **MM:GIFs**.

MIDI Configure

The *MIDI* Configure dialog box allows the selection of Windows 3.1 MIDI output drivers. Several output ports may be configured, but most GIF contained MIDI files will specify only one output port. In order to select or change a driver, simply highlight the driver of interest and click on the **Add** button. To remove a driver, highlight the driver and press **Delete**.

If you have an FM sound card, you will usually get better results by selecting the sound card's FM driver directly (instead of the MIDI Mapper).

See also MIDI Configure Dialog

Driver Configure

The *Driver Configure* dialog box allows adjustment of the perceived polyphony capabilities of the currently selected MIDI driver. Some internal sound card drivers may report an actual number of voices that the driver can support, but external MIDI interfaces have no way of telling what MIDI modules are attached to the other end of the cable. By adjusting the number of voices in the polyphony box, you can aid **MM:GIF** in deciding which rendition of a MIDI file to play.

If the warning box is checked, **MM:GIF** displays a warning when the requirements of a MIDI file exceed the stated polyphony capacity.

The *choose rendition with* radio buttons tells MM:GIF how to pick a rendition:

Best Match Chooses a rendition that the driver can play

without losing notes

Maximum Polyphony Chooses the rendition that contains the

most voices

Maximum Polyphony Chooses the rendition that contains the

least voices

See also **Driver Configure Dialog**

File

Open

Opens a .gif file. See Open File Dialog

Close

Closes current file without exiting MM:GIF.

Play List

Opens a dialog box to select a previously saved Play List. See Play List

Details

Provides information about each of the images in the Gif file as well as any comments about the file the author may have inserted.

File List

Provides a list of the last four files opened by MM:GIF. Selecting one of these names will open that file.

Exit

Duh.

Run

Play

If the file opened is a Multimedia Gif and **Auto Play** is not selected, Selecting **Play** will start playback. If **Auto Play** *is* selected (See <u>Options</u>) or if the file is a *single* Gif image, then playback begins immediately when the file is opened.

Stop

Selecting this will stop playback of a Multimedia Gif.

Continue

Continues playback that was Stopped.

View

First

Next

Current

Previous

Last

When playback is stopped, selecting one of these items will show either the First, Next, Current, Previous, or Last image in the file, without playing the associated MIDI file. Note that the order of the images in the file is not necessarily the same order as you viewed them.

Blank

Substitutes a blank image for the image currently displayed.

Play List

MM:GIF offers a **Play List** feature: a collection of multimedia GIFs which can be performed in sequence. In order to create or use Play Lists, select the **File/Play List...** menu item.

Creating a Play List

A new Play List is created by adding files to the dialog list box. When the list box is first opened, only the ---End List--- line is displayed. To add files, press the **Insert** button or press the **Insert** key on the keyboard. A **File Open** dialog is presented. Multiple files may be selected at one time from the File Open dialog, by clicking and dragging or by using the **Shift** and **Ctrl** keys in conjunction with the mouse. After pressing OK, any files selected are inserted in the Play List box. You can control where files are inserted by high-lighting a line in the Play List box before pressing **Insert**: any files added are inserted before the high-lighted line.

Files may be deleted from the Play List by selecting a file and pressing the **Delete** key or button. By combining Insert with Delete, the list can be completely reordered.

Opening and Saving Play Lists

An existing Play List is opened via the **Load** Button. A File Open dialog is presented which displays all files with the .MGL extension in the last directory accessed.

A Play List is saved by pressing the **Save** button on the Play List dialog. If the list already has a name, it is suggested in the **File Save** dialog, but a list may be saved with any name. A **.MGL** extension is added if not supplied.

Using Play Lists

In order to use a Play List, the **Use** check box must be set. Once it is set, and the **OK** button is pressed, the current file in the list (the one which is high-lighted) is read into memory and readied for **Play**. If the **Auto-play** menu option is checked, (see <u>Options</u>) playback begins immediately, otherwise the program waits for a play begin instruction. In either case, the remainder of the list is processed without further user interaction required. If you look at the **File** menu, you will notice that the **Play List...** option has a check-mark by it. If the **Options/Loop** menu switch is set, the entire list will repeat again from the beginning. In this case playback will only end when you explicitly end it.

See also Play List Dialog

Playing Files

As soon as MM:GIF is configured for a MIDI device, you can begin to play multimedia GIF files with it. Files can be opened by choosing File/Open... or by dragging a file from the File Manager into an open copy of MM:GIF.

If the GIF file contains MIDI tracks it will wait for you to start playback by choosing **Run/Play**. You can also configure MM:GIF to automatically begin playback as soon as the file is opened and processed: see <u>Options</u>.

See also Load and Run Files

Options

You can adjust certain playback parameters by selecting options from the Option menu. A check mark beside an option means that it is in effect:

| Option | Result |
|-------------------|---|
| Auto Dither | This only has effect for 16 color VGA drivers. If you have one of these, enabling this option will allow an approximation of the 256 color images usually better than the Windows default. |
| Auto Play | Will begin playback as soon as a GIF file loads. |
| Auto Loop | Will continually playback the same GIF over and over. If you choose this option and Full Screen you'll have a Multimedia Screen Saver. |
| Center Image | Causes all Images to be centered on the screen. |
| Full Screen | Checking this option causes the Image to occupy the entire screen, the next time it is displayed (by choosing View/Current, for instance). The image is not re-sized however. The mouse cursor will disappear, but any keystroke or a left mouse click will restore the screen. The cursor reappears after playback ends. |
| Screen Background | Allows choice of a different screen background color. |
| Image Transitions | Adjusts the speed of the effects to match the speed of your computer. On a slower computer, choose Fast or Faster to ensure that the effect is finished in time for the next image. |



MM:GIF was envisioned and created by CompuServe Staff in the **Sight And Sound Forum**. Consequently, it will be supported within the Sight And Sound Forum on **CIS: GO SSFORUM**

Credits and Acknowledgment

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| | | | |

A special thanks to the **Sight & Sound Studio Workshop** Group

Disclaimer

This program is provided without any warranty, expressed or implied, including but not limited to fitness for a particular purpose.

Tutorial

This tutorial is designed to take the first-time user through the process of setting up **MM:GIF** to view files and run the viewer. Use the **Browse** buttons (<< >>) on the menu to step through sequentially, or click on the area below to advance to.

Configuration

Optional Settings

Load and View Files

MIDI Configure Dialog

After running the setup program and starting **MM:GIF** by clicking its icon in Program Manager, you need to configure the program for your machine and equipment. **MM:GIF** will search for installed sound card drivers the first time it runs. If it does not find any drivers, it will select the <u>MIDI Mapper</u> as its output device. You should check to see that the MIDI device you want to use has been selected.

From the Options menu, select MIDI Configure.

Put the mouse cursor over parts of the dialog box you would like more information about, or TAB to the area with your keyboard.

For more information see MIDI Configure

Driver Configure Dialog

Sound card drivers can report the capabilities of the sound card. You would only want to change the number of voices (maximum polyphony) reported if you were using a MIDI interface card connected to external equipment. In this case, the driver does not know the capabilities of the equipment and you can supply it. This information is not strictly necessary, but helps **MM:GIF** decide how best to play a song with a large number of voices.

| area with your keyboard. | Put the mouse cursor over parts of the dialog box you would like more information a | about, or | TAB to the |
|--------------------------|---|-----------|------------|
| | area with your keyboard. | | |

For more information see **Driver Configuration**

Wave Configure Dialog

You can choose whether or not to decompress in memory wave files that may be in the Gif, and which quality of wave file to force **MM:GIF** to use.

Put the mouse cursor over parts of the dialog box you would like more information about, or TAB to the area with your keyboard.

Load and Run Files

Select **File** and **Open** from the menu and get a standard File Open dialog. The only files you can choose are files with a .gif extension. You can load standard **Gif** files or **MMGif** files.

Put the mouse cursor over parts of the dialog box you would like more information about, or TAB to the area with your keyboard.

Select Run and Play to view the selected file.

See also Playing Files

Optional Settings

From the **Options** Menu you can control certain aspects of **MM:GIFs** behavior.

Select **Auto Play** if you want the Gifs to begin playing as soon as they are loaded.

Select **Auto Loop** if you want the Gifs to continuously repeat.

Select **Auto Dither** if you run a 16 color video driver. Most Gifs are 256 colors, and selecting Auto Dither will give you the best approximation.

Select **Center Image** if you want the Gifs to automatically center themselves in the screen. Note that MM:GIFs can contain location information that will override this setting.

Select Full Screen if you want the Gifs to display maximized.

Select **Screen Background** to change the background color that shows behind a Gif that does not cover the entire screen.

Select **Image Transitions** to adjust the speed of the effects in the newer MM:GIFs. How quickly the Gifs display depends on your CPU speed, your video speed, your video resolution, and the number of colors you are using. You may have to choose Fast, Faster, or None if you have a non-accelerated video card and a CPU slower than a 486.

For more information see Options

Output Port

This is the port that MM:GIF will send the MIDI information to. If no port is selected, then no music will be heard.

Available Output Ports

This is a list of drivers you have installed on your machine that report that they are MIDI devices. If there are no devices in this list, you will not be able to play MM:GIF files.

Add Button

After choosing an output port from the list of available drivers, use this button to add them to the Output Port list.

Delete Button

After selecting a driver in the Output Port list, use this button to remove it from that list. This means it will no longer be your output driver. Note that this does **not** mean the driver is deleted from your hard disk. It will still appear in your Available Output Ports list.

Input Port

This function is not used by MM:GIF and would normally be set to <none>.

Driver

This is the name of the MIDI driver you have selected in the MIDI Configure Dialog.

Driver Capabilities

This shows the number of simultaneous voices that the driver reports as its capability. Change this number if you have external MIDI equipment and you know its capability. You can un-check the **Warnings** box if you do not want MM:GIF to tell you every time a MIDI file in a Gif requires more voices than the driver can produce.

Choose Rendition

This helps MM:GIF decide how to play a song that reports it requires more simultaneous voices than is listed in the Capabilities box

Decompress in memory

Check this box to have MM:GIF decompress any embedded wave files in available memory, which gives better performance. Un-check this box if you have many programs running at once or do not have much memory.

Force Width

File List

Type in the name of the .gif file or select it from the list.

Directory

Select the directory you want to search for .gif files

List

The only choice is .gif files

Drives

Choose the drive to search for .gif files

Use

This box must be checked to run the files in the Play List

Insert

Using this button causes a standard file selection dialog to appear. Choose the file, or files, you want to add to the play list. Choose multiple files using the Shift or Ctrl keys as you would in File Manager.

Delete

Select a file in the Play List and use this button to remove it from the list.

Load

Choosing this button causes a standard file dialog to appear. You can search for Play List files you have saved with the .mgl extension.

Save

Use this button to save the Play List you have created. The file will have an .mgl extension.

List Box

This box shows the files in the Play List.

Play List Dialog

Put the mouse cursor over parts of the dialog box you would like more information about, or TAB to the area with your keyboard.

MIDI Mapper

The MIDI Mapper is a driver provided with Windows. Using it can be confusing, so Dan McKee prepared a FAQ file (MMQUST.TXT) which can be found on the Sight and Sound and the MIDI Forums. Portions of that file relative to MM:GIF have been extracted and placed here for your convenience. Seek out the full file if these portions do not answer your questions.

- Q. What's the MIDI Mapper for anyway?
- Q. Okay, how does it provide this independence?
- Q. Huh? What's a patch, channel and velocity?
- Q. Will it work with all MIDI files?
- Q. What's General MIDI?
- Q. What are the differences between Microsoft's way and the real General MIDI Specification?
- Q. What are the capabilities of a Basic device?
- Q. Okay, what about Extended devices?
- Q. Where do I install the Sound Drivers?
- Q. What's this setting called MIDI?
- Q. What are the MIDI Mapper Setups?
- Q. When would I have to edit or create a MIDI Mapper Setup?

A. The MIDI Mapper's purpose is to provide device independence to MIDI devices. It attempts to do that same thing that the printer drivers do, for instance - a Windows program doesn't have to know how to deal with your specific printer type, it just deals with a generic printer. Then Windows and the printer driver figure out how to make the printed output appear.

| A. Technically, what the MIDI Mapper does, is remap patches, notes, channels and adjust velocities. It uses the Patch Map, Key Map and Setup to determine how to do this. You can create or adjust these yourself. | |
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A. These are all part of the MIDI lingo. A Patch is used to determine the sound to be used - examples would be Pianos, Strings or Guitars. Patches are used to select which instrument is used. Channels are used to separate songs to allow more than one instrument to sound at the same time. There are 16 MIDI channels, and each channel can use a single instrument or patch at a time. All notes are played on a MIDI channel. Velocity is a measure of how hard a note is pressed, and is used to specify how loud a particular note is.

A. Well, kinda yes and no. Until recently, there wasn't any standard for patch numbers, or note numbers. It was up to the manufacturer to determine what patch number to use for a Piano sound for instance. Now there is a General MIDI specification, which does identify which instrument is to be used for each patch number. However, there are a large number of songs out there that are not General MIDI. Now this doesn't mean that you shouldn't try to play non-General MIDI files with the MIDI Mapper. The worst that can happen is it'll sound bad.

A. This is an official specification from the International MIDI Association (the MIDI standards committee). Microsoft has used a subset of the specification for their own purposes. Microsoft has adopted the General MIDI patch numbers and drum key numbers, however they have not taken the complete specification.

A. The General MIDI Specification requires much more capable MIDI equipment than Microsoft. A real General MIDI device supports 32 note polyphony (that's 32 notes sounding at the same time), and uses all 16 MIDI channels. This is more than Microsoft's target device can handle, so Microsoft has defined two less capable devices - a "Basic" device, and an "Extended" one. They've also defined a set of "Authoring Guidelines" for MIDI files.

A. A Basic device must be capable of playing 6 melodic notes, in at least three different instruments, as well as 5 percussion notes. All sound cards are capable of this - in fact, most can only do this. Basic devices are supposed to listen to MIDI channels 13 through 15 for the melodic instruments, with the drums on channel 16. The Adlib, Sound Blaster and original Sound Blaster Pro are all Basic devices, as are most sound cards.

A. Extended devices must be capable of 16 melodic notes, using 9 instruments, plus 16 note, 8 instrument percussive. Extended devices are supposed to listen to MIDI channels 1 through 9 for melodic sounds, with the drum track on channel 10. Examples of Extended devices include the Roland MT-32/LAPC, Roland Sound Canvas series (including the SCC-1), and Turtle Beach's MultiSound card.

A. All sound drivers are installed using the Window Control Panel application (in your Main program group). Once started, Control Panel shows a set of icons - choose the one labeled Drivers to install, remove or configure sound drivers. Now a list of the currently installed drivers will be shown - press Add to add a new driver. Most sound cards come with drivers for them - follow the manufacturer's directions to install the drivers. This is also fairly well documented in your Windows manuals.

| A. Most sound cards include an optional MIDI connection. Often this is an add on. You'd use this to connect an external MIDI device, such as a keyboard. Unless you've got an external MIDI device, you can ignore anything like "Sound Blaster 1.0 MIDI" - if you use this, you won't hear anything. |
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A. A Setup in the MIDI Mapper connects a key map and patch map to a set of drivers. A Key map is used to remap drum notes, and the patch map is used to remap patches. The setup ties all of these together, and assigns a patch map, key map and device to each MIDI channel.

A. If you've got a MIDI device that isn't supported in the list of available setups, you'll have to edit the setup. For instance, someone with a Roland Sound Canvas is probably using the Windows MPU-401 driver. The Sound Canvas is a real General MIDI device - it doesn't need any patch or key maps. You can easily create a setup for this - just assign "MPU-401" as the driver for each channel, and save the setup.

MM:GIF Frequently Asked Questions

Hey! No Sound!!!
What's With The Warnings?!!!
The Images Stink!!!
I Get "Out Of Memory" Errors!!!
What If I Don't Have A Sound Card?

- Q. I just downloaded the mmgif.zip package from the CompuServe SSForum and the audio doesn't work. I have a Pro Audio Spectrum 16 sound card (or Sound Blaster or XYZ Brand Sound Card) and it does play midi files through the Windows Media Player just fine?
- A. Most sound cards come with new setups for the MIDI Mapper. There are often three setups that will use the internal sounds of the sound card -- one labeled "Basic", one labeled "Extended" and one labeled "All". The differences between these three setups are the channels used. A Basic setup will ignore anything on channels 1 to 12, and an extended setup will ignore anything on channels 11 through 16. The All setup will listen to all 16 MIDI channels.

You can also bypass the MIDI Mapper altogether and select your FM driver directly by using the Options/MIDI Configure . . . menu item.

Q. When do I use All?

A. For songs contained in multimedia GIFs, **AII** is the best setting. MIDI songs contained in GIF's adhere to the General MIDI Standard (not Microsoft authoring guidelines -- see <u>MIDI Mapper</u>). This means that they contain MIDI data on any of the 16 channels, with percussion on channel 10.

Q. I get a warning message saying that the "Song (Song Name) sends output on channels not supported by my driver"?

A. If you are using the MIDI Mapper as the output device, see the <u>No Sound</u> suggestions about using the **ALL** MIDI Mapper setting. If you are using the Jamie O'Connell - FM Synth driver directly, open the Control Panel applet and select (put an X in) all 16 channels, select the "save settings" box, press the Apply button, and then press the Close button.

Q. I get a warning message saying that the "Song (Song Name) requires more voices (number) than my driver supplies (number)..."?

A. This is simply an **advisory** message. MM:GIF will play the song and adjust itself according to the choice you made in the <u>Driver Configure Dialog Box</u>. You will frequently get this message when using a sound card driver supplied by most manufacturers. Most stock FM drivers cannot play more than 6 notes at once. If you have a more advanced card with 2 OPL2 FM chips or a single OPL3 or OPL4 FM chip (Sound Blaster Pro, SB16, Media Vision PAS 16, etc.), and want to hear more notes, download the FM Synth driver (FMSYN.ZIP). This driver has the ability to play 15 notes at once.

- Q. I tried to use your mm-gif viewer on another .gif file that displays very nicely on cshow.exe (or other DOS viewer) and find that your mm:gif returns an image that is overlayed with white-dots. What Gives?
- A. In order to achieve the highest resolution, MM-GIF requires that a Super-VGA card is installed, and that a 256 color driver is installed in Windows. DOS programs can set VGA cards into other video modes -- Windows programs must use the video driver that is currently installed. The "white-dots" or cross-hatching are dithering marks. They are produced when MM-GIF translates a 256 color picture into 16 colors. Trust me, it is better looking than if we didn't do the conversion!

GIF files cannot contain more than 256 colors so you may get more memory available, and better response if you switch to a 256 color driver from a more capable one (16 million colors?).

Q. I Downloaded your mmgif viewer, and was disappointed to find it would not work. It will view a GIF file, poorly, but when I try to load the smallest file on the forum (teapot) it sends an "OUT OF MEMORY" message. I do not have one of the mega-memory monsters, I simply have 2 megs RAM?

A. Its time to upgrade! GIF files are compressed. Some GIFs can compress much more than others. When expanded, Teapot occupies over 2 Megs of RAM -- it is definitely not the smallest, although it's disk image is. A realistic minimum amount of memory for playing multimedia GIFs is about 4 Megs of RAM. All files currently available will play in 4 Megs on a properly configured PC.

Q. What do you mean "properly configured"?

A. The first thing to find out is how much disk space you are donating for a swap file. Opening the Control Panel, 386 Enhanced Mode applet and pressing "Virtual Memory", will display the amount. It is better to dedicate a "permanent" swap file if you can manage it. For a machine containing 4 Megs of RAM, an 8 Meg swap file would be ideal. The Program Manager Help/About box should display over 9 Megs of virtual memory in this case (with no other apps loaded).

Other things to check for are TSRs such as RAM drives: Disable them. These are of no use on a Windows machine with less than 16 megs of memory. Look in the AUTOEXEC.BAT (or CONFIG.SYS for older DOS), for the amount of RAM being given to SMARTDRV. With a 4 Meg machine, SMARTDRV should be configured to use 512K of memory when running Windows. (This is the default on a 4 meg machine). This may cause more disk accesses and slow things down slightly, but you can play all the GIFs here! Obviously the best solution is to get more memory. And yes, we own stock in a chip factory.

I don't have a sound card or any other MIDI device. Can I still see the images?

MM:GIF must have a MIDI device to "talk" to in order to play mmgifs. However, you can obtain **MPCable** (mpc.zip) from the Sight and Sound Forum and install it on your machine. **MPCable** is designed to be a patch cable between MIDI devices, but it does not need to have *both* ends plugged in. You can select it in your MIDI Configure Dialog and **MM:GIF** will send its MIDI information to the cable. The MIDI data will spray out of the other end of the cable and eventually fill up the inside of your computer. To remove those bytes, we *sell* a device called MIDI Vacuum . . .Just Kidding, folks. The MIDI data will harmlessly "evaporate".