

USER'S GUIDE



POWERJAM SYSTEMS **CANVASMAN32**TM

*Windows 95/98/NT Editor / Librarian
for GS and Sound Canvas Synthesizers*

PowerJam Systems

CanvasMan32TM

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CanvasMan32 User's Guide

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OVERVIEW

CanvasMan32 is the Windows NT, Windows 98, and Windows 95 editor/librarian for Roland's line of Sound Canvas and GS synthesizers. **CanvasMan32** provides true MIDI multitasking—you can run it by itself, while you sequence with Cakewalk or while you jam along with The Jammer. Your wait is over for an easy-to-use Sound Canvas editor.

CanvasMan32 can play your MIDI files as you edit—you'll hear your changes instantly in the context of your own musical projects! It saves its data in standard sysex format (also called 'MIDIEX' format) so you can store edits within your sequences or as stand-alone banks. You can even create your own single- and multi-Part sounds for easy future recall. Finally, **CanvasMan32** gives you mastery over all Global, Part, and Drum parameters. No other editor gives you such complete control over the Sound Canvas!

To maximize data integrity, **CanvasMan32** uses one-way MIDI communication only (from the computer to the synth). You cannot lose data when other windows send extraneous data.

Unless otherwise noted, this guide interchangeably refers to 'Windows NT', 'Windows 98', and 'Windows 95' as 'Windows.' It also refers to any **CanvasMan32**-supported GS sound module or keyboard as a 'Canvas,' a 'Sound Canvas' or a 'GS synth.' If you have an SCC-1, please ignore references to the 'display' or 'LCD'—the SCC-1 doesn't have one.

CanvasMan32 avoids the term 'patch' in its documentation because 'patch' has an ambiguous definition in the context of multi-timbral synths. All users should read the **Combos / Sounds / Drum Kits** section (page 23) for a complete description of **CanvasMan32**'s data files.

This guide describes how to modify, save and audition the various parameters within the Canvas. It does not describe what these parameters do. For example, it describes how to turn Chorus On and Off, but it doesn't state what effect that has on the sound nor why you might want that effect. The online help and various Canvas owner's manuals will explain some of these parameters, however.

This guide also does not explain basic Windows procedures and concepts such as selecting menu options and using scroll bars. If you are a new Windows user, please run the appropriate Windows tutorials.

Finally, though there are multiple Editions of **CanvasMan32**, they share the same user's guide and help file. Unless specifically noted, '**CanvasMan32**' refers to any Edition.

System Requirements

- Microsoft Windows NT, Windows 98 or Windows 95
- Mouse or other pointing device
- MIDI interface with a Windows driver
- Roland GS or compatible synthesizer

- ❶ **Run SETUP**—Click on the **Start** button and then select the **Run** option. This will display the Run dialog and position your cursor at Open.

*If you have a **CanvasMan32** disk in drive A:, type **A:SETUP <Enter>***

*If you have downloaded the Shareware Edition of **CanvasMan32**, type the full path to the downloaded archive file and press <Enter> (for example, **C:\DOWNLOAD\CM32 <Enter>**).*

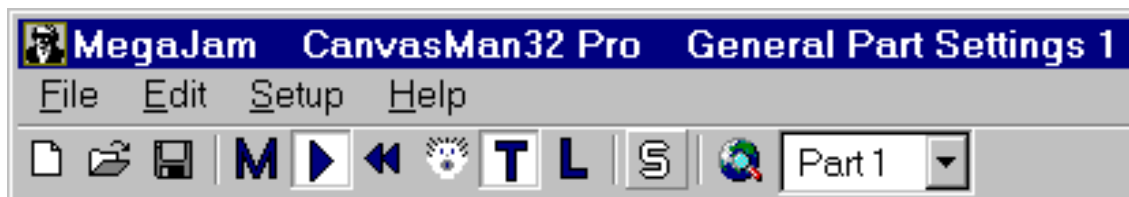
Follow the instructions on the screen.

- ❷ **Read CanvasMan32's Help Introduction**—When completed, the SETUP program will display a good overview of **CanvasMan32** from its online help file. Please take the time to read it. (To redisplay this again later, you can also double-click on the **READ ME FIRST!** icon in the **PowerJam Systems** folder.)

- ❸ **Set Up MIDI Devices and Synths**—Start **CanvasMan32** by double-clicking on its icon in the **PowerJam Systems** folder. Setting up consists of three dialog boxes: *Sequence MIDI Output Ports*, *Define MIDI Thru Settings* and *Define Synths*. Select *Sequence MIDI Output Ports* via the 'S' button on **CanvasMan32's** toolbar. (**CanvasMan32** will automatically start them for you the first time in.)

Read the next four pages for complete descriptions of *Sequence MIDI Output Ports*, *Define MIDI Thru Settings* and *Define Synths*.

See also the **MIDI Multitasking** appendix for more information.



Like most of our 32-bit programs, **CanvasMan32** uses a centralized module called '**PowerJam Central**' for MIDI input and output ('MIDI I/O'). Coordinating MIDI I/O centrally has some fundamental benefits:

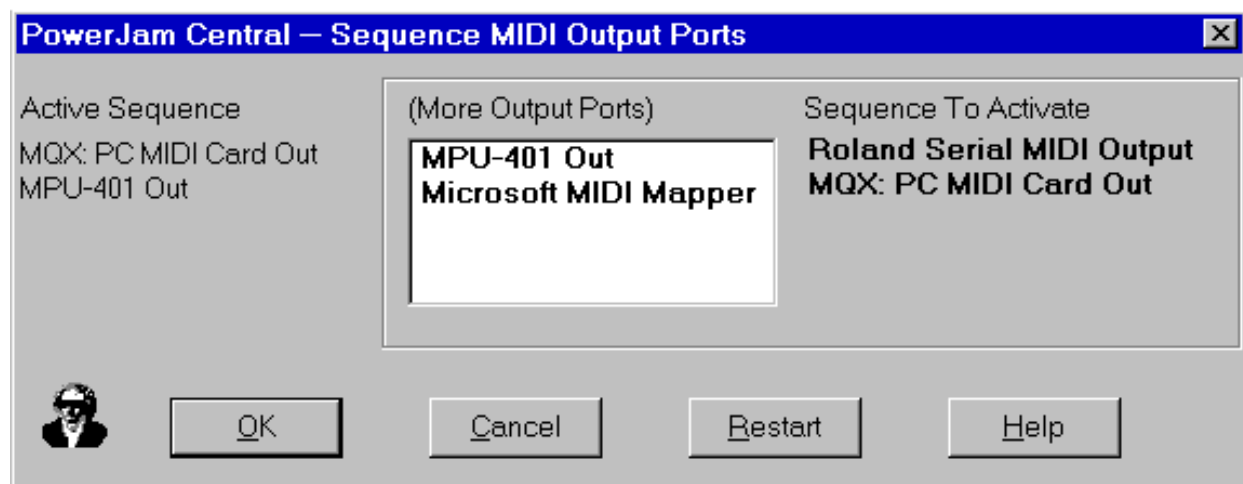
- opening several instances of a program will not overload the MIDI driver
- each instance knows about and can communicate with the others

PowerJam Central is a small toolbar that merges with **CanvasMan32**'s toolbar as shown above. You can also have it float centrally by itself at the top of the screen (as shown below).



Note that **PowerJam Central** turns off Local Control at startup. For more information, see the **MIDI Thru and Local** appendix (page 33).

For complete details concerning **PowerJam Central**, see the **Main Window Layout / MIDI Toolbar** section (page 8) and the **PowerJam Central** appendix (page 28).



If you have more than one output port, you can have **PowerJam Central** play your MIDI files on some or all of them. To do so, sequence the output ports to match your multi-port MIDI files.

The left column shows your current port sequence. If you wish to change this sequence, double-click, in order, on the relevant ports in the center column (this will move them to the right column). For example, the picture above shows that I am changing my sequence from the MQX as #1 and the MPU-401 as #2 (**Active Sequence**) to the Roland Serial as #1 and the MQX as #2 (**Sequence to Activate**). If I want to, I can still add the MPU-401 and the MIDI Mapper to the **Sequence to Activate** column as #3 and #4 before selecting **OK**.

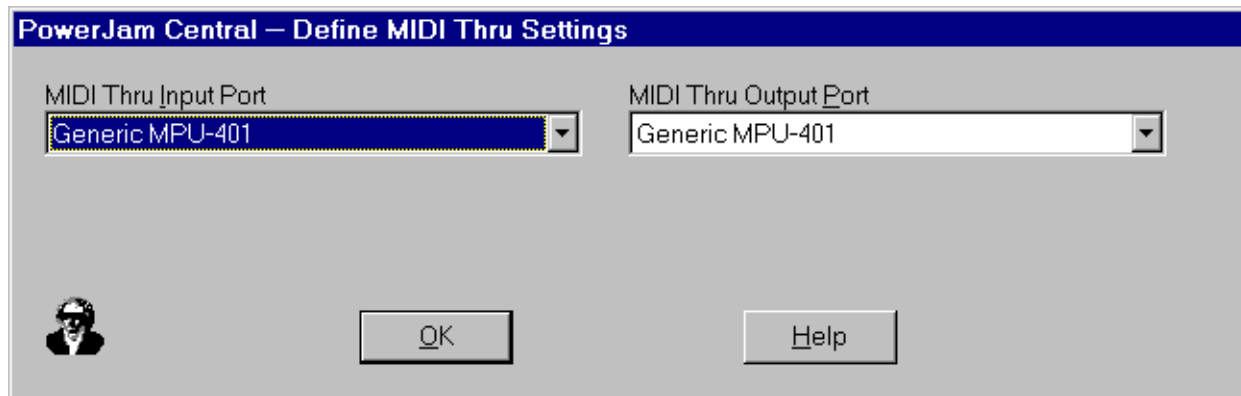
In summary, when you select **OK**, the **Sequence To Activate** takes effect. If you select **Cancel**, however, the **Active Sequence** remains in effect.

If you sequence the ports incorrectly, select the **Restart** button to move all ports back to the center column. You can then restart sequencing your ports.

Try to avoid using the MIDI Mapper—you cannot normally open it for multiple concurrent output. See the **MIDI Multitasking** appendix (page 32) for more information.

Each time you run *Sequence MIDI Output Ports*, **PowerJam Central** will run *Define MIDI Thru Settings* afterwards.

SETTING UP — Define MIDI Thru Settings

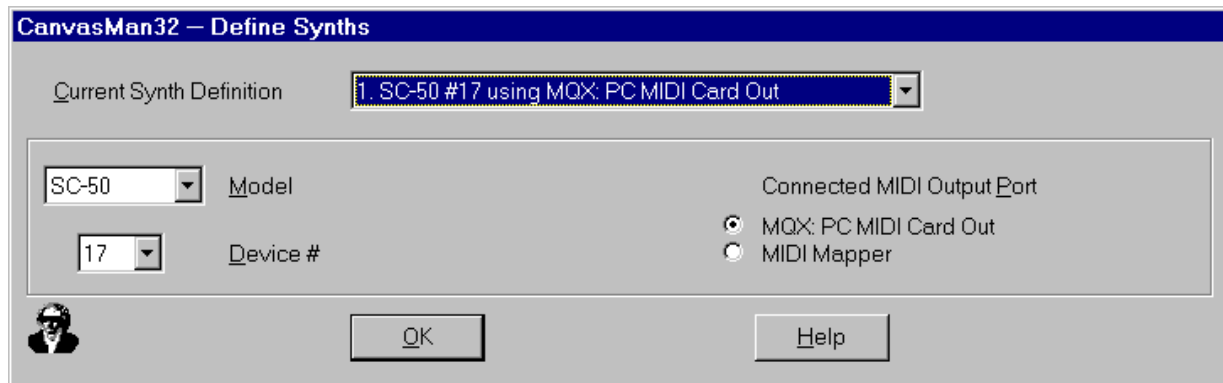


This screen is where you to set up your MIDI Thru options. **PowerJam Central** filters sysex, system reset, active sensing, and tune request.

Define MIDI Thru Settings allows you to select the input and output port you wish to use for MIDI Thru. The left side handles the input port. You will want to select the port that is connected to your keyboard controller. (If you have more than one controller, select the one you are currently playing.)

The right section of this screen handles the output port. Select the port to which you want your keyboard controller's MIDI information routed. You'll typically specify the same port as in *Define Synths* (see next page), since you'll probably want both types of MIDI information to go to the same port (i.e., eventually routed to the Canvas).

This screen is unavailable if your MIDI interface is output-only or if your selected input port has a single-client driver and is already in use. See the **MIDI Thru and Local** appendix (page 33) for more information.



This screen allows you to tell **CanvasMan32** about your synthesizer(s). **CanvasMan32** will support a MIDI network that has up to eight GS synths.

The **Current Synth Definition** listbox allows you to choose one of up to eight **CanvasMan32** synths—use definition #1 for your first synth and work upwards from there.

Once you select a **Definition**, use the **Model** listbox to tell **CanvasMan32** what type of Canvas you have. (If your model is not listed, please see the online help's **Introduction** section for information on how to proceed.)

Use the **Device #** listbox to specify which device # you have used for this synth. You will want to leave the device # at 17 unless you have more than one GS synth connected to the same MIDI output port. (If you **do** have more than one on the same MIDI port, read your synth manual to find out how to change its device # and then change **CanvasMan32** to match.)

Finally, use the **Connected MIDI Output Port** radiobuttons to specify which MIDI port you have connected to this synth. Most users will specify the same port as in *Define MIDI Thru Settings*, since you'll probably want both types of MIDI information to go to the same port (i.e., eventually routed to the Canvas). (If the MIDI port is not listed in the **Connected MIDI Output Port** column, re-run the *Sequence MIDI Output Ports* dialog to add the port.)

When you have specified your synth model, its device # and its MIDI port, select **OK**; **CanvasMan32** will then act upon your decisions and display the information on the status bar.



CanvasMan32's main window consists of several sections. From top to bottom, they are:

- **Titlebar / Caption**
- **Menubar**
- **Toolbar / Part Selector**
- **Edit Controls** (The picture above does not show any **Edit Controls** since they change based on the current **Edit Menu** selection.)
- **Status bar** (The lower section of the picture above.)

The window **caption** states your current Combo file name, 'CanvasMan32,' and the current **Edit Menu** selection.

The **menubar** (**F**ile **E**dit **S**etup **H**elp) appears below the caption. The menu sections of this manual explain each menu option in detail. Certain options have accelerator 'hotkeys' that make accessing them quicker. For example, you can press **Ctrl+1** to display the **General Part Settings #1** screen. The menus show accelerators where available.

The **toolbar** is the row of pictures (‘buttons’) below the menubar. These buttons duplicate some of the menu options. From left to right, the first three buttons represent **File-New**, **File-Open**, and **File-Save**.

The next several toolbar buttons are for **PowerJam Central** functions. From left to right, they represent **Open MIDI File**, **Play/Pause MIDI File**, **Rewind MIDI File**, **Panic Button**, **toggle MIDI Thru**, **toggle MIDI Local**, and **Setup PowerJam Central**. The **PowerJam Central** buttons are disabled if MIDI is unavailable. See the **PowerJam Central** appendix on page 28 for more details.

Finally, the last button takes you to the **PowerJam Systems** web site.

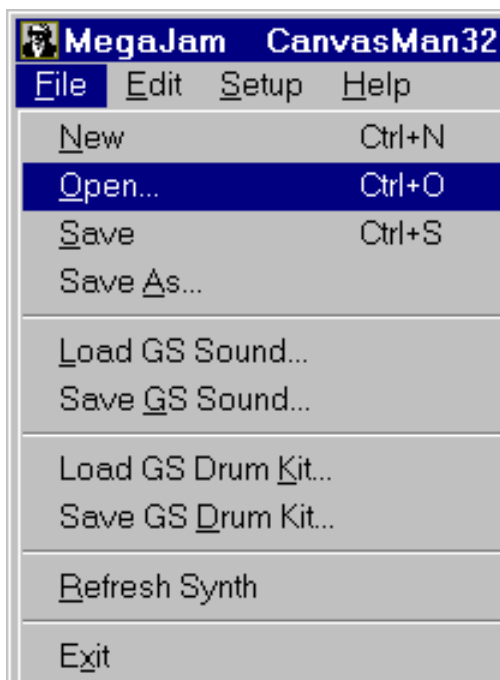
Certain toolbar options have accelerator ‘hotkeys’ that make accessing them quicker. For example, you can press <**Ctrl+O**> to **Open** a new Combo file. The tooltips show accelerators where available.

The **Part Selector** listbox is just to the right of the **toolbar**. You can choose the currently editable Part with the Part Selector listbox. When you display an edit window that spans multiple parts (e.g., Quick Edit), however, the Part Selector listbox disappears. When available, click on one of the sixteen listings to choose your current work-in-process Part.

Starting on page 12, the **Edit Menu** section describes the different **Edit Control** screens in detail.

The **status bar** appears at the bottom of the window. It generally lists the synth model you have, its device number and the MIDI port to which it is attached. You can change all of these settings in the *Define Synths* dialog.

Like in other Windows programs, you can resize the **CanvasMan32** window by dragging its border.



See the **Combos / Sounds / Drum Kits** section (page 23) to learn how **CanvasMan32**'s data files interrelate.

New

This option creates a new GS Combo file by sending a GS Reset to the Canvas. Before wiping out your Combo-in-process, however, **File-New** will prompt you to save it if you've changed it since your last **File-Save** or **File-Save As**.

Open

This option displays a file open dialog for GS Combos. Once you select a valid file, **CanvasMan32** sends its sysex data to the Canvas. **File-Open** will prompt you to save the current Combo if you've changed it since your last **File-Save** or **File-Save As**.

Save

This option saves the current GS Combo file. If the current file is unnamed, **File-Save** behaves as **File-Save As** and displays a file save dialog for Combos.

Save As

This option displays a file save dialog for GS Combos.

Load GS Sound

This option displays a file open dialog for GS Sounds. Once you select a valid file, you can insert it into the current Combo starting on any tonal part.

Save GS Sound

This option allows you to select which Part(s) you wish to include in a GS Sound. Once you've done so and pressed the **OK** button, **File-Save GS Sound** displays a file save dialog for Sounds.

Load GS Drum Kit

This option displays a file open dialog for GS Drum Kits. Once you select a valid file, you can insert it into the current Combo as Drum Kit #1 or #2.

Save GS Drum Kit

This option displays a file save dialog for GS Drum Kits.

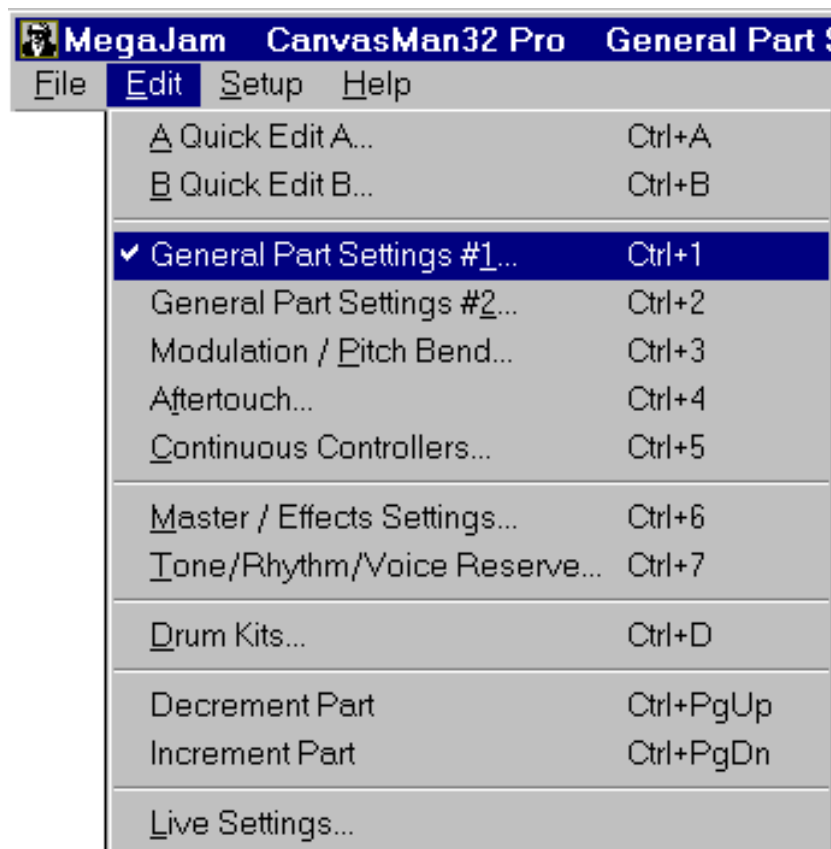
Refresh Synth

This option retransmits the current GS Combo file's sysex data to the Canvas.

Exit

This option exits **CanvasMan32**. **File-Exit** will prompt you to save the current GS Combo file if you've changed it since your last **File-Save** or **File-Save As**.

EDIT MENU



The **Edit Menu** displays a list of all of the edit dialog windows. **CanvasMan32** indicates the current choice with a check mark to its left.

When you select a new edit window, the window size reverts to its default. As with most Windows programs, however, you can resize the **CanvasMan32** window at any time.

Each valid change you make on any edit screen sends the sysex data to the Sound Canvas immediately. *Clicking on a control with the right mouse button (or left button, for left-handers) will change the control's setting to its default value.*

To help clarify the explanatory text, the edit dialog pictures that follow show neither the titlebar, menubar, toolbar, Part selector nor status bar.

CanvasMan32 CE does not have all of the edit dialogs.

EDIT MENU — Quick Edit

	Part															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Instrument #	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIDI Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume Level	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Pan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chorus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reverb	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Pitch Bend Range	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mod Depth	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Cutoff Freq	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Resonance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Attack Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Release Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Quick Edit A

	Part															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Instrument #	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIDI Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume Level	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Velo Sense Depth	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Velo Sense Offset	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Vibrato Rate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vibrato Depth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vibrato Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Key Range - Lo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Key Range - Hi	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
Key Shift	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pitch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Voice Reserve	6	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0

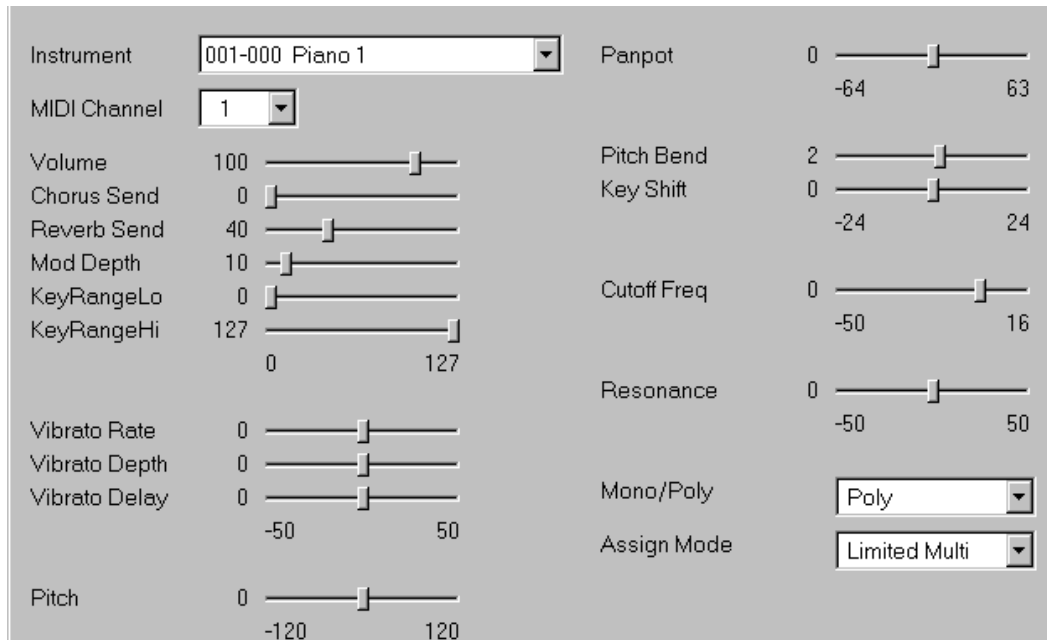
Quick Edit B

These dialogs display general part settings for all 16 Parts. You can use the keyboard to change several parameters here. Move between parameters with the **<Tab>** and **<Shift+Tab>** keys; you can also single-click (steady hand!) on a parameter cell to select it.

Once you have selected a cell, you can also use the **<Ctrl+↑>** and **<Ctrl+↓>** accelerators to quickly change values.

To mute a Part in *Quick Edit*, set its **MIDI Channel** to **0**. To set random panning, set **Pan** to **-64**.

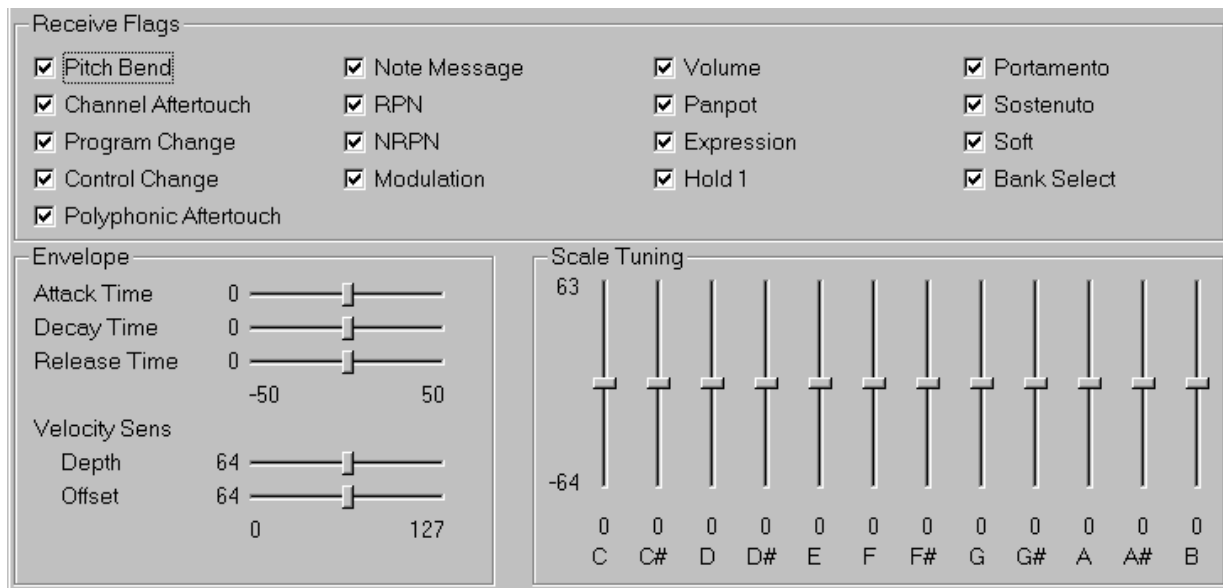
EDIT MENU — General Part Settings



The 'General Part Settings 1' dialog box contains various parameters for a MIDI part. It features two columns of sliders and dropdown menus. The left column includes 'Instrument' (set to '001-000 Piano 1'), 'MIDI Channel' (set to '1'), 'Volume' (100), 'Chorus Send' (0), 'Reverb Send' (40), 'Mod Depth' (10), 'KeyRangeLo' (0), 'KeyRangeHi' (127), 'Vibrato Rate' (0), 'Vibrato Depth' (0), 'Vibrato Delay' (0), and 'Pitch' (0). The right column includes 'Panpot' (0), 'Pitch Bend' (2), 'Key Shift' (0), 'Cutoff Freq' (0), 'Resonance' (0), 'Mono/Poly' (set to 'Poly'), and 'Assign Mode' (set to 'Limited Multi').

Parameter	Value
Instrument	001-000 Piano 1
MIDI Channel	1
Volume	100
Chorus Send	0
Reverb Send	40
Mod Depth	10
KeyRangeLo	0
KeyRangeHi	127
Vibrato Rate	0
Vibrato Depth	0
Vibrato Delay	0
Pitch	0
Panpot	0
Pitch Bend	2
Key Shift	0
Cutoff Freq	0
Resonance	0
Mono/Poly	Poly
Assign Mode	Limited Multi

General Part Settings 1



The 'General Part Settings 2' dialog box is divided into three main sections. The top section, 'Receive Flags', contains a grid of checkboxes for various MIDI messages. The bottom-left section, 'Envelope', contains sliders for 'Attack Time', 'Decay Time', 'Release Time', 'Velocity Sens Depth', and 'Velocity Sens Offset'. The bottom-right section, 'Scale Tuning', contains a series of vertical sliders for each note in a 12-note scale, with 'C' as the reference.

Receive Flag	Checked
Pitch Bend	Yes
Channel Aftertouch	Yes
Program Change	Yes
Control Change	Yes
Polyphonic Aftertouch	Yes
Note Message	Yes
RPN	Yes
NRPN	Yes
Modulation	Yes
Volume	Yes
Panpot	Yes
Expression	Yes
Hold 1	Yes
Portamento	Yes
Sostenuto	Yes
Soft	Yes
Bank Select	Yes

Envelope Parameter	Value
Attack Time	0
Decay Time	0
Release Time	0
Velocity Sens Depth	64
Velocity Sens Offset	64

Scale Tuning Note	Value
C	0
C#	0
D	0
D#	0
E	0
F	0
F#	0
G	0
G#	0
A	0
A#	0
B	0

General Part Settings 2

You can change several general parameters in these dialogs. You can set several high-level features, you can specify to which MIDI messages a Part responds, you can set a Part's amplitude envelope, and you can tune the Part's individual chromatic notes.

To set random panning, set **Panpot** to **-64**.

Modulation

Pitch
24
-24
0

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
10
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Pitch Bend

Pitch
24
-24
2

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
0
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Modulation / Pitch Bend

Channel Aftertouch

Pitch
24
-24
0

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
0
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Polyphonic Aftertouch

Pitch
24
-24
0

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
0
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Aftertouch

These options show different controller-oriented dialogs. You can change modulation, pitch bend, aftertouch, and continuous controller settings on these screens.

Continuous Controller 1

#
95
0
16

Pitch
24
-24
0

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
0
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Continuous Controller 2

#
95
0
17

Pitch
24
-24
0

TVF
Cut
127
0
64

Ampl
64

RC
64

LF01
PD
TVF
TVA
0
0
0

RC
64

LF02
PD
TVF
TVA
0
0
0

Continuous Controllers

EDIT MENU — Global

General			
Patch Name	<input style="width: 150px;" type="text" value="Jailhouse Rock"/>	Tuning	0 <input style="width: 100px;" type="range"/> -1000 1000
Volume (0-127)	127 <input style="width: 100px;" type="range"/>	Key Shift	0 <input style="width: 100px;" type="range"/> -24 24
Pan (L63-R63)	0 <input style="width: 100px;" type="range"/>		
Reverb		Chorus	
Macro	<input style="width: 100px;" type="text" value="Hall 2"/>	Macro	<input style="width: 100px;" type="text" value="Chorus 3"/>
Character (0-7)	4 <input style="width: 100px;" type="range"/>	Pre-LPF (0-7)	0 <input style="width: 100px;" type="range"/>
Pre-LPF (0-7)	0 <input style="width: 100px;" type="range"/>	Level	64 <input style="width: 100px;" type="range"/>
Level	64 <input style="width: 100px;" type="range"/>	Feedback	8 <input style="width: 100px;" type="range"/>
Time	64 <input style="width: 100px;" type="range"/>	Delay	80 <input style="width: 100px;" type="range"/>
Delay Feedback	0 <input style="width: 100px;" type="range"/>	Rate	3 <input style="width: 100px;" type="range"/>
Rev->Cho Send	0 <input style="width: 100px;" type="range"/>	Depth	19 <input style="width: 100px;" type="range"/>
	0 127	Cho->Rev Send	0 <input style="width: 100px;" type="range"/>
			0 127

Master Settings

		Part															
		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16															
Part Type																	
Tone		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Rhythm Map #1		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Rhythm Map #2		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Voice Reserve																	
	28	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	
	0	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	<input style="width: 100px;" type="range"/>	
		6	2	2	2	2	2	2	2	2	2	0	0	0	0	0	

Tone/Rhythm / Voice Reserve

These options allow you to affect each Part in your Combo. You can change effects and other global parameters on the *Master Settings* screen. On the *Tone/Rhythm / Voice Reserve* dialog, you can designate Parts as tonal or rhythm (Map #1 or #2) here, and you can reserve voices for Parts.

	ELECTRONIC					POWER				
	Vol	Pan	Rev	Cho	Tune	Vol	Pan	Rev	Cho	Tune
27 D#1 High Q	79	-15	127	127	60	79	-15	127	127	60
28 E1 Slap	107	-15	127	127	60	107	-15	127	127	60
29 F1 Scratch Push	87	-10	63	63	60	87	-10	63	63	60
30 F#1 Scratch Pull	91	-10	63	63	60	91	-10	63	63	60
31 G1 Sticks	115	0	63	63	60	115	0	63	63	60
32 G#1 Square Click	127	-10	0	0	60	127	-10	0	0	60
33 A1 Metronome Click	103	0	63	63	60	103	0	63	63	60
34 A#1 Metronome Bell	103	0	63	63	60	103	0	63	63	60
35 B1 Kick Drum 2	127	0	32	32	60	127	0	32	32	60
36 C2 Elec Bass Drum	127	0	32	32	62	127	0	32	32	60
37 C#2 Side Stick	127	0	127	127	60	127	0	127	127	60
38 D2 Elec Snare Drum	127	0	127	127	60	127	0	127	127	60

This option displays the *Drum Kits* dialog. The Sound Canvas stores settings for two drum kits; you can use the keyboard to change these settings here. Move between parameters with the **<Tab>** and **<Shift+Tab>** keys; you can also single-click (steady hand!) on a parameter cell to select it.

Once you have selected a cell, you can also use the **<Ctrl+↑>** and **<Ctrl+↓>** accelerators to quickly change values.

The top of the screen displays the kit names (**Electronic** and **Power** in the example above). The left column lists the sounds within the selected kit. You can select which of the two sound lists to display via the **Instrument Names** radio buttons in the upper left corner. For example, to change the list from **Electronic** to **Power**, click on the bottom button. If both kits are the same, **CanvasMan32** disables the **Instrument Names** radio buttons. (Most sounds are the same throughout all kits, so you may not see much, if any, effect when changing **Instrument Names**.)

Decrement Part

This option decreases the current Part number by 1. If you are already on Part 1, the Part recycles back to 16.

Increment Part

This option increases the current Part number by 1. If you are already on Part 16, the Part recycles back to 1.

Next Quick Edit Screen

This option moves forward through the *Quick Edit* screens. If you're already at the last screen, it takes you to the first. This option is only available when the *Quick Edit* screens are active.

Prior Quick Edit Screen

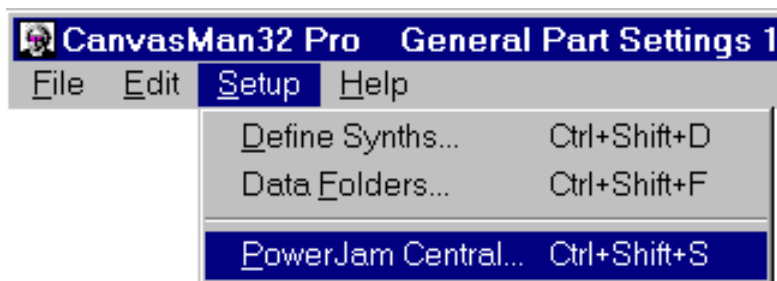
This option moves backward through the *Quick Edit* screens. If you're already at the first screen, it takes you to the last. This option is only available when the *Quick Edit* screens are active.



The screenshot shows the 'Live Settings' dialog box. It has a grey background and a black border. At the top, there is a text field labeled 'Patch Name' containing the text 'MegaTranspose'. Below this, there are four rows of settings, each with a label, a numerical value, and a horizontal slider. The first row is 'Key Shift (-24 / +24)' with a value of '12'. The second row is 'Pan (L63 / R63)' with a value of '0'. The third row is 'Tuning (-1000 / +1000)' with a value of '0'. The fourth row has two radio buttons: 'Backup' (unselected) and 'Lead' (selected). To the right of the radio buttons are two numerical values: '84' and '127', each followed by a horizontal slider.

Setting	Value
Patch Name	MegaTranspose
Key Shift (-24 / +24)	12
Pan (L63 / R63)	0
Tuning (-1000 / +1000)	0
Backup	84
Lead	127

This option displays the *Live Settings* dialog. You can change settings relevant to performing live here. See the **Live Performance Mode** section (page 22) for more details.



Define Synths

Page 7 of **Setting Up** explains this option fully.

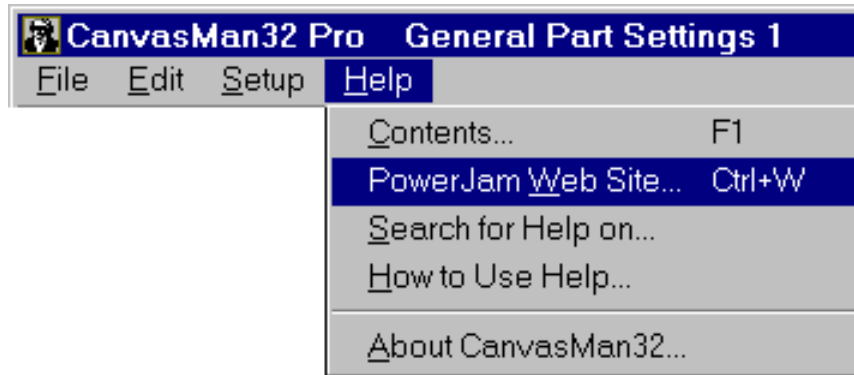
Data Folders

This option allows you to specify which folders to use for sysex/MIDIEX files (labeled **SysEx / MIDIEX Files**), GS Combos (**Combo Files**), GS Sounds (**Sound Files**) and GS Drum Kits (**Drum Kit Files**). *Setup-Data Folders* will create the directories if necessary, but only to one level. For example, C:\CM\SOUNDS is invalid unless C:\CM already exists.

PowerJam Central

This option allows you to specify settings that affect *all* **PowerJam Systems** programs. For complete details concerning **PowerJam Central**, see the **Main Window Layout / MIDI Toolbar** section (page 8) and the **PowerJam Central** appendix (page 28).

HELP MENU



Contents

This option displays the table of contents for **CanvasMan32**'s online help system.

PowerJam Website

This option starts your Internet browser and takes you to the **PowerJam Systems** worldwide web home page.

Search for Help on

This option displays the list of cross-referenced **CanvasMan32** help keywords. You can search for information on any indexed word or phrase as listed here.

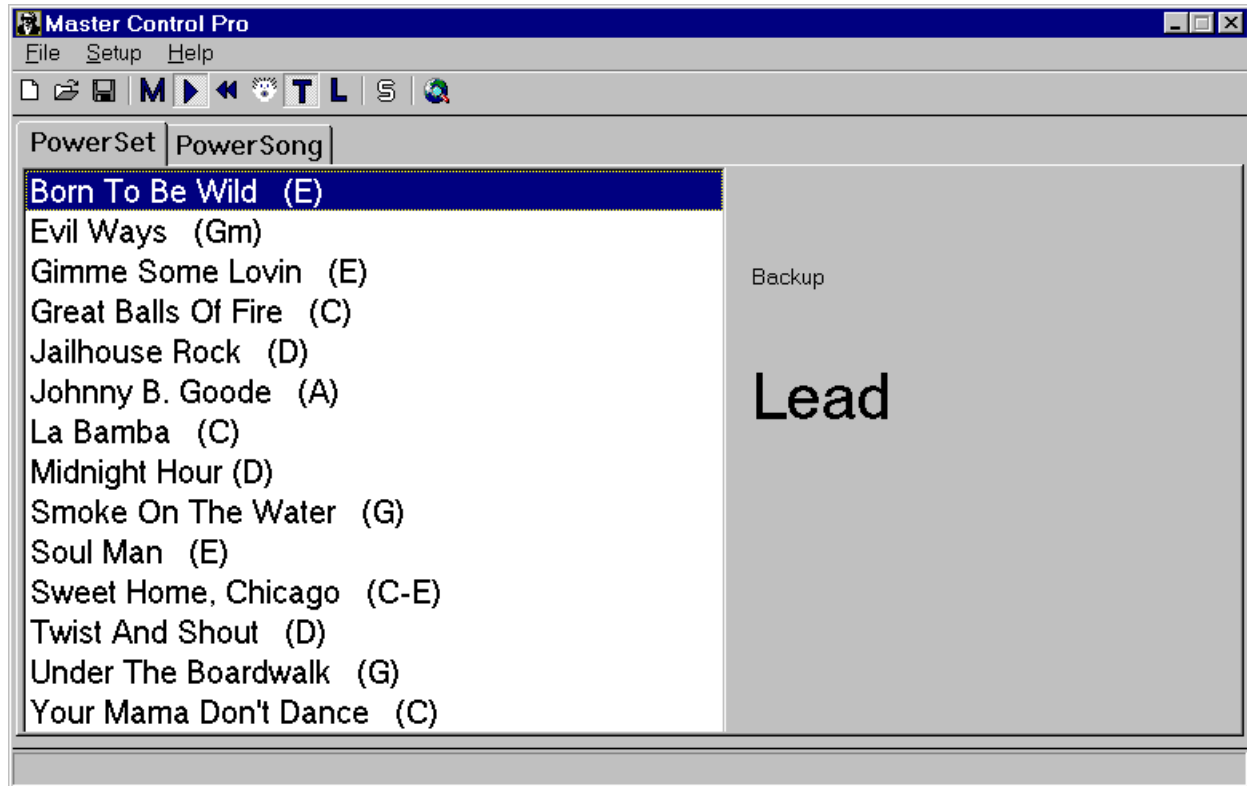
How to Use Help

This option displays Windows' own 'how to use help' tutorial.

About CanvasMan32

This option displays the sunglassed Beethoven trademark and plays the **PowerJam Systems** fanfare. Its purpose is to list copyright and program version information.

LIVE PERFORMANCE MODE



CanvasMan32's Edit-Live Settings screen (page 19) works with our **Master Control** program (shown above) to better support live performances.

Master Control essentially makes it easy to change patches and switch between *Backup* and *Lead* volume levels while performing live. Prior to your gig, you use **CanvasMan32's Edit-Live Settings** screen to set up *Backup* and *Lead* volume levels for each **Combo** in your gig. Then, when you've decided on your set list(s), you use the **Master Control PowerSet** screen to sequence your **Combos** into Set List files.

The **Master Control User's Guide** contains more details.

CanvasMan32 creates three types of data files:

GS Combos	*.CM1 / *.CM2 / *.CM3 / *.SYX
GS Sounds	*.GSS / *.G2S / *.G3S
GS Drum Kits	*.GSD

CanvasMan32 focuses on **Combo** files—they contain data for the entire Canvas. Because the Canvas has sixteen Parts and two drum kits, you can think of a Combo file as a large band. (In this context, capitalized ‘Combo,’ ‘Sound’ or ‘Drum Kit’ indicates **CanvasMan32** data files. The non-capitalized version indicates ‘normal’ meaning; e.g., a ‘combo’ is a band or an orchestra.)

You set up one Combo for each of your songs; in effect, each song has a separate combo at its disposal. However, you will probably find that your songs often use the same settings for several instruments. For example, if you create the ultimate grand piano sound, you might want to use it in most of your songs’ Combos. Similarly, if you’ve changed the reverb on certain instruments in drum kit #1, you might want that effect in all of your songs.

This is where **Sound** and **Drum Kit** files come in. Sounds and Drum Kits are modular building blocks for your Combos. Sounds consist of one or more Parts on the same channel. Drum Kits contain note mapping and effects parameters for drum kits. Continuing the example above, assume you’ve created a great piano sound in your current Combo on MIDI channel 6 using Part 8. Rather than remembering all of the parameters you have tweaked so you can recreate them for your next song, simply save Part 8 by itself as a Sound.

To do so, select **File-Save GS Sound**. When it asks which Part(s) to include, click on Part 8. When you select OK, **CanvasMan32** will display the standard Windows file save dialog and allow you to name your Sound ‘UltimateGrandPiano.GSS’ or similar. Note that you can have multiple Parts in a Sound file. For example, if you create a grunge organ by combining *Organ 3* and *Overdrive Guitar*, you can save them together for use in Combos. After selecting **File-Save GS Sound**, simply check the appropriate Parts’ checkboxes. Since it makes no sense to include rhythm Parts in a Sound, **CanvasMan** prevents such attempts.

Sounds contain all parameters that are pertinent to that Part. They do not contain Global settings like reserved voices nor the chosen Reverb Macro—that information is stored in Combos.

Drum Kits work similar to Sounds. After changing the reverb for your chosen rhythm instruments in Drum Kit #1, select **File-Save GS Drum Kit**. When it asks which of the two kits to use, click on Kit #1. When you select OK, **CanvasMan32** will display the save dialog and allow you to name your Drum Kit ‘WayCoolReverb.GSD’ or similar.

When you want to use a Sound or a Drum Kit in a Combo, you select **File-Load GS Sound** or **File-Load GS Drum Kit**, respectively. **Load GS Sound** allows you to insert Sounds into the current Combo. After selecting a valid Sound file, you specify the destination Part and MIDI channel. The Part(s) and channel of the original Sound are irrelevant; **CanvasMan32** provides maximum flexibility here.

When loading a Sound, you can also opt whether to mute existing Parts on the destination MIDI channel. If you’re loading Ultimate Grand Piano on channel 1 and channel 1 is already assigned to *Space Echo*, you will probably want to leave this Mute option checked (or end up with a space-echoed piano sound). **CanvasMan32** loads the file into the current Combo and sends the sysex info to the Canvas.

Load GS Sound will not overwrite Rhythm Parts with the Tonal information in the Sound. For example, if you load a 4-Part sound into Part 9 and you have previously set Part 10 to the **Power** (rhythm) **Set**, the **GS Sound** will overwrite Parts 9, 11, 12 and 13. Similarly, **Load GS Sound** will fail if you attempt to load a Sound that will not fit. For example, you cannot load a three-part sound starting on Part 15 because it would try to fill Parts 15, 16 and 17. **Load GS Sound**'s prompts automatically adjust for this.

Load GS Drum Kit allows you to insert Drum Kits into the current Combo. After selecting a valid Drum Kit file, you specify the destination kit. There are two destination kits, and as with Sounds, the original Kit's kit number is not relevant. **CanvasMan32** loads the file into the current Combo and sends the sysex info to the Canvas.



COMBO TEMPLATE

CanvasMan32 has the ability to use your ‘normal’ settings with each new Combo file that it creates. To take advantage of this capability, you need to create a Combo file and store it as **CNVSMN32** in your **CanvasMan32** directory (normally **C:\Program Files\PowerJam Systems**).

For example, once you’ve programmed the settings that you ‘normally’ use, select **File-Save As**. Then enter the file name

C:\Program Files\PowerJam Systems\CNVSMN32

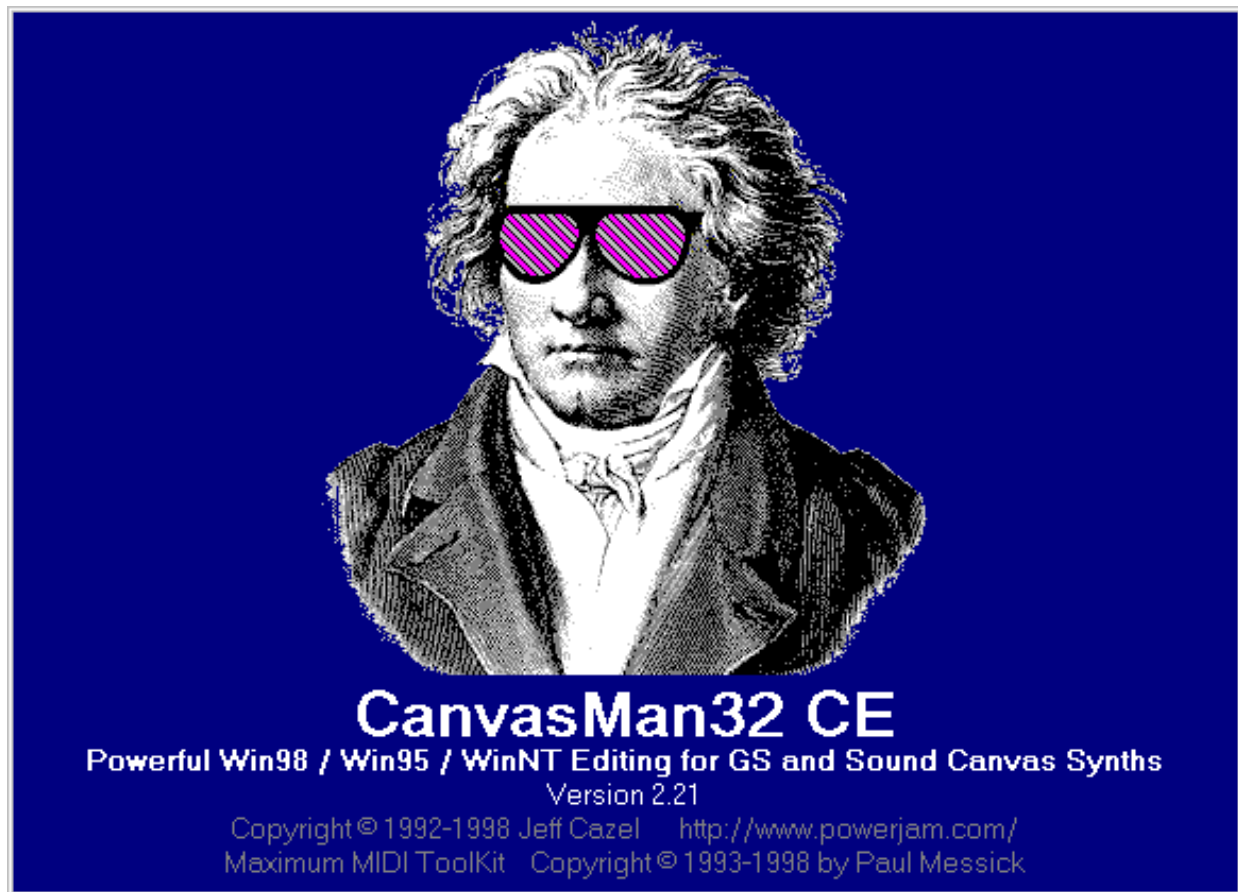
(Do *not* type the **.CM1**, **.CM2**, or **.CM3** file extension.)

Once you have created this Combo template, a **File-New** will send a GS reset as it does now. It will then ask if you want to use the template. You can respond **Always** (to use the template and make **CanvasMan32** stop asking), **Yes**, or **No**. It will then act accordingly. (Responding **Always** will turn off the question for this session only.)

Note that when you start **CanvasMan32**, its first (startup) **File—New** will use the template without asking.

Appendix A

TECHNICAL SUPPORT



See the online help's **Technical Support** topic for current information on getting help. Be ready to give the support staff the current version of **CanvasMan32**. This information shows on the **About** screen; in the **CanvasMan32 CE** example shown above, the version is 2.21.

POWERJAM CENTRAL



Overview

Like most of our 32-bit programs, **CanvasMan32** uses a centralized module called '**PowerJam Central**' for MIDI input and output ('MIDI I/O'). Coordinating MIDI I/O centrally has some fundamental benefits:

- opening several instances of a program will not overload MIDI drivers
- each instance knows about and can communicate with the others

PowerJam Central is a small toolbar that displays as part of the **CanvasMan32** toolbar. You can also have **PowerJam Central** float centrally by itself at the top of the screen (as shown above).

The relevant **PowerJam Central** buttons are disabled if no MIDI drivers are available.

Functions

Several of the buttons are *toggles*—i.e., they can be 'On' or 'Off' and will appear either depressed or raised, respectively.



MIDI File—opens and plays a Standard MIDI File. You can also play a file by dragging it from the Explorer and dropping it onto either **CanvasMan32** or onto the floating **PowerJam Central**.



Play/Pause—toggles playback for the Standard MIDI file. As shown, the button appears depressed when the file is playing.



Rewind—rewinds the Standard MIDI file to its beginning and, if playing, pauses it.



Functions (continued)



Panic—mutes all **PowerJam**-generated MIDI data and stops playback. In specific, it stops the song (if playing) and sends ‘all notes off’ and ‘reset all controllers’ messages on each channel of each sequenced MIDI output port.



Thru—toggles MIDI Thru. MIDI Thru is unavailable if you do not have at least one MIDI Input and one Output port. As shown, the button appears depressed when MIDI Thru is On. For more information, see the **MIDI Thru and Local** appendix (page 33).



Local—toggles Local keyboard control. The data transmits on all channels for each sequenced MIDI output port. Since most users want Local turned Off, **PowerJam Central** turns Local Off at startup. As shown, the button appears raised when Local is Off. For more information, see the **MIDI Thru and Local** appendix (page 33).



Settings—displays the **PowerJam Central Setup** dialog (described on the next page).

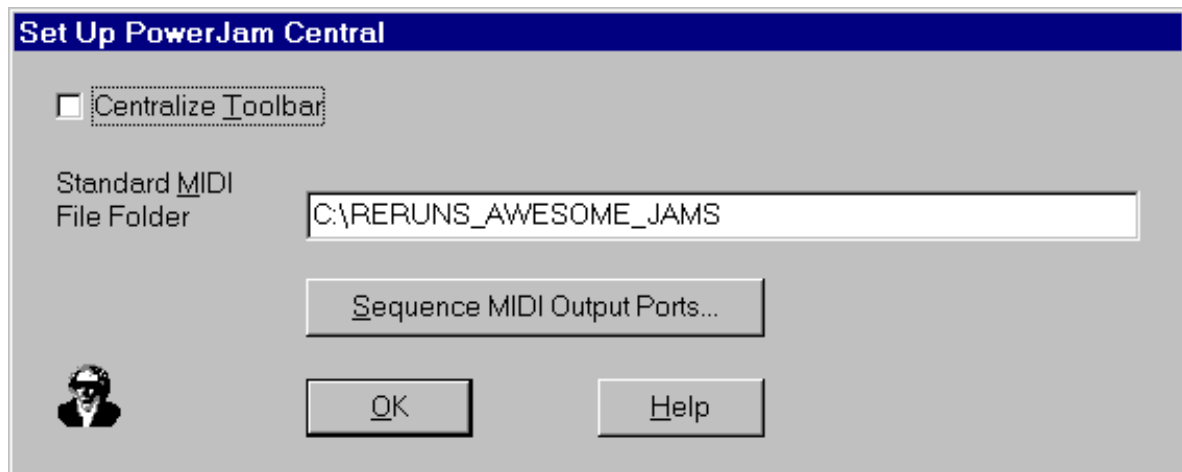


Move—moves the **PowerJam Central** toolbar along the top of the screen. Click and drag this button left or right as desired. This button only displays when the **PowerJam Central** toolbar is *centralized*, as described on the next page.

POWERJAM CENTRAL



Setup Dialog



This dialog box is where you can specify the settings for **PowerJam Central**.

Check the **Centralize Toolbar** option to display the toolbar as a separate ‘window’ at the top of the screen. (Centralizing the toolbar is generally only useful if you are running more than one instance of **CanvasMan32**.)

Specify your folder for Standard MIDI Files in the **Standard MIDI File Folder** edit control. **PowerJam Central** will create this folder if necessary, but only to one level. For example, C:\ROCKANDROLL\TUNES is invalid unless C:\ROCKANDROLL already exists.

Press the **Sequence MIDI Output Ports** button to run the *Sequence MIDI Output Ports* dialog. Note that **PowerJam Central** will automatically run *Define MIDI Thru Settings* after it runs *Sequence MIDI Output Ports*. Note also that *Define Synths* is a **CanvasMan32**-specific dialog and is not part of the **PowerJam Central** setup process. Pages 5 and 6 of the **Setting Up** section fully explain the *Sequence MIDI Output Ports* and *Define MIDI Thru Settings* dialogs.



Locking PowerJam Central

Because most of our 32-bit Windows programs use **PowerJam Central** to centrally coordinate MIDI I/O, **PowerJam Central** must protect itself from certain combinations of activity. For example, it cannot allow you to run the *Define Synths* dialog in **CanvasMan32** while running *Sequence Ports* in **AxeBlaster**. If it **did** allow this, you could give yourself an instant crash, for example, by unsequencing (closing) the MIDI Mapper in **AxeBlaster** and then selecting it in **CanvasMan32**'s *Define Synths*. **PowerJam Central** guards against these problems by having the following activities 'lock' **PowerJam Central** until they finish; i.e., they temporarily prevent you from running other programs that use **PowerJam Central**:

PowerJam Central's own *Settings* dialog, including its *Sequence MIDI Output Ports* and *Define MIDI Thru Settings* options

Refresh Synth (and any other time you send an entire sysex file)

Note that because Windows still shows 'locked' (disabled) programs on the taskbar, the 'lock' purposely **hides** these programs to cause them to also disappear from the taskbar. The programs reappear when the lock is over with.

MIDI MULTITASKING

Windows' capability of running multiple MIDI programs at the same time makes it vastly superior to DOS MIDI. You maximize this capability by using MIDI drivers that allow multiple concurrent output ('multi-client').

Multi-client drivers, for example, allow you to program sounds with **CanvasMan32** at the same time you play a song in Cakewalk or The Jammer. Note that the MIDI Mapper does not allow multiple clients. Note also that since few input drivers support multi-client use, you should make sure **PowerJam Central**'s MIDI Thru is turned Off if you run it at the same time as your sequencer—this way, **PowerJam Central** won't even try to open an input port, because it doesn't need one. If you can share an input port, however, make sure that no more than one program has MIDI Thru turned On—otherwise, your machine might lock up.

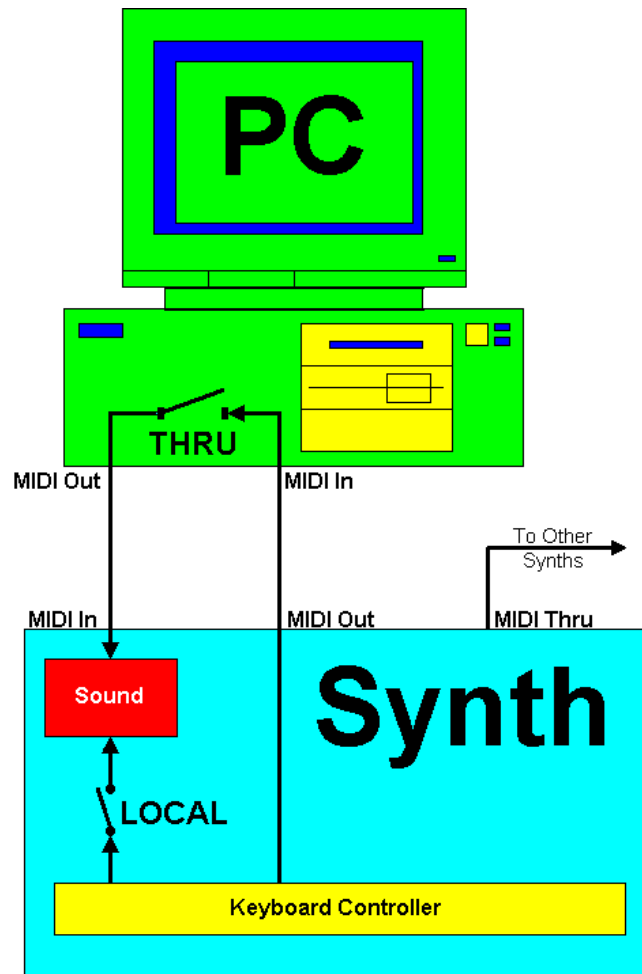
Many drivers support multiple output clients; however, the MPU-401 driver that comes with Windows does not support multiple clients. **Cakewalk Music Software** has created a better MPU-401 driver that does allow this. If you already run Wincake with an MPU-401, you probably have already installed this driver. If you don't have the driver, you can get it in Wincake's demo on the web at **www.cakewalk.com**.

Understanding these concepts is probably the most confusing aspect of Windows MIDI.

MIDI THRU AND LOCAL

(Few topics are as confusing to MIDI novices as MIDI Thru and MIDI Local Control. Since advanced users typically understand these subjects already, this discussion aims at novices. Note that the following paragraphs are not intended to be exhaustive—they are simply intended to get new users up and running.)

Study the diagram—it shows the ‘correct’ way to connect your MIDI cables. Once you have connected things this way, you should turn **PowerJam Central**’s Thru On and Local Off. (If you’re running **PowerJam Central** at the same time as your sequencer, however, leave **PowerJam Central**’s Thru Off and turn your sequencer’s Thru On.)

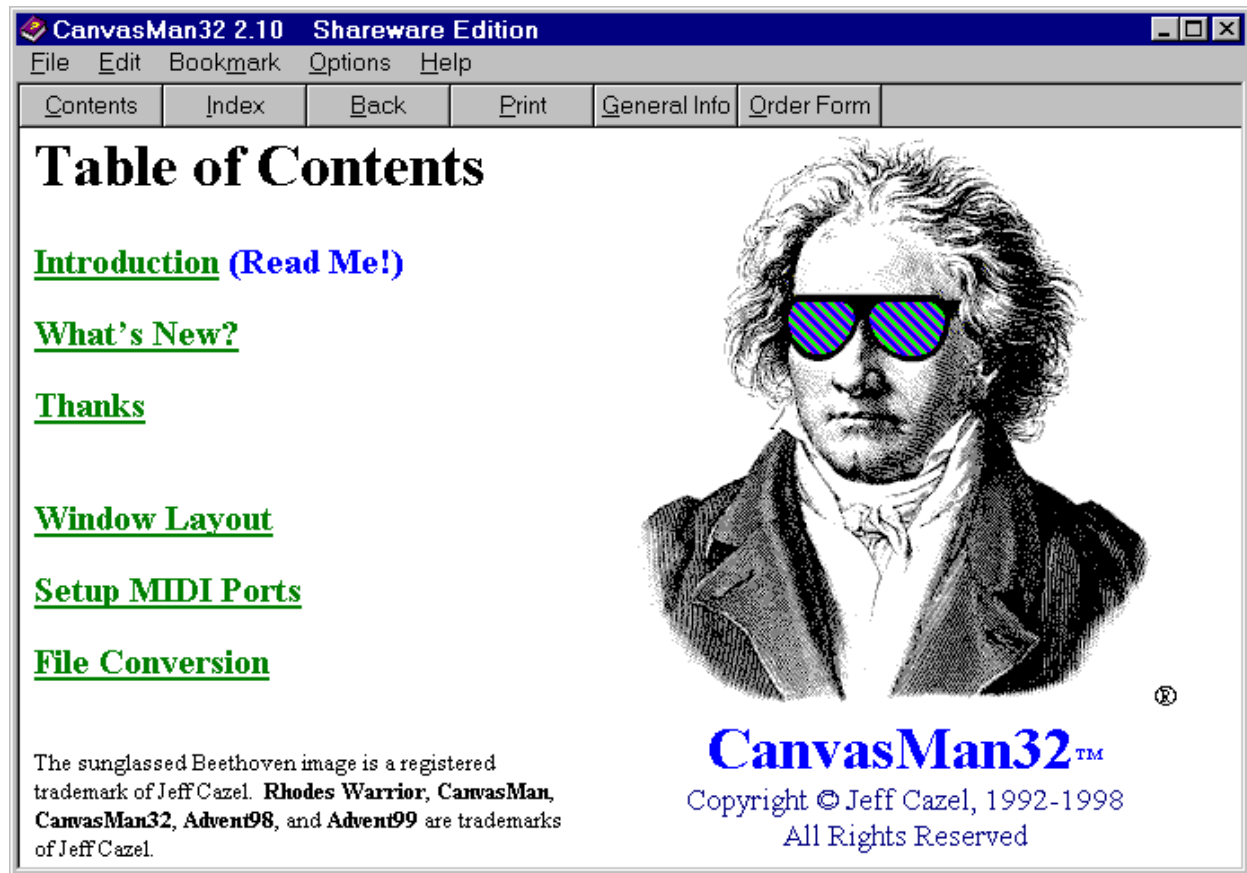


If you leave Local On, your keyboard will always make noise when you press its keys. You probably will not want that, since you might want to hear your other synth modules (labeled *To Other Synths*) by themselves. You can control if and when the keyboard itself makes noise by setting its Receive channel to the same channel on which it Transmits.

This is where MIDI Thru comes in. With Thru On, the computer ‘echoes’ MIDI data from its MIDI In to its MIDI Out. Turning Thru On and Local Off enables you to specify when you want the keyboard to make noise and when you want your synth modules to make noise. If you have both Thru and Local On, playing your keyboard can ‘double’ its notes—the internal connection will sound, and the computer will re-route the MIDI data back to the keyboard, sounding it again. Conversely, you will hear nothing if both Thru and Local are off.

Appendix E

ONLINE HELP



You can reach **CanvasMan32**'s online help at any time by pressing **F1**. Please be sure to read the **Introduction** topic.

Note the **General Info** button near the top on the right. **General Info** deals with **PowerJam Systems** as a whole.

MULTIPLE SYNTHS

As described in the **Setting Up** section of this guide on page 7, **CanvasMan32** will support a MIDI network that has up to eight Sound Canvas synthesizers. Once you define your synths to **CanvasMan32** (via the *Define Synths* dialog), you must tell each instance of **CanvasMan32** that you run which particular synth definition you wish to address.

You do this with the optional **/S:n** command-line parameter. You run **CNVSMN32 /S:1**, **CNVSMN32 /S:2**, **CNVSMN32 /S:3**, etc., to specify which synth definition to address (**CanvasMan32 Pro** users can run several at the same time). Note that the **/S:n** parameter is not case-sensitive (e.g., **/s:2** is the same as **/S:2**) and may not contain imbedded spaces (e.g., **/S: 2** is invalid).

The default setting is **CNVSMN32 /S:1**. In other words, if you run **CNVSMN32.EXE** with no **/S:** setting, **CanvasMan32** will access the first Sound Canvas you've defined.

CanvasMan32's **SETUP** program creates an icon for synth #1. If you have more than one **CanvasMan32** synth, however, you can create separate icons for each. See the online help's **Multiple Synths?** section for detailed instructions in setting-up your **CanvasMan32** icons to make it easy to control your setup.

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