Cakewalk Professional for Windows 2.00

README.WRI

This file contains information that became available after the printed documentation went to press. If you enlarge the Write window to its maximum size, this document will be easier to read. To do so, click the Maximize button in the top-right corner of the window. Or open the Control menu in the top-left corner of the Write window (press ALT+SPACEBAR), and then choose the Maximize command.

To move through the document, press PAGE UP or PAGE DOWN or click the arrows at the top and bottom of the scroll bar along the right side of the Write window.

To print the document, choose the Print command from the File menu.

Contents

1. General information

1.1. Press F1 for context-sensitive help

Remember that you may press the **F1** function key at any time to get help related to what you're doing in Cakewalk Professional.

1.2. CompuServe

An excellent alternative to technical support via phone or mail is to use CompuServe. Type "GO MIDIAVEN" and switch to our section (number 3). Messages are usually answered within 24 hours during weekdays by Twelve Tone Systems staff and experienced users. A variety of files are available for download. Type "GO MIDI" for questions and discussion about MIDI topics and products not related to Cakewalk.

1.3. Drivers included with Cakewalk Professional

In general, most drivers you will use are either included with Windows 3.1 or provided by the manufacturer of the MIDI interface or sound card. However, we have included two drivers on the Cakewalk Professional diskette.

➲ **IMPORTANT! If you have a SCSI hard drive controller**,
be sure to read thoroughly the section below titled, "WARNING: SCSI Hard Drives"!

Music Quest

We supply a driver for Music Quest interfaces (PC MIDI Card, MQX-16, MQX-32) on the Cakewalk Professional diskette. Music Quest may have newer, improved versions of this driver available. You may wish to contact them or check their section of the MIDIAVEN forum on CompuServe.

Please see the Cakewalk Professional *Installation Guide* for instructions on adding or removing drivers using the Drivers icon of the Windows Control Panel. Insert the Cakewalk Professional for Windows diskette in the drive when prompted.

Roland MPU-401 and compatibles

Windows 3.1 includes a driver for MPU-401 compatible MIDI interfaces. You may want to use our driver instead. It can be opened for output by more than one program at the same time, so that you don't have to quit one MIDI program before starting another. Important: be sure to Remove the Microsoft driver before you Add ours. If both drivers are installed at once, you will experience problems.

Please see the Cakewalk Professional *Installation Guide* for instructions on adding or removing drivers using the Drivers icon of the Windows Control Panel. Insert the Cakewalk Professional for Windows diskette in the drive when prompted.

1.4. SPACEBAR, P, R, and W keys

The shortcut keys for starting and stopping playback (SPACEBAR, P) and recording (R), and for rewinding (W), do not work in some circumstances. If the CAL view is active, then these keys need to be used so that you may type spaces and characters. For example, you need to be able to type spaces in your CAL programs, so the SPACEBAR let you do that instead of starting and stopping playback!

Note that if the CAL view is minimized (an icon) and you click on the icon, that becomes the active view. The title beneath the icon is highlighted. Even though you are not displaying the window at its normal size, it is still the active window. Thus the shortcut keys for playback, recording, and rewinding do not work. Make another window active (for example by clicking on it) to regain the use of these keys as shortcuts.

1.5. Dump Request Macros

When you press the Receive button in the Sysx window, you may pick from a list of Dump Request

Macros. These are short System Exclusive messages sent to a synthesizer to make it dump (send back) System Exclusive data. DRMs are defined in your WINCAKE.INI file in the [Dump Request Macros] section. You may add your own DRMs or modify the ones that we have provided. Use the Windows Notepad to edit the file.

Please note that many DRMs have been donated by customers who are using the particular equipment. In some cases we have not been able to test those DRMs because we do not have access to that equipment. We are redistributing such DRMs on an as-is basis. Additional user-supplied DRMs may be available on BBSs like CompuServe.

1.6. Saving MIDI Files containing System Exclusive banks

If a Cakewalk file has System Exclusive Auto-Send banks, then these will be saved in a MIDI File as System Exclusive messages at the very beginning of the song (1:1:0). If the song has other MIDI data starting at 1:1:0 -- for example, notes -- it won't get played correctly because the System Exclusive transmission will delay the start. The beginning of the song will sound "garbled".

The solution is to start the song at measure 2, for example, leaving room for the System Exclusive. (A good rule of thumb is to slide everything later by 1 measure, but you could make it longer if need be.) If you have Tempo changes, Meter/Key changes, or Markers in your song, you'll have to use **Cut** and **Paste** to cut the entire song and paste it back a measure later. If you have only notes in your song, you may use the **Slide** command instead, which is a little quicker.

1.7. Mail support

Cakewalk Professional allows sending files via Microsoft Mail or any other mail system that offers the MAPI Simple Mail Interface. If you have installed such a mail system, Cakewalk Professional will automatically add a **Send** command to its **File** menu. Choosing **Send** will call up the standard MAPI dialog box with the current Cakewalk Professional song file attached to the message.

1.8. File compatibility with earlier versions

Earlier versions of Cakewalk can load a file created by Cakewalk Professional for Windows 2.0, but will ignore information in the file related to features which are new in 2.0. For example, information in a file about the 32 new knobs in the Faders view will be ignored by Cakewalk Professional for Windows 1.0 when it loads the file.

Another example concerns the fields besides Comments in the **Info** dialog. Earlier versions of Cakewalk support Comments, but do not read and display the new 2.0 fields: Title, Subtitle, Instructions, Author, Copyright, and so on. If you are distributing Cakewalk files to people who may be using earlier versions of Cakewalk, you should consider duplicating the Author and Copyright information in the Comments section, so that they see it, too.

2. Hardware-specific information

2.1. WARNING: SCSI hard drives

As part of Windows MIDI driver installation, a virtual device driver (VxD) file is usually installed. For the two drivers we provide, this file is named VMPUD.386 for MPU.DRV (MPU-401) and VMQX.386 for MQX.DRV (Music Quest). This VxD file is only used when you run Windows in 386 Enhanced mode.

The purpose of the VxD

The Twelve Tone Systems VxD reads the card's base address from SYSTEM.INI (which you set using Control Panel Driver Setup) and traps accesses from that address to that address plus 10h (10 hex or 16 decimal). The goal of this VxD is simply to prevent DOS programs from accessing the card and interfering with the Windows driver's handling of the card while Windows is running. If an access is detected, the VxD displays an error message and simulates a dead card to the "offending" DOS program. The Twelve Tone Systems VxD is based on the original Microsoft VxD sample code and works the same way over the same address range.

Why are addresses trapped from the base address to the base address plus 10h, when supposedly the MPU-compatible cards only use addresses from the base address to the base address plus 1? Many MPU-compatible cards, such as the original Roland MPU-401 and Music Quest cards, actually respond to other addresses within that 10h range. When set at base address 330h, the Music Quest PC MIDI card has been reported to respond to 332h-337h as well, and the MPU-401 has been reported to respond to 338h-339h. Apparently, these cards do not decode all the address lines. Thus the safest, most-complete approach when dealing with MPU-compatible cards is for the VxD trap the whole range of 10h addresses.

The potential problem with SCSI cards

Unfortunately, it has also been reported that if the access comes from a SCSI card trying to access a SCSI hard drive within DOS, the error message never appears and DOS hangs. **Hard drive data loss is a possibility. SCSI card owners should beware of setting their SCSI card address anywhere within this range.** If it doesn't conflict with the card directly, then it will conflict with the VxD like this in enhanced mode if it's installed. If you're sure you aren't conflicting with your card, you can decide to forego the VxD protection by removing the VxD.

Removing a VxD .386 file

If you decide it's safe to remove the VxD, here's how to do it. Although Control Panel's driver installation knows how to install the VxD file associated with a driver, its driver removal does not know how to remove it. Therefore, an installed VxD will remain forever installed, unless you remove it manually. To do this, edit SYSTEM.INI with a text editor like the Windows Notepad. Find the line DEVICE=VMPUD.386 or DEVICE=VMQXD.386 under the section [386Enh] and delete it. Save the file and restart Windows. If you ever re-install the driver using Control Panel, you'll have to do this again.

2.2. Wave events and MIDI input using Sound Blaster

Many models of the Sound Blaster cannot do both MIDI input and wave output at the same time. Thus, if you've selected "Creative Labs" as an input device in Cakewalk's **MIDI Devices** dialog, wave audio won't work. This includes Cakewalk's special Wave and MCIcmd events as well as wave audio attempted by any other Windows application running while the "Creative Labs" MIDI In device open. This is not a limitation of Cakewalk in particular: while *any* program is using the "Creative Labs" input device, wave audio will not work.

Note that MIDI output will work fine along with wave audio: you can select "Creative Labs" from the list of output devices. The problem occurs only when you've selected the "Creative Labs" input device.

2.3. Striping a tape with "Smart FSK" or CLS

If you are striping a tape with a form of "Smart FSK" (for example, Music Quest's Chase Lock Sync), you need to check that an option in **MIDI Out** is turned on while you are striping the tape. This option is

Transmit Start/Continue/Stop/Clock, which is off by default. If this option isn't checked, striping won't be successful. Why? These forms of sync basically encode MIDI Sync info in a special code on tape. Therefore to create the code you must have Cakewalk emit MIDI Sync by checking the **Transmit Start/Continue/Stop/Clock** option. And once the tape is striped, remember that in order to have Cakewalk play in sync to Smart FSK or CLS, you need to use the **Clock** command and choose **MIDI Sync**" (or press the Control bar clock button until it reads "MIDI").

2.4. MIDI Time Piece Tips and Tricks

These comments are to help you use the MIDI Time Piece (MTP) made by Mark of the Unicorn (MOTU).

1. In Windows, input ports are separate. This means that the System Exclusive receive buffers Cakewalk uses are distributed among all the input ports. Using Cakewalk's **MIDI Devices** command (on the **Settings** menu), you may need to de-select all input ports except for the one receiving the System Exclusive. This ensures that there are enough buffers for the desired port. After the System Exclusive dump, you can return to **MIDI Devices** to switch the input port back to receive your MIDI controller's data.

2. "FAST 1X" mode of the MTP may exhibit strange behavior with System Exclusive send. This is a result of the MTP's "middle-man" processing techniques. The MTP Windows driver is not allowed to send System Exclusive through the MTP byte by byte. The MTP stores System Exclusive in a buffer to be sent out in larger, faster packets. This causes checksum errors on a Sound Canvas, for example. We are able to send System Exclusive to the Sound Canvas in FAST 1X mode by lowering the TTSSEQ.INI's SendSysxPacketSize parameter to 344. This number will differ for individual computer systems. Use FAST 1X mode with System Exclusive "at your own risk".

3. MOTU's MTP setup software is a DOS program and doesn't currently run together with the Windows driver in Windows 386 Enhanced or Standard modes. To use the MOTU setup program, exit Windows altogether.

4. MOTU provides a starting template for their setup software called WINDOWS.MTP. This should be loaded (hint: see item 3) before using the MTP as an interface in Cakewalk Professional for Windows. The MTP driver will access the MTP's current state as configured by WINDOWS.MTP rather than reinitializing it. This will allow you to customize the provided template using MOTU's MTP software, and then access this setup in the Windows driver.

5. When connecting two MTP's together for 16 input/output ports, put the unit assigned to ports 1-8 first in the chain. Then, connect the network cable from the back of this unit to the network input on the second unit (ports 9-16).

6. Since the MTP has a 17th port for sync input, you will see this in the Cakewalk Professional **MIDI Devices** list as a separate input port option. Cakewalk Professional supports a maximum of 16 input ports. If you have two MTP's using all 16 input ports and are using SMPTE sync, one input port should be deactivated in **MIDI Devices** in favor of using that 16th available input port as your sync port. Also, sync audio input should be read on the first MTP. This configuration is based on the routings of the provided WINDOWS.MTP template.

2.5. Patch Names

Cakewalk Professional for Windows lets you refer to patches using names instead of numbers. Names are provided for the factory preset patches of various kinds of synthesizers. With some synthesizers, you may need to configure the synthesizer in a certain way before the patches corresponding to the names are available. You'll find some tips to get you started below.

You may add or change patch lists by editing the PATCHES.INI file. The next time you start Cakewalk, the changes will take effect. You will see the message "Compiling PATCHES.INI" while your changes are being converted by Cakewalk into a PATCHES.BIN file. (Subsequently, Cakewalk uses PATCHES.BIN because it can be read much more quickly than PATCHES.INI.) Once Cakewalk starts, use the **Patch**

Names command from the **Settings** menu to choose your newly-created list.

Please note that the Windows Notepad application cannot handle text files larger than 32K, and PATCHES.INI exceeds that limit. Instead of Notepad, use the EDIT command found in MS-DOS 5.0 or higher, or, some other text editing application capable of handling larger text files. Do *not* edit the file using a word processing program like Windows Write, because it does not store plain text files.

CT-470 Upper Tone Bank
These are the default patches, numbers 0..109.

CT-470 Lower Tone Bank
You must press the SELECT button on the CT-470 to change it to the lower position before the patches with these names will be available on the CT-470.

CT-470 Beat Bank
The CT-470's Channel 4 button must be assigned to the Beat Bank and its sync mode set to external clock. Please see the Casio manual for more information about the Beat Bank. In Cakewalk, choose the **MIDI Out** command from the **Settings** menu and check the option, **Use Start, Never Continue**.

D110 Preset Tones
Uses the default Timbre Bank.

VFX 2.1 ROM Programs
Be sure to select the ROM bank on the VFX or VFX-SD.

MIDIVERB III
These names are for the preset effects 0..99. Customized internal effects will respond to program changes 100..127. (If you have internal effects with MIDIVERB III program numbers 128 and higher, you can use its mapping feature to bring those down into the 0..127 range, perhaps substituting presets that you don't use.)

2.6. Hewlett Packard LaserJet 4

Printing from within the Staff view may lead to General Protection Faults in the LaserJet 4 Windows driver. We are working with Hewlett Packard on a solution to this problem. Most likely, this solution will come from Hewlett Packard in the form of a newer version of their Windows printer driver.

As this is written, the newest version is 31.V1.20 and it still exhibits the problem. (To see the version number of the driver from within Cakewalk, choose **Print Setup**, select the LaserJet 4, press the **Options** button, and then press the **About** button to see the driver's About dialog.)

There is no additional information at this time for README.WRI.