

Cakewalk Home Studio™ 2.01

README.WRI

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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 Home Studio.

1.2. CompuServe

An excellent alternative to technical support via phone or mail is to use CompuServe. Type "GO MIDI AVEN" 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 Home Studio

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 Home Studio 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 Home Studio diskette. Music Quest may have newer, improved versions of this driver available. You may wish to contact them or check their section of the MIDI AVEN forum on CompuServe.

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

1.4. "Problem creating Staff view musical symbol font"

You may experience this problem if you have disabled True Type fonts in Windows.

The problem: When you start Cakewalk, a message appears saying "Problem creating Staff view musical symbol font." Press OK, and Cakewalk's window appears. Now open the Staff view. The notes and staff are gigantic, and all the noteheads and clef symbols are characters from some other font, like Greek symbols or Latin letters. **Print Preview** displays the notes and staff as very small, all on top of each other, and uses characters from other fonts.

The solution: Go to Windows Control Panel, double-click the **Fonts** icon and press the **True Type** button. Make sure that **Enable True Type Fonts** is checked. If you don't have this checked, then Windows won't access any True Type font, which includes ours.

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

Certain older models of the Sound Blaster cannot do both MIDI input and wave output at the same time. (However, the latest Sound Blaster cards, such as the Sound Blaster 16, are fully capable of performing MIDI input and wave output simultaneously.) Thus, if you've selected "Creative Labs" as a MIDI In device in Cakewalk's **Settings/MIDI Devices** dialog, wave audio won't work. This includes Cakewalk's special *Wave* events as well as wave audio attempted by

any other Windows application running while the "Creative Labs" MIDI In device is open. This is not a limitation of Cakewalk: while *any* program is using the older "Creative Labs" MIDI In 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 MIDI Out devices. The problem occurs only when you've selected the "Creative Labs" MIDI *In* device.

2.3. 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. 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.
2. 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 Home Studio. 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.
3. 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).

2.4. Patch Names

Cakewalk Home Studio 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.)

2.5. Hewlett-Packard LaserJet 4

Printing from within the Staff view may lead to General Protection Faults in the LaserJet 4 Windows driver. Obtaining the latest version of the driver may solve this problem.

As this is written, the latest version of the driver is 31.V1.26. (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 obtain the latest version of the driver, please call HP Driver Distribution at 303-353-7650.

2.6. Gravis UltraSound

Cakewalk Home Studio 2.0 adds support for sound cards which use "patch caching", like the popular Gravis UltraSound. These cards load sounds from your hard drive as needed. If you are using this kind of sound card, the **Update Patch Cache** command on the **Realtime** menu will be enabled. When you choose this command, Cakewalk examines your song to see which Patch numbers you have used. It gives this list to the sound card, which loads the required sounds. This process can take some time, so Cakewalk lets you control when to "recalculate" the patches used, by you issuing the **Update Patch Cache** command. (Cakewalk also performs the "recalculation" when you use **Open** or **New** to open or clear a song file.)